LOS ANGELES
DEPARTMENT OF CITY
PLANNING
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DRAFT
ENVIRONMENTAL IMPACT REPORT

Downtown Community Plan Update/
New Zoning Code for Downtown Community Plan

Environmental Case: ENV-2017-433-EIR
State Clearinghouse No.: 2017021024

Project Location: The Downtown Community Plan Area includes approximately 4,066 acres encompassing Downtown Los Angeles and bordered by the communities of Boyle Heights, Silver Lake-Echo Park, Westlake, Southeast and South Los Angeles, and the City of Vernon. The New Zoning Code applies to all areas of the City of Los Angeles, which encompasses roughly 478 square miles.

Community Plan Area:

Downtown Community Plan: Central City/Central City North

New Zoning Code: Citywide

Council Districts:

Downtown Community Plan: 1, 9, 14

New Zoning Code: Citywide

Project Description: Updates to the Central City and Central City North Community Plans, adoption of the New Zoning Code, and the adoption of necessary revisions and any other amendments necessary to implement the above, including amendments to other General Plan elements (such as, Mobility and Framework), the Los Angeles Municipal Code, specific plans, and other ordinances to implement those updates

PREPARED BY:
The City of Los Angeles
Department of City Planning

PREPARED WITH THE ASSISTANCE OF:
Rincon Consultants, Inc.
AECOM
Fehr & Peers

August 2020

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Draft Environmental Impact Report

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August 2020

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1.0 INTRODUCTION

This chapter provides a brief introduction to the Proposed Project, an overview of the purpose and focus of the Draft Environmental Impact Report (EIR), a discussion of the intended use of this Draft EIR, a description of the organization of the Draft EIR, and a discussion of the public review process and potential areas of controversy.

1.1 PROPOSED PROJECT

This Draft EIR analyzes the potential environmental effects of the "Proposed Project." The Proposed Project is composed of two components, one a long-term land use planning effort and the other a comprehensive zoning code update program, both of which are summarily described below:

1. **Update the City's Downtown Community Plan ("Downtown Plan" or "Proposed Plan").** This is the primary component of the Proposed Project and its purpose is to update the Central City Community Plan and the Central City North Community Plan, the two community plans covering Downtown Los Angeles. The updates to these two community plans, which are further described in Chapter 3, are part of the City's New Community Plan (NCP) Update program to update all 35 of the City's community plans. The City's 35 community plans make up the land use element of the City's General Plan. The community plan updates require: (i) updating the text and land use maps of the two community plans, (ii) adopting zoning ordinances to implement the community plans, including adopting zone changes to amend the Zoning Map, and (iii) making all other necessary amendments to the Framework Elements, Mobility Plan, and other General Plan Elements, specific plans, the Los Angeles Municipal Code (LAMC), and adopting or amending other ordinances to implement the above. For the updates to these two community plans, instead of adopting zone changes utilizing existing zoning classifications in Chapter 1 of the LAMC (the City's Zoning Code), the City will adopt and utilize portions of a proposed new zoning code ("New Zoning Code"), discussed below. The update of the Central City Community Plan and the Central City North Community Plan, including adoption of changes to re-designate property in the Downtown Plan Area utilizing the zone classifications in the New Zoning Code and all other required actions to update the community plans, is referred to in this EIR as the 'Downtown Plan' or 'Proposed Plan'

2. **Adopt and implement the New Zoning Code for the Downtown Plan Area ("New Zoning Code")[1]**. This component of the Proposed Project is the adoption and implementation of part of the New Zoning Code in the Downtown Plan area. The New Zoning Code, which is further described in Chapter 3, is a citywide program (the re:code LA program) to comprehensively update the City's zoning ordinances through amendments to the LAMC. The LAMC amendments will add a new Chapter 1A to the LAMC, which will establish a new zoning code for the City. The existing Zoning Code is found in Chapter 1 of the LAMC. Implementation of the New Zoning Code will occur through future zone changes to re-designate land utilizing the zoning designations from the new Chapter 1A. Adoption of the full text of the New Zoning Code is expected to occur over multiple projects and is beyond the scope of the Proposed Project. Implementation of the New Zoning Code is expected to occur through the community plan update process or through other planning and zoning efforts. As part of the Proposed Project, the City intends to adopt that portion of Chapter

[1] The Notice of Preparation for this EIR referred to the New Zoning Code as defined in this EIR as the, "Downtown Zoning Code."

1A, that will allow the City to utilize and implement the New Zoning Code in the Downtown Plan area. This component of the Proposed Project will require adopting a Chapter 1A (or adopting amendments to Chapter 1A if it has already been adopted) that includes at minimum: (i) the new zoning modules to be used in the Downtown Plan area, including substantive requirements for those zoning modules, and (ii) adopting all of the background parts of the New Zoning Code that do not already exist that would allow the new zoning to be implemented, which may potentially include general zoning definitions, processes, general development standards, rules for non-conforming uses, and zoning incentive programs, among others. The component of the Proposed Project to adopt or amend the new Chapter 1A to the LAMC is referred to in this EIR as the "New Zoning Code." The designation of properties with zoning from Chapter 1A in zoning ordinances intended to implement the updates to the Central City and Central City North Community Plans is part of the "Downtown Plan" component. While the EIR analyzes indirect impacts of the adoption of the New Zoning Code as part of the Proposed Project, future zone changes utilizing the New Zoning Code that are not included in the zone changes made as part of the Downtown Plan component of the Proposed Project would be speculative at this time. Future zone changes will be environmentally analyzed prior to approval of those zone changes.

A detailed description of the components of the Proposed Project is provided in **Chapter 3.0 Project Description**, of this Draft EIR.

1.2 PURPOSE OF THIS ENVIROMENTAL IMPACT REPORT

This EIR has been prepared to comply with the requirements of the California Environmental Quality Act (CEQA), which requires the preparation and certification of an environmental impact report on any project proposed by the City to carry out or approve that may have a significant effect on the environment. (PRC Section 21100(a).) The EIR is ultimately intended as an informational document and by itself does not determine whether the Downtown Plan, the New Zoning Code, or any component of the Proposed Project, will be approved. The EIR aids in the decision-making process by disclosing the potential significant and adverse impacts. In conformance with CEQA, California Public Resources Code, Section 21000, this EIR provides objective information addressing the environmental consequences of the Proposed Project and identifies the means of reducing or avoiding its significant impacts where feasible.

The CEQA Guidelines help define the role and expectations of this EIR as follows:

- **Information Document**. An EIR is an informational document that will inform decision-makers as well as members of the public of the significant environmental effects of a project, identify feasible ways to minimize or avoid these effects, and describe a set of reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information contained in the administrative record (Section 15121(a)).
- **Degree of Specificity**. An EIR on an individual development project will be more detailed in the specific effects of the project than will an EIR on the adoption of a community plan or zoning ordinance because the effects of the individual development can be predicted with greater accuracy. An EIR on a project such as the adoption of a community plan and/or zoning ordinance should focus on the secondary effects that can be expected to follow from the adoption, but need not be as detailed as the analysis on the specific construction project that might follow (Section 15146).
- **Standards of Adequacy**. An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information that enables them to make a decision that intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed

> project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure (Section 15151).

The CEQA Guidelines, Section 15382, defines a significant effect on the environment as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant."

1.3 LEAD, RESPONSIBLE, AND TRUSTEE AGENCY

The lead agency for the Proposed Project is the City of Los Angeles (City). The Department of City Planning is responsible for preparing the EIR for the review and consideration of the City Council, as the final decision-maker for the Proposed Project. The address for the Department of City Planning is the following:

City of Los Angeles
Department of City Planning
200 North Spring Street, Room 667
Los Angeles, CA 90012

The determination that the City of Los Angeles is the "lead agency" is made in accordance with CEQA Guidelines sections 15051 and 15367, which define the lead agency as the public agency that has the principal responsibility for carrying out or approving a project. This Draft EIR reflects the independent judgment of the City regarding the potential environmental impacts, the level of significance of the impacts both before and after the mitigation measures proposed to reduce the impacts.

Responsible agencies are other agencies responsible for carrying out/implementing a specific component of the proposed project or for approving a project (such as an annexation) that implements the goals and policies of a general plan. Section 15381 of the CEQA Guidelines defines a "responsible agency" as: "A public agency which proposes to carry out or approve a project, for which a lead agency is preparing or has prepared an EIR or Negative Declaration. For purposes of CEQA, responsible agencies include all public agencies other than the lead agency that have discretionary approval authority over the project."

There are no responsible agencies for the Proposed Project. However, several other agencies have approval authority over individual developments that could be facilitated by the Downtown Plan and/or the New Zoning Code. These agencies include, but are not limited to, California Department of Transportation, California Department of Fish and Wildlife (CDFW), the South Coast Air Quality Management District, and the Los Angeles Regional Water Quality Control Board.

Trustee agencies have jurisdiction over certain resources held in trust for the people of California, but do not have legal authority to approve or carry out the project. CEQA Guidelines Section 15386 designates four agencies as trustee agencies: CDFW with regards to fish and wildlife, native plants designated as rare or endangered, game refuges, and ecological reserves; the State Lands Commission with regard to state-owned "sovereign" lands, such as the beds of navigable waters and state school lands; the California Department of Parks and Recreation with regard to units of the state park system; and, the University of

California with regard to sites within the Natural Land and Water Reserves System. There are no trustee agencies for the Proposed Project.

1.4 AUTHORIZATION AND FOCUS

The City determined that an EIR is needed to evaluate potentially significant effects that could result from the implementation of the Proposed Project. An Initial Study was not prepared for the Proposed Project since it was determined from the outset that an EIR would be required (CEQA Guidelines Section 15060(d).

The City is required to consider the information in the Draft EIR, along with any other relevant information, in making its decision on the Proposed Project. Although the Draft EIR does not determine the ultimate decision that will be made regarding implementation of the project, CEQA requires the City to consider the information in the Draft EIR and make findings regarding each significant effect in the Draft EIR. Because the Central City and Central City North Community Plans are geographically contiguous, require similar analysis, and would be expected to have similar environmental impacts, one Draft EIR is being prepared to analyze the impacts of adoption of the Proposed Plan and their implementing ordinances, including the New Zoning Code (CEQA Guidelines Section 15153(a); 15165).

Once certified, the Final EIR will serve as the environmental document for the Proposed Project and will be used as a basis for decisions related to future development in the Downtown Plan area. Other agencies may also use this Draft EIR in their review and approval process.

1.5 TYPE OF ENVIRONMENTAL REVIEW

The Downtown Plan will guide development for the Downtown Community Plan Area ("CPA" or "Downtown Plan Area") through 2040. The New Zoning Code, as an amendment to the LAMC, has the potential to be used Citywide through future planning and zoning actions. This EIR considers broad community plan level issues and evaluates the effects of the Downtown Plan as well as the effects of the New Zoning Code citywide. This EIR addresses environmental impacts from the Proposed Project to the level that can be assessed without undue speculation, in light of the scope of the Proposed Project components.

Consistent with the requirements of CEQA, the EIR compares the reasonably anticipated development from the Proposed Project against the existing environment and not to the existing plans and regulations. The No Project alternative considers the effects of the existing community plans and zoning ordinances relative to the impacts of the Proposed Project.

Future Use of the EIR and Subsequent Projects

Approval of the Proposed Project does not constitute a commitment to any specific development project. It is contemplated that future site-specific approvals in the CPAs may be evaluated with consideration of the EIR under CEQA rules for subsequent approvals, where applicable, including but not limited to the following:

- **Addendums (CEQA Guidelines Sections 15162 and 15164)**. Addendums may be used when a subsequent approval is consistent with the Proposed Project and no major revisions to the EIR are required based on a change to the Proposed Project, a change in circumstances, or new information, as a result of a new significant impact or an identified significant impact being more severe.

- **Tiering (Public Resources Code Section 21094 and CEQA Guidelines Section 15152)**. Tiering refers to using the analysis of general matters contained in a broader EIR with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussion from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project.
- **Program EIR/Subsequent Approvals (CEQA Guidelines Section 15168.)** Projects within the scope of a Program EIR are eligible for streamlined review.
- **Projects Consistent with a Community Plan, General Plan, or Zoning (CEQA Guidelines Section 15183).** Streamlined environmental review is available for a project consistent with community plan adopted with an EIR (Public Resources Code Section 21083).
- **Streamlining for Infill Projects (SB 226; PRC Section 21094.5;** CEQA Guidelines Section 15183.3). Eligible infill projects may qualify for streamlined environmental review at the project level where the effects of infill development have been addressed in a planning level decision or by uniformly applicable development policies.
- **Transit Priority Projects (SB 375; PRC Section 21155-21155.2).** Transit Priority Projects consistent with the SCAG RTP/SCS near transit that have imposed all or all applicable mitigation measures from a prior EIR may be exempt from CEQA or be subject to streamlined review.
- **Statutory Exemption for Projects Consistent with Specific Plan (SB 743; PRC Section 21155.4; CEQA Guidelines Section 15182).** Eligible projects consistent with a specific plan adopted/updated with an EIR may be eligible for these statutory exemptions if all requirements are met.

1.6 ENVIRONMENTAL REVIEW PROCESS

In compliance with CEQA, the City of Los Angeles completed a multi-step process to determine the appropriate scope of issues to be examined in this Draft EIR.

Pursuant to CEQA Guidelines Section 15082, the City filed a Notice of Preparation (NOP) with the State Clearinghouse in the Office of Planning and Research (State Clearinghouse No. 2016041093) as an indication that an EIR would be prepared. The Department of City Planning published the NOP for this Draft EIR for a 30-day public review period on February 6, 2017. The NOP was distributed to trustee agencies, responsible agencies, and other interested parties to request information and concerns relative to the potential environmental impacts of the Proposed Project.

Information, data and observations addressing comments from these letters are included throughout this Draft EIR where relevant. The NOP and NOP comment letters received are included in Appendix A of this Draft EIR. A public Scoping Meeting was held on February 16, 2017 to provide early consultation for the public to express their concerns about the Proposed Project and to acquire information and make recommendations on issues to be addressed in the Draft EIR, including the scope of impacts, alternatives, and potential mitigation.

The City received a total of 36 written and verbal comments and letter responses to the NOP. Information, data and observations addressing comments from these letters are included throughout this Draft EIR where relevant. Comments received are summarized in **Table 1-1**.

TABLE 1-1 NOP COMMENTS AND EIR RESPONSE	
Topic	**Where Topic is Addressed in EIR**
Proposed Project Scope and Description ● Clear indication of which Area Plans will be revised to be consistent with the Proposed Project ● Propose to provide separate zoning and land use objectives/entirely separate EIRs for the zoning and the Community Plan updates ● Request that the financial and economic setting for existing and proposed population is assessed ● Online GIS mapping tool for the Proposed Project ● Provide a comprehensive financial, economic, and income assessment for current and proposed/alternative Community Plans ● Recommend community and neighborhood-specific meetings for the various Downtown stakeholders ● Include language in the Proposed Project that informs future development activity of Los Angeles County Metropolitan Transportation Authority (Metro) notification procedures, including policy language or guidance that denotes development occurring within 100 feet of a Metro facility will require Metro review and approval, including Metro's Development Guidelines and a recorded Noise Easement Deed ● West Santa Ana Branch is exploring an alignment along Alameda Street and 7th Street as an alternative, and should be coordinated as part of the process ● Metro strongly recommends that the Proposed Project include a minimum five foot setback from the Metro right-of-way to ensure that property owners can maintain their property without entering Metro property ● Policies should encourage transit-supportive public realm improvements, way finding signage, and enhanced ADA-compliant street crossing elements adjacent to transit stops and stations ● Include the Connect US Action Plan, which is a community-driven active transportation plan that prioritizes pedestrian and bicyclist connections to and from Los Angeles Union Station, the 1st/Central Regional Connection Station, and the surrounding historic and culturally significant communities	**Section 3, *Project Description*** Economic impacts and a GIS mapping tool are not within CEQA's scope. As stated in Section 3, the Proposed Project includes analysis of both the Downtown Plan and the New Zoning Code in the EIR.
Aesthetics ● Consistency with historic buildings and new proposed uses, especially height differences between existing historic buildings and proposed residential high rises ● Viewshed impacts to the Los Angeles River and Elysian Hills from Downtown towers ● Preserve Chinatown, Little Tokyo, and El Pueblo aesthetics with a mix of roof shapes, façade material varieties, and setbacks ● Out of scale buildings that destroy the character of individual sections of downtown should be avoided ● Protect the aesthetics of City Hall; proposed buildings are too tall, blocking the viewshed ● Assess the feasibility of a design review board, perhaps under the auspice of SciArc. ● Form a relationship between the Los Angeles Mural Conservancy to bring more mural art forward, and shifting the requirement of public art to murals ● Evaluate the aesthetic, cultural, and traffic safety impacts of billboards, particularly digital	**Section 4.1, *Aesthetics***

TABLE 1-1 NOP COMMENTS AND EIR RESPONSE	
Topic	**Where Topic is Addressed in EIR**
● Use innovative architecture, with more interesting and innovative design	
Air Quality ● Use of the South Coast Air Quality Management District (SCAQMD) Air Quality Handbook, the California Emissions Estimator Model (CalEEMod), and the 2016 Air Quality Management Plan in the analysis ● Proposed mitigation measures, such as SCAQMD's Rule 403 regarding fugitive dust, SCAQMD's website, and the Southern California Association of Government's Mitigation, Monitoring, and Reporting Program ● Concern of artificially capping the housing supply in downtown Los Angeles and harming the environment and human health (including air quality, greenhouse gas, and vehicle miles traveled [VMT] impacts) ● The effect of large and tall buildings on air quality, air flow, and future climate temperature increase should be considered	**Section 4.2, *Air Quality***
Biological Resources ● Wildlife impacts and nesting bird impacts ● Provide street trees for urban nature and shade ● Unrealistic tree requirements for development	**Section 4.3, *Biological Resources***
Cultural Resources/Tribal Cultural Resources ● Protection through Historical Zones ● Protection of 3rd Street, north to City Hall, bordered by Broadway and Los Angeles Streets (Bradbury, Vibiana, St. George Hotel, Higgins Building, City Hall Historic District) ● Add Higgins Building at 2nd and Main into the Historic Core ● Add Higgins Building in the Traditional Core and not the Transit Core ● Historically significant buildings and areas including: Higgins Building, St. Vibiana, the Bradbury Building, St. George Hotel, Grand Central Market, Million Dollar Theater, the Douglas Building, Biddy Mason Park, Downtown Independent Theater, and "Pope of Broadway" mural ● Keeping legacy businesses ● Stating Assembly Bill 52/Senate Bill 18 requirements, and recommendations for cultural resource assessments, including a Sacred Lands File search and contacting the California Historical Research Information System Center ● Example Tribal Cultural Resource mitigation measures, including avoidance, protection, and conservation ● Paleontological resources setting ● Archaeological and historical resources review ● Identify locations of the oldest 100 structures and parcels ● Preservation of Chinatown, Little Tokyo, and El Pueblo known and discoverable historic resources and assets ● Well-defined mitigation for cultural/historical impacts, possibly with community assistance for special knowledge ● Evaluate the aesthetic, cultural, and traffic safety impacts of billboards, particularly digital ● Call the traditional zone the Historic Core, as it more accurately reflects the architecture and history of the area ● The Historic Core Overlay should be included ● Enforce a "zone of respect" around historic monuments and	**Section 4.4, *Cultural Resources*** **Section 4.16, *Tribal Cultural Resources***

TABLE 1-1 NOP COMMENTS AND EIR RESPONSE	
Topic	**Where Topic is Addressed in EIR**
buildings	
Energy ● Concern of artificially capping the housing supply in downtown Los Angeles and wasting energy associated with fossil fuel extraction and generation	**Section 4.5, *Energy***
Geology and Soils ● Maps of alluvium and bedrock at surface and within 100 feet of the surface ● Provide locations of recorded seismic events and blind/buried faults	**Section 4.6, *Geology and Soils***
Greenhouse Gas Emissions ● Displacement increasing greenhouse gases ● Global analysis of greenhouse gas emissions ● Reduce/avoid contributions to the urban heat island effect ● Proposed mitigation measures, such as SCAQMD's website and the California Air Pollution Control Officers Association (CAPCOA) Quantifying Greenhouse Gas Mitigation Measures report ● Concern of artificially capping the housing supply in downtown Los Angeles and harming the environment and human health (including air quality, greenhouse gas, and VMT impacts)	**Section 4.7, *Greenhouse Gas Emissions***
Hazards and Hazardous Materials ● Provide locations of methane zones and associated historic oil fields ● Provide historic locations of railroads, cornfields, and industrial land uses ● Concern about the Coal Gasification Plant Site and associated railroad use with chemical plants ● Concern of lumber yards and preservative-creosoting pits	**Section 4.8, *Hazards and Hazardous Materials***
Hydrology and Water Quality ● Maps of groundwater recharge/forced infiltration, storage, and outflow in relation to Los Angeles River ● Provide a map of ancestral river floodplain and recharging zones and related land uses ● Low impact development for stormwater management ● Use of native plants in landscaping	**Section 4.9, *Hydrology and Water Quality***
Land Use and Planning ● Fashion District density floor area ratio (FAR) ● FAR of no less than 6.0 ● Increasing base density would deter affordable housing ● Concern of Entertainment District concentrating alcohol sales ● Concern about specific districts segregating uses ● Allowing heliports in Downtown ● Provide maps of current occupied, under construction, and current zoning plans, compared to the proposed and alternative plans ● Rezoning Capitol Mill to 8:1 is a violation of the "town" concept ● Review and rethink Central City East land use policies ● Provide new and non-traditional approaches to embedding flexibility in land use and urban design policies that will allow appropriate new uses to already mixed districts, like Central City East	**Section 4.10, *Land Use and Planning*** All comments regarding voting control have been provided to the decision-makers of the Proposed Project. Economic impacts are not within CEQA's scope.

TABLE 1-1 NOP COMMENTS AND EIR RESPONSE	
Topic	**Where Topic is Addressed in EIR**
● Central City East is a neighborhood where people live and work; it deserves similar levels of investment and attention as other neighborhoods where people live and work ● Central City East Association completed their own planning study in 2015 and has shared with City staff. Conclusions drawn from this study include: (1) Lack of infrastructure towards pedestrians, (2) The need for diversified housing, including affordable, mixed income, mixed-collar, and multi-generational, (3) The wall created along Alameda Street preventing Fifth Street from crossing Central Avenue has had the effect of a dam, preventing a natural flow and connection through Downtown to the Arts District and the Los Angeles River. The "M" zone has been an area "frozen in time" ● Community opinion as to design, size, scale and amenities should be given a voice. Giving greater voting control to Neighborhood Councils would help ● Incompatibility of alcohol service and residential uses/designation of non-residential entertainment districts ● Evaluate the aesthetic, cultural, and traffic safety impacts of billboards, particularly digital, and prohibit such signage ● Project proponents should be encouraged to provide job information on jobs provided along with housing development phases ● Extend the traditional zone or City Hall, or up to and include 2nd Street, in particular, the Higgins Building ● Evaluation of the Proposed Project's consistency with Measure JJJ ● In favor of the Downtown housing incentives, parking requirements, and floor area ratio averaging to allow for flexibility in the development process ● Metro supports the creation of General Plan Land Use Designations that prioritize growth around transit infrastructure, such as the Transit Core with the highest allowed FAR of all designations, and Transit Edge designations ● Metro supports the inclusion of a core principal that calls for "Promoting a transit, bicycle, and pedestrian-friendly environment" and the creation of linkages between districts	
Noise ● Incompatible use of residential and bars/clubs/restaurants with alcohol service, should be restricted to 10 p.m. or 12 a.m. to reduce noise and disturbance ● Reduce impacts of noise spill out onto streets through patio or open door and ensure enforceability ● Noise transmittal between multi-family units; double drywall does not work. A request for evaluation of the range of options to strengthen building codes for residential buildings	**Section 4.11, *Noise***
Population and Housing ● Displacement in Chinatown, Lincoln Heights, and Solano Canyon/current residents, including low income residents ● Needs of affordable housing, especially in Chinatown for lower income and seniors ● Generally affordable units should be lower rise structures, with mitigation to replace all lost housing units with an equal or higher amount of units into the district (Chinatown) ● Dividing an established community (Skid Row)	**Section 4.12, *Population and Housing***

TABLE 1-1 NOP COMMENTS AND EIR RESPONSE	
Topic	**Where Topic is Addressed in EIR**
● Consistency with the Regional Transportation Plan/Sustainable Communities Strategy goals, strategies, demographics and growth forecasts ● Provide estimates of maximum population, households, and jobs for the Proposed Project ● Concern of artificially capping the housing supply in downtown Los Angeles and harming the environment and human health (including air quality and greenhouse gas impacts) ● The optimal population and density for a fully built downtown should be considered and achieved/overbuilding and the "Manhattanization" of downtown should be avoided ● Affordable housing for young workers and seniors	
Recreation ● 8th and San Pedro as pocket park/Gateway Project ● Paseos requirements for large developments to ensure use by public/businesses ● Current public facility zones should be converted to open space ● Creation of community/public spaces and parks ● Improve access to and encourage use of public open spaces, such as the Los Angeles River and bike path ● Including open space and plazas in the plan (and with new developments) ● Add more parks	**Section 4.14, *Recreation***
Transportation and Traffic ● Lack of public parking/requirements ● Lack if accessible and affordable parking facilities for downtown residents ● Consider the creation of a Municipal Parking Authority ● San Pedro Street as a transportation corridor ● Consistency with Regional Transportation Plan/Sustainable Communities Strategy goals, strategies, demographics and growth forecasts ● Lack of additional multi-modal transportation opportunities with new development in Little Tokyo ● Request of a VMT analysis ● Maps of all historic, current, and proposed surface and subsurface rail facilities and yards, road and transit routes and intersections for Metro ● Refining/strengthening public transportation options throughout if traffic is anticipated to increase ● Rapid population growth in Chinatown will cause congestion at all intersections/limited improvements available due to Civic Center access. Mitigation for traffic calming measures, limiting dense developments, and increasing parking structures, while removing street parking ● Re-route entry and exit routes to Civic Center (Hill and Broadway) ● Concern of artificially capping the housing supply in downtown Los Angeles and harming the environment and human health (including air quality, greenhouse gas, and VMT impacts) ● Evaluate the aesthetic, cultural, and traffic safety impacts of billboards, particularly digital ● Emphasis of coordination of planning efforts between local agencies and the California Department of Transportation (Caltrans) districts ● Preservation of transportation corridors for future system	**Section 4.15, *Transportation and Traffic***

TABLE 1-1 NOP COMMENTS AND EIR RESPONSE	
Topic	**Where Topic is Addressed in EIR**
improvements ● Development of coordinated transportation system management plans that achieve the maximum use of present and proposed infrastructure ● Be aware that the thresholds of significance on State highway facilities are different than those applied in the Los Angeles County Management Program; refer to the Statewide Guide for the preparation of Traffic Impact Studies ● Possible transportation mitigation alternatives may include vehicular demand reducing strategies (e.g., park-and-ride lots, discounts on monthly bus and rail passes, vanpools, etc.) ● A transportation fund mechanism similar to the West LA TIMP is recommended ● The Circulation Element of the General Plan needs to be consistent with the Land Use and Housing Elements of the General Plan ● Consider the strategy of Transit-Oriented Developments ● Consider bus operations with any roadway modifications/coordinate with Metro prior to advancing any improvements that may affect bus operations	
Utilities and Service Systems ● Maps of the system networks for current, under construction, and Proposed Project/Alternatives utilities with inventory of the date of installation, expected operating lifetime, service capacity ● Maps of all abandoned pipes, cables, or other transmission systems and access portals ● Concern of artificially capping the housing supply in downtown Los Angeles and water waste, by increasing multi-family housing, there will be less water use	**Section 4.17, *Utilities and Service Systems***
Alternatives ● High population/household growth (growth exceeding population expectations)/"High housing alternative" allowing for significantly more zoned housing capacity, more new housing units, and higher potential population growth in downtown Los Angeles than the expected growth rate of approximately 70,000 housing units ● Preservation of southeast downtown for purely jobs/manufacturing vs housing/jobs hybrid zone ● Increased floors and height proposed for the Metro Center	**Section 5, *Alternatives***

In accordance with CEQA Guidelines sections 15087 and 15105, this Draft EIR is being circulated for a 75-day review period. The Draft EIR was also submitted to the State Clearinghouse for distribution to state agencies.

Interested parties may provide written comments on the Draft EIR during the comment period. Comment letters may be sent via U.S. mail or email addressed to the following:

City of Los Angeles, Department of City Planning
ATTN:

Brittany Arceneaux, City Planner
Case Number: CPC-2017-432-CPU; CPC-2014-1582-CA; ENV-2017-433-EIR

200 N. Spring Street, Room 667
Los Angeles, CA 90012

1.7 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

Potential areas of controversy and issues to be resolved by the City's decision-makers may include those environmental issue areas where the potential for an unavoidable and significant impact has been identified.

Based on the NOP comment letters (summarized in **Table 1-1** and provided in Appendix A of this Draft EIR), issues known to be of concern in the community and therefore, potential areas of controversy, include loss of affordable housing, lack of parks, lack of jobs, overconcentration of certain uses, protection of small businesses, signage/billboard blight, displacement of residents, public health, and transit-related safety.

1.8 ORGANIZATION OF THE DRAFT ENVIRONMENTAL IMPACT REPORT

This Draft EIR is organized into ten chapters, as follows:

1.0 INTRODUCTION. This chapter contains an overview of the purpose and focus of the Draft EIR, a discussion of the intended use of this Draft EIR, a description of the organization of the Draft EIR, and a discussion of the public review process and potential areas of controversy.

2.0 EXECUTIVE SUMMARY. This chapter provides a summary of the Proposed Project's potential environmental impacts that would result from implementation of the Proposed Project, proposed mitigation measures where applicable, and the level of significance of the impact before and after mitigation.

3.0 PROJECT DESCRIPTION. This chapter describes the Proposed Project, including project location, existing conditions, project objectives, and a description of the proposed changes to existing plans and zoning under the project.

4.0 ENVIRONMENTAL IMPACT ANALYSIS. This chapter is the primary focus of this Draft EIR. Each environmental issue is considered in a separate section, which contains a discussion of the environmental settings, the regulatory setting, the methodology and the thresholds of significance. Each section also includes the analyses of environmental impacts of the project, mitigation measures, conclusions regarding the level of significance after mitigation, and cumulative impacts for each of the following environmental topics and environmental issues:

- 4.1 **Aesthetics** - Changes to views, scenic resources, and visual quality
- 4.2 **Air Quality** - Changes in pollutants affecting air quality
- 4.3 **Biological Resources** - Impacts on any sensitive wildlife habitats or special species
- 4.4 **Cultural Resources** - Changes to historic resources and impacts to archaeological or paleontological resource and human remains
- 4.5 **Energy** – Wasteful or inefficient use of energy resources
- 4.6 **Geology and Soils** - Risk from geologic and seismic hazards

4.7 **Greenhouse Gas Emissions** - Changes to greenhouse gas emissions and conformance to applicable greenhouse has plans, policy, and regulations

4.8 **Hazards and Hazardous Materials** - Changes in the risk of exposure to hazardous materials, or proximity to wildland fire hazards

4.9 **Hydrology and Water Quality** - Changes in water quality, drainage patterns and the amount of stormwater runoff

4.10 **Land Use and Planning** - Changes to land use and zoning

4.11 **Noise and Vibration** - Changes in noise and vibration levels due to construction, traffic, and proposed uses

4.12 **Population, Housing, and Employment** - Changes in population, jobs/housing balance, and the displacement of a substantial number of housing units or persons

4.13 **Public Services** - Impacts related to the construction of new or expanded public facilities (i.e. fire protection and schools)

4.14 **Recreation** – Impacts related to the construction of new or expanded recreational facilities and impacts to existing recreational facilities with implementation of the Proposed Project

4.15 **Transportation and Traffic** - Changes in transportation conditions and vehicles miles travelled, review of emergency access, potential hazardous design features, and potential conflict with alternative transportation (e.g., bicycles and public transportation)

4.16 **Tribal and Cultural Resources** – Impacts to cultural resources potentially related to one of more Native American tribes

4.17 **Utilities and Service Systems** - Impacts related to the increased need for utilities and infrastructure improvements and the construction of new or expanded facilities

4.18 **Effects Found Not to Be Significant** – Issues for which the Proposed Project was found to have no potential for significant environmental impacts

The impact analysis and conclusions in each section for each environmental issue are prepared for both components of the Proposed Project under separate subheadings of 'Downtown Plan' and 'New Zoning Code'. This is necessary because the project area is different for each and the level of specificity and the ability to identify potential indirect impacts for each component is different.

The project area for the Downtown Plan is the CPAs. The project area for the New Zoning Code is citywide because zoning in the LAMC is eligible for use citywide provided necessary legislative planning and zoning actions are taken in the future. The proposed land use and zoning designation for all the properties in the CPAs is known and can be analyzed for the Downtown Plan component of the Proposed Project. On the other hand, how or where any part of the New Zoning Code may be implemented outside of or apart from the Downtown Plan update is not known at this time and is not reasonably forecasted. Therefore, only a qualitative analysis of potential citywide impacts is provided throughout this EIR under the "New Zoning Code" subheadings.

5.0 ALTERNATIVES. This chapter provides analysis of a range of reasonable alternatives to the Proposed Project in accordance with CEQA Guidelines Section 15126(f). The range of alternatives considered is based on their ability to feasibly attain most of the project objectives and avoid or substantially lessen any of the significant effects of the Proposed Project.

- Alternative 1: Reduced Development Potential
- Alternative 2: Housing Redistribution

- Alternative 3: Increased Development Potential
- Alternative 4: No Project

6.0 OTHER CEQA CONSIDERATIONS. This chapter provides analysis of a discussion of the (1) significant environmental effects that cannot be avoided if the Proposed Project is implemented, (2) significant irreversible environmental changes that would result from implementation of the Proposed Project, and (3) growth-inducing impacts of the Proposed Project.

7.0 REFERENCES. This chapter lists reference materials used in the preparation of this EIR, including written materials, websites, and personal communications.

8.0 ACRONYMS & ABBREVIATIONS. This chapter defines acronyms and abbreviations used throughout this EIR.

9.0 PREPARERS OF THE DRAFT EIR. The chapter lists the persons and lead agency that were consulted or contributed in the preparation of this Draft EIR.

1.9 PUBLIC PARTICIPATION

CEQA encourages public participation in the planning and environmental review processes. The City will provide opportunities for the public to present comments and concerns regarding the CEQA processes. The public is invited to provide comments and concerns regarding the accuracy of the Draft EIR and the CEQA process. Written comments may be submitted to the City of Los Angeles City Planning Department to the attention of Brittany Arceneaux, City Planner, at 200 N. Spring Street, Room 667, Los Angeles, CA, 90012 or email to brittany.arceneaux@lacity.org, during the specified public review and comment period. Written comments may also be submitted electronically through the Downtown Community Plan Update program website, accessible at the following address: https://planning.lacity.org/plans-policies/community-plan-update/downtown-los-angeles-community-plan-update. The comment period and public hearing dates are indicated on the cover of this EIR. Pursuant to CEQA Guidelines Section 15088, the City will prepare written responses to any comments that raise significant environmental issues received during the noticed comment period and include those responses in the Final EIR. The public will also be provided opportunities to present oral and written comments at future hearings and meetings on the Proposed Project to City Planning Commission and the City Council. The City may but is not required to provide written responses to comments submitted after the circulation period for the Draft EIR.

1.10 FINAL EIR AND EIR CERTIFICATION

Following the close of the public review period on the Draft EIR, the City will prepare and publish a Final EIR, which will contain a summary of all written and recorded oral comments on this EIR received during the public review period for the Draft EIR and written responses to those comments that raise environmental concerns, along with copies of the letters received, and any necessary revisions to the EIR. The Draft EIR, comments on the EIR and a list of persons, organizations and public agencies that commented on the Draft EIR, response to comments, and any revisions to the Draft EIR will constitute the Final EIR. The City Council, in an advertised public meeting(s), will consider the documents and then, if found adequate, certify the Final EIR as completed in compliance with CEQA and the CEQA Guidelines.

1.11 CEQA FINDINGS FOR PROJECT APPROVAL

Where a certified EIR identifies significant environmental effects, CEQA Guidelines Sections 15091 and 15092 require the adoption of findings prior to approval of a project. Prior to approval of a project, one of three findings must be made, as required by PRC Section 21081 and CEQA Guidelines Section 15091:

- Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

If the City approves the Proposed Project, despite significant impacts identified in the Final EIR that cannot be feasibly mitigated, the City must state in writing the reasons for its actions, under CEQA Guidelines Section 15093. Those findings, called a Statement of Overriding Considerations, must be prepared to substantiate the City's decision to accept the unavoidable significant environmental effects of the Proposed Project balanced against the benefits afforded by the Proposed Project.

1.12 MITIGATION MONITORING PROGRAM

At the time of project approval, CEQA and the CEQA Guidelines require lead agencies to adopt a mitigation monitoring program for monitoring the revisions it has required in the project and the measures it has imposed to mitigate or avoid significant effects on the environment (CEQA Section 21081.6; CEQA Guidelines Section 15097). This Draft EIR contains mitigation measures that if found feasible will be included in the Mitigation Monitoring Program for the Proposed Project.

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2.0 EXECUTIVE SUMMARY

This document is an Environmental Impact Report (EIR) analyzing the environmental effects of the proposed updates to the City of Los Angeles' Downtown Plan (Central City and Central City North Community Plans) and adoption of the New Zoning Code to implement the Downtown Plan. This section summarizes the characteristics of the Proposed Project, alternatives to the Proposed Project, and the environmental impacts and mitigation measures associated with the Proposed Project.

2.1 SUMMARY OF THE PROPOSED PROJECT

Project Proponent

City of Los Angeles
Department of City Planning
200 North Spring Street, Room 667
Los Angeles, CA 90012

Lead Agency Contact Person

Veena Snehansh
City Planning Associate
Los Angeles City Planning
200 N. Spring St., Room 667
Los Angeles, CA 90012

PROJECT DESCRIPTION

This EIR has been prepared to examine the potential environmental effects of the updates to the City's Downtown Plan and New Zoning Code. The following is a summary of the full project description, which can be found in Section 3.0, *Project Description*.

Downtown Plan

The Downtown Plan is part of the City's New Community Plan (NCP) Program developed in 2006. It is an update to the existing Central City and Central City North Community Plans, two of the City's 35 Community Plans. The amendments to the community plan text and land use maps for the Downtown Plan are intended to guide development through the year 2040 by establishing the City's broad planning goals, policies, and objectives, the arrangement of land uses and intensities, as well as specific development standards for the Plan area.

The Downtown Plan updates require: (i) amending the text of the community plan, including the goals, policies and programs, (ii) amending the designations on the community plan land use maps, (iii) adopting zoning ordinances to facilitate implementation of the Community Plans (see section on New Zoning Code), and (iv) making all other necessary amendments to the Framework Elements, Mobility Plan, and other General Plan Elements, specific plans, the Los Angeles Municipal Code (LAMC) and other ordinances as necessary. The City will adopt and utilize portions of a proposed New Zoning Code, described below, to implement the Downtown Plan.

The Downtown Plan Area refers to both the Central City and Central City North Community Plan Areas. The Central City Community Plan Area encompasses approximately 2,161 acres and is generally bounded on the north by Sunset Boulevard/Cesar Chavez Avenue, on the south by the Santa Monica Freeway (Interstate 10), on the west by the Harbor Freeway (Interstate 110), and on the east by Alameda Street. Immediately to the east of Alameda Street is the Central City North Community Plan Area, which encompasses approximately 2,005 acres and is generally bounded on the north by Stadium Way, Lilac Terrace, and North Broadway, on the south by the City of Vernon, on the west by Alameda Street, and on the east by the Los Angeles River.

New Zoning Code

The New Zoning Code was developed through re:code LA, the comprehensive revision of the City's Zoning Code. The New Zoning Code is a citywide program (the re:code LA program) to comprehensively update the City's zoning ordinances through amendments to the LAMC. Adoption of the full text of the Zoning Code is expected to occur over multiple projects and is beyond the scope of the Downtown Plan. Part of the New Zoning Code will be adopted and implemented in the Downtown Plan area.

The objectives and goals outlined in the Downtown Plan require the application of New Zoning Code regulations. The New Zoning Code regulations include new zone designations, intended for application in the Downtown Plan, which require the bundling of several districts to make a zone including: Form, Frontage, Development Standards, Use and Density districts; Citywide Development Standards (such as landscaping requirements, on-site sign provisions, light and glare standards and others); definition of terms; rules of measurement (such as how to measure lot width and building height); zoning incentive system(s) tied to public benefits, nonconforming use and development provisions; maintenance of current rules for division of land; street/public right of way improvement requirements; incorporation of overlay district standards and regulations; and enabling language for Environmental Protection Standards, a set of standards that will be used to implement the mitigation measures from the EIR in compliance with CEQA Guidelines 15126.4(a)(2), in addition to other standards intended to protect the environment.

PROJECT OBJECTIVES

The underlying purpose of the Downtown Plan is to plan for and accommodate foreseeable growth in the Downtown Plan Area consistent with the growth strategies of the City as provided in the Framework Elements, the policies of SB 375, and the Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

The underlying purpose of the New Zoning Code is to create the tools necessary to implement community visions expressed in adopted plans, including the Downtown Plan. The modular zoning tools of the New Zoning Code are designed to be adaptable to future needs throughout the City.

The **Primary Objectives** of the Proposed Project are to:

- **Primary Objective 1:** Accommodate employment, housing, and population growth projections forecasted through the planning horizon year of 2040 to ensure that Downtown Plan Area continues to grow in a sustainable, equitable, healthy, and inclusive manner, consistent to implement policies of the City of Los Angeles General Plan Framework Element, by focusing new job-generating uses and residential development around transit stations;
- **Primary Objective 2:** Provide for economic diversification and reinforce Downtown Plan Area as a primary center of employment for the City and the Southern California region;

- **Primary Objective 3**: Build upon Downtown's role as a regional transportation center by allowing for intensive development throughout the Plan Area, and concentrating development opportunity immediately surrounding the transit stations with an appropriate range of building sizes and mix of uses;
- **Primary Objective 4:** Promote a mode-shift from private automobile usage and foster a transit, bicycle, and pedestrian supportive environment;
- **Project Objective 5:** Reduce vehicle miles traveled to meet the goals of the Senate Bill 375, Senate Bill 743, and California Assembly Bill 32 to reduce carbon emissions;
- **Primary Objective 6:** Support a growing residential population by expanding the areas where housing is permitted and allowing for a full range of housing options;
- **Primary Objective 7:** Celebrate and reinforce the character of each of the neighborhoods in the Plan Area;
- **Primary Objective 8:** Provide a set of implementation tools that are responsive to the range of physical and functional needs across the Plan Area, and enable the creation of similar tools across the City.

The **Secondary Objectives** of the Proposed Project are to:

- **Secondary Objective 1:** Refine and expand a system that links development with public benefits to deliver community amenities in the Downtown Plan Area, and is adaptable to the policy needs across the City;
- **Secondary Objective 2:** Maintain a meaningful amount of the Plan Area that is dedicated to production and high-intensity traditional industry;
- **Secondary Objective 3:** Promote a mix of land uses that fosters sustainability, equity, community, neighborhood density, and healthy living;
- **Secondary Objective 4:** Identify appropriate locations for housing and establish zoning tools that encourage a range of unit typologies;
- **Secondary Objective 5:** Ensure new development provides the appropriate range of outdoor amenity space and other recreational options to tenants and property owners; and
- **Secondary Objective 6:** Support and sustain Downtown's ongoing revitalization.

DOWNTOWN COMMUNITY PLAN REASONABLY ANTICIPATED DEVELOPMENT

Reasonably anticipated development that is anticipated to occur through 2040 as a result of the Proposed Plan is shown in **Table ES-1**. The Downtown Plan would increase reasonably expected housing, population and employment compared to the Existing Plan (Central City and Central City North community plans) and compared to SCAG forecasts.

Reasonably anticipated development for the Downtown Plan Area was determined based on land designations included in the City's General Plan, the allowable development capacity in each designation, anticipated levels of development in the life of the Proposed Plan, and development constraints such as topography. The development anticipated under the Downtown Plan would accommodate SCAG's 2040 population, housing, and employment projections. Reasonably anticipated development and reasonably expected housing, population and employment growth are further discussed in Section 4.12, *Population and Housing.*

TABLE ES-1 2040 REASONABLY ANTICIPATED DEVELOPMENT IN THE DOWNTOWN PLAN AREA				
	2017 Baseline /a/	**Existing Plan Reasonably Anticipated Development /b/**	**Downtown Plan Reasonably Anticipated Development /b/**	**SCAG 2040 Growth Forecast /d/c**
Housing /a/	34,000	59,000	133,000	96,000
Population	76,000	112,000	252,000	189,000
Employment	219,000	278,000	305,000	257,000
Notes: Numbers are rounded to the nearest thousand, and percentages are calculated from the rounded values. /a/ 2017 Baselines – SCAG 2016-2040 RTP/SCS /b/ LADCP 2018a /c/ SCAG 2016-2040 RTP/SCS.				

2.2 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

Potential areas of controversy and issues to be resolved by the City's decision-makers may include those environmental issue areas where the potential for an unavoidable and significant impact has been identified.

Based on the NOP comment letters (summarized in Table 1-1 and provided in Appendix A of this Draft EIR), issues known to be of concern in the community and therefore, potential areas of controversy, include loss of affordable housing, lack of parks, lack of jobs, overconcentration of certain uses, protection of small businesses, signage/billboard blight, displacement of residents, public health, and transit-related safety.

The primary issue to be resolved through the planning and environmental review process for the Proposed Project is whether the City should adopt the updated Downtown Plan and New Zoning Code to replace the existing community plans and code. Options include adopting the New Project or some variation of it (such as one of the alternatives considered in this EIR) or continuing to have the existing community plans and zoning code guide development in the Downtown Plan Area and throughout the City.

2.3 CLASSIFICATION OF ENVIRONMENTAL IMPACTS

The following environmental impact categories are analyzed in this EIR:

- **Aesthetics.** Consistency with applicable scenic quality regulations and changes to scenic vistas, scenic highways, and light/glare.
- **Air Quality.** Consistency with applicable air quality plan and changes in cumulative pollutant emissions, sensitive receptor exposure, and odors.
- **Biological Resources.** Consistency with applicable habitat conservation plan and policy and impacts to special status species and special species habitat, riparian habitat, wetlands, and migratory wildlife.
- **Cultural Resources.** Impacts to historical resources, archaeological resources, and human remains.

- **Energy.** Consistency with applicable renewable energy plans and changes in energy consumption.
- **Geology and Soils.** Risk from geologic and seismic hazards and impacts to paleontological resources.
- **Greenhouse Gas Emissions.** Generation of greenhouse gases and consistency with applicable plans, policy, and regulations related to climate change and greenhouse gas emissions.
- **Hazards and Hazardous Materials.** Changes in risk or exposure to hazardous materials, and consistency with applicable airport and emergency response plans.
- **Hydrology and Water Quality.** Consistency with applicable water quality plans and policy, and changes in water quality, groundwater supplies, drainage, and release in pollutants.
- **Land Use Planning.** Consistency with applicable land use plans and policies and impacts to community connectivity.
- **Noise.** Changes in noise and vibration levels due to construction, traffic, and operation of future development, and consistency with applicable airport plans.
- **Population and Housing.** Changes in population, and the displacement of housing units or persons.
- **Public Services.** Impacts related to the construction or expansion of public facilities (i.e. police protection, fire protection, schools, and libraries).
- **Recreation.** Impacts related to the construction, expansion, or deterioration of recreational facilities.
- **Transportation.** Consistency with applicable plans and policy related to circulation, impacts related to vehicle miles travelled metric, hazards, and emergency access.
- **Tribal Cultural Resources.** Impacts to tribal cultural resources.
- **Utilities and Services Systems.** Consistency with applicable regulations and goals, and impacts related to the construction of new or expanded facilities (i.e., wastewater treatment, drainage, water, solid waste, electric power, natural gas, telecommunications, police, fire, libraries and schools).

2.4 SUMMARY OF ALTERNATIVES

As required by Section 15126.6 of the CEQA Guidelines, a range of reasonable alternatives to the Proposed Project that would attain most of the basic project objectives, but would avoid or substantially lessen any of its significant environmental effects must be examined. Project alternatives aim to identify and disclose ways to mitigate or avoid significant environmental effects that may result from the Proposed Project. Impacts found to be significant and unavoidable in Section 4.0, *Environmental Analysis,* include the exceedance of criteria air pollutant emission standards including construction-related VO_x, $PM_{2.5}$, PM_{10} emissions and operation-related VOC, PM_{10}, and $PM_{2.5}$ emissions, exposure of sensitive receptors to operation-related pollutants from distribution facilities, the possible loss of historical resources, temporary construction-related noise and construction-related vibration impacts, deterioration of existing parks, and traffic safety impacts related to highway off-ramps. Impacts found to be potentially significant but able to be reduced to less than significant with the imposition of proposed mitigation include impacts to sensitive receptors from construction-related activities, impacts to birds from construction activities, impacts from ground-disturbing activities to archaeological, tribal and paleontological resources or resulting from contaminated soils.

The alternatives considered are summarized below. Project alternatives are further discussed in Section 5.0, *Alternatives.*

- **Alternative 1: Reduced Development Potential.** Alternative 1 involves reducing the maximum FAR in subareas in the Traditional Core, Community Center, Markets, and Hybrid Industrial General Plan Designations to a maximum of 3.0:1 FAR and 6.0:1 FAR but retains the story limitations associated with these designations. Alternative 1 would also reduce base FAR in the transit Core to 6:1. Alternative 1 is expected to incrementally reduce or avoid the significant unavoidable impacts of the Downtown Plan with regard to historical resources, construction noise, construction vibration and deterioration of existing parks as well as the Downtown Plan's significant, but mitigatable impacts related to biological, archaeological and paleontological resources, and hazardous materials while still meeting most of the basic project objectives. Despite accommodating less development capacity as compared to the Downtown Plan, Alternative 1 would still result in significant and unavoidable impacts to historical resources, air quality, construction noise and vibration, recreational facilities and transportation impacts.

- **Alternative 2: Housing Redistribution.** Alternative 2 would modify the Downtown Plan land use mix by expanding the areas where housing is permitted within the Markets and Production General Plan designations on the south-central portion of the Downtown Plan Area. This Alternative was included to meet the request of community groups and to consider an option with a different mix of housing types and locations where more housing is provided in the immediate vicinity of Downtown Plan Area jobs. Under this alternative, the Industrial-Mixed Hybrid 1 (IH1) Use District would be applied to areas that are proposed as Industrial-Mixed Use 2 (IX2), where the only type of housing allowed is through conversion of existing buildings to Joint Living and Work Quarters, and Restricted Light Industrial (MR1), which does not permit any type of housing. HI1 allows for adaptive reuse to housing, joint living and work quarters, and construction of new live/work units, in addition to a range of commercial and light industrial uses. Under this Alternative, the area with 8.0:1 maximum FAR in the Downtown Plan would be reduced to 4.5:1 and the area with 3:1 maximum FAR would be increased to 4.5:1, to promote a more compatible scale of development between residential, and hybrid industrial uses. Alternative 2 reduces the total number of housing units, as compared to the Downtown Plan. Alternative 2 was selected because it was expected to incrementally reduce the significant unavoidable impacts of the Downtown Plan with regard to historical resources, construction noise, construction vibration, and deterioration of existing parks as well as the Downtown Plan's significant, but mitigatable impacts related to biological, archaeological and paleontological resources, and hazardous materials while still meeting all of the basic project objectives. Alternative 2 would result in slightly less development and growth in the Downtown Plan Area but would result in the same significant and unavoidable impact conclusions as the Downtown Plan in all impact categories.

- **Alternative 3: Increased Development Potential.** Alternative 3 would permit greater development capacity in the Markets and Community Center area, in exchange for a higher requirement for the provision of public benefits. This Alternative was included to inform decision makers and foster public participation on an alternative that could result in higher community benefits by allowing for greater development capacity in the Downtown Plan Area. Under this alternative, the Industrial-Mixed Use 2 (IX2), in which the only type of housing allowed is through conversion of existing buildings to Joint Living and Work Quarters, would be applied to areas that are proposed as Restricted Light Industrial (MR1), where no housing is allowed under the Downtown Plan. This alternative would raise the maximum FAR to 10.0:1 in areas that are proposed as 3:1, 4.5:1, 6.0:1 and 8.5:1. The FAR would also be raised to a maximum of 13.0:1 in areas that are proposed as 8.0:1 and 10.0:1. Under Alternative 3, the Downtown Plan Area would have increased development capacity that may result in incrementally greater impacts. Alternative 3 was selected to consider its potential regional

benefits (including potential benefits to VMT and GHG) and because it would meet all the basic project objectives. Alternative 3 would accommodate increased development overall compared to the Downtown Plan and thus more growth in the Downtown Plan Area and would result in the same significant and unavoidable impact conclusions as the Downtown Plan in all impact categories.

- **Alternative 4: No Project Alternative.** The "No Project" alternative involves continued implementation of the existing Central City and Central City North Community Plans. This alternative assumes that the City's existing plans and policies would continue to accommodate development in accordance with existing General Plan designations. The "no project" alternative, required by CEQA, would meet some of the basic project objectives. Alternative 4 would include less development capacity overall and thus less growth in the Downtown Plan Area but would result in the same significant and unavoidable impact conclusions as the Downtown Plan in all impact categories.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires identification of the environmentally superior alternative among the options studied. In general, the environmentally superior alternative is the alternative that would be expected to generate the fewest adverse impacts. If the No Project alternative is identified as environmentally superior, then another environmentally superior alternative shall be identified among the other alternatives.

Alternative 4 would involve the lowest overall levels of growth and development in the Downtown Plan Area and thus would have the fewest overall impacts in the Downtown Plan Area. Among the other alternatives, Alternative 1 would involve the least growth and development and thus would result in the fewest impacts in the Downtown Plan Area. Therefore, the Reduced Development Potential (Alternative 1) is the Environmentally Superior Alternative. The project alternatives are compared in detail in Section 5.0, *Alternatives.*

Table ES-2 summarizes the impacts of the Alternatives compared to the proposed project.

TABLE ES-2 IMPACT COMPARISON OF ALTERNATIVES

Issue	Alternative 1: Reduced Development Capacity	Alternative 2: Housing Redistribution	Alternative 3: Increased Development Potential	Alternative 4: No Project
Aesthetics	+	+	-	+
Air Quality	**+**	**+**	**-**	**=**
Biological Resources	+	+	-	**-**
Cultural Resources	**+**	**+**	**-**	**=**
Energy	+	+	-	-
Geology and Soils	+	+	-	**-**
Greenhouse Gas Emissions	+	+	-	+
Hazards/Hazardous Materials	+	+	-	**=**
Hydrology/Water Quality	=	=	=	=
Land Use and Planning	=	=	=	=
Noise	**+**	**+**	**-**	**=**
Population and Housing	=	=	=	=
Public Services	+	+	-	+
Recreation	**+**	**+**	**-**	**+**
Transportation/Traffic	**-**	**-**	**-**	**-**
Tribal Cultural Resources	+	+	-	**=**
Utilities/Service Systems	+	+	-	+

+ Superior to the proposed project (reduced level of impact)

- Inferior to the proposed project (increased level of impact)

= Similar level of impact to the proposed project

Significant and unavoidable impacts are bolded and red. Note that for Alternative 4, impacts would not technically be "significant" under CEQA since that alternative involves continued implementation of the existing Central City and Central City North community plans, impacts are identified as "significant and unavoidable" if the physical effect associated with the alternative would be equivalent to a "significant impact" if the alternative involved a new discretionary action.

2.5 SUMMARY OF PROJECT IMPACTS AND MITIGATION MEASURES

A summary of the environmental impacts associated with the Proposed Project is included in **Table ES-3.** If necessary, mitigation measures are included to avoid or decrease the severity of significant impacts. The level of significance before and after mitigation measures is also identified.

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TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
AESTHETICS				
Scenic Vista	**Impact 4.1-1:** Would implementation of the Proposed Project have a substantial adverse effect on a scenic vista?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
Scenic Resources Within a State Scenic Highway.	**Impact 4.1-2:** Would implementation of the Proposed Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	**Downtown Plan:** No impact **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** No impact **New Zoning Code:** Less than significant
Scenic Quality Zoning and Regulations	**Impact 4.1-3**: Would the Proposed Project conflict with applicable zoning and other regulations governing scenic quality?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan**: Less than significant **New Zoning Code:** Less than significant
Light and Glare	**Impact 4.1-4:** Would implementation of the Proposed Project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
AIR QUALITY				
Air Quality Plan	**Impact 4.2-1:** Would implementation of the Proposed Project conflict with or obstruct implementation of the applicable air quality plan?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan**: Less than significant **New Zoning Code**: Less than significant
Cumulative Increase	**Impact 4.2-2:** Would implementation of the Proposed Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	**Downtown Plan:** *Construction* – Significant *Operation* – Significant **New Zoning Code:** *Construction* – Less than significant *Operation* – Less than significant	**4.2-2 Construction Emissions Reduction** The City shall require all discretionary projects that involve construction-related activity to comply with the following and require the developers to notify any contractors, and include in any agreements with contractors and subcontractors, the following, or equivalent, best management practices in construction specifications: ● All off-road diesel-powered construction equipment greater than 50 horsepower shall meet the USEPA Tier 4 emission standards, where available. In the event that Tier 4 engines are not available for any off-road equipment larger than 100 horsepower, that equipment shall be equipped with a Tier 3 engine or an engine that is equipped with retrofit controls to reduce exhaust emissions of NOx and DPM to no more than Tier 3 levels unless certified by engine manufacturers or the on-site air quality construction mitigation manager that the use of such devices is not practical for specific engine types. ● All construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.	**Downtown Plan:** *Construction* – Significant and unavoidable *Operation* – Significant and unavoidable **New Zoning Code:** *Construction* – Less than significant *Operation* – Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
			● Construction contractors shall use electricity from power poles rather than temporary gasoline or diesel powered generators, as feasible, or solar where available. ● Consistent with SCAQMD Rule 403, construction contractors shall implement best available dust control measures during active construction operations capable of generating dust. ● Construction contractors shall maintain construction equipment in good, properly tuned operating condition, as specified by the manufacturer, to minimize exhaust emissions. Documentation demonstrating that the equipment has been maintained in accordance with the manufacturer's specifications shall be kept on-site and made available to LADBS inspectors during inspection. ● Vehicle idling shall be limited to five minutes as set forth in the California Code of Regulations, Title 13. Signs shall be posted in areas where they will be seen by vehicle operators stating idling time limits. ● Construction contractors shall utilize construction equipment that uses low polluting fuels (i.e. compressed natural gas, liquid petroleum gas, and unleaded gasoline) to the extent that they are available and feasible to use. ● Heavy duty diesel-fueled equipment shall use low NOx diesel fuel to the extent that it is available and feasible to use. ● Construction haul truck operators for demolition debris and import/export of soil shall use trucks that meet the California Air Resources Board's (CARB) 2010 engine emissions standards at 0.01 g/bhp-hr of particulate matter (PM) and 0.20 g/bhp-hr of NOx emissions. Operators shall maintain records of all trucks associated with project construction to document that each truck used meets these emission standards and shall make these records available for inspection upon request by	

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
			the City of Los Angeles or the South Coast Air Quality Management District (SCAQMD). ● Construction contractors shall reroute construction trucks away from congested streets or sensitive receptor areas, as feasible.	
Sensitive Receptors	**Impact 4.2-3:** Would implementation of the Proposed Project expose sensitive receptors to substantial pollutant concentrations?	**Downtown Plan:** *Construction* – Significant *Operation* – Significant for distribution centers **New Zoning Code:** *Construction* – Less than significant *Operation* – Less than significant	Refer to mitigation measure 4.2-2. Also, the following is required for Downtown Plan Area distribution centers. **4.2-3 Distribution Facility Health Risk Assessment** Applicants for distribution centers in the Downtown Plan Area within 1,000 feet of sensitive land uses that require discretionary permits and would accommodate more than 100 truck trips or 40 transport refrigeration units (TRUs) per day shall prepare health risk assessments (HRAs) per SCAQMD and OEHHA guidance to identify the potential for cancer and non-cancer health risks. If cancer risks exceeding SCAQMD standards are identified, the applicant shall identify ways to reduce risks. Methods may include, but are not limited to limiting the number of trucks/TRUs, locating distribution center entry and exit points as far as possible from sensitive land uses, and routing truck traffic away from sensitive land uses.	**Downtown Plan:** *Construction* – Less than Significant *Operation* – Significant and unavoidable **New Zoning Code:** *Construction* – Less than significant *Operation* – Less than significant
Odors	**Impact 4.2-4:** Would implementation of the Proposed Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	**Downtown Plan:** *Construction* – Less than significant *Operation* – Less than significant **New Zoning Code:**	No mitigation required.	**Downtown Plan:** *Construction* – Less than significant *Operation* – Less than significant **New Zoning Code:**

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
		Construction – Less than significant *Operation* – Less than significant		*Construction* – Less than significant *Operation* – Less than significant
BIOLOGICAL RESOURCES				
Special Status Species Habitat	**Impact 4.3-1:** Would implementation of the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	**Downtown Plan:** Significant **New Zoning Code:** Less than significant	**4.3-1(a) Pre-Construction Bird Nest Surveys and Avoidance** For discretionary projects in the Downtown Plan Area that are within 200 feet of Elysian Park, a pre-construction nesting bird survey shall be conducted no more than ten days prior to initiation of ground disturbance and vegetation removal activities for any grading or construction activity initiated during the bird nesting season (February 1 – August 31). The nesting bird pre-construction survey shall be conducted on foot by a qualified biologist and shall include a 100-foot buffer around the construction site. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities or vegetation removal shall occur within this buffer until the biologist has confirmed that breeding/ nesting is completed and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist on the basis that the encroachment will not be detrimental to an active nest. A Statement of Compliance signed by the Applicant and Owner is required to be submitted to LADBS at plan check and prior	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
			to the issuance of any permit. Any survey, report, construction monitoring, and implementation of protective measures conducted shall be documented by a qualified biologist, and shall be provided to the City upon request. **4.3-1(b) Notification** All project applicants will be notified of and shall include on their plans an acknowledgement of the requirement to comply with the federal MBTA and CFGC to not destroy active bird nests and of best practices recommended by qualified biologist to avoid impacts to active nests, including checking for nests prior to construction activities during February 1-August 31 and what to do if an active nest is found, including inadvertently during grading or construction activities. Such best practices shall include giving an adequate construction and grading buffer to avoid the active nest during construction.	
Riparian Habitat	**Impact 4.3-2:** Would implementation of the Proposed Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	**Downtown Plan:** No impact **New Zoning Code**: Less than significant	No mitigation required.	**Downtown Plan:** No impact **New Zoning Code:** Less than significant
Wetlands	**Impact 4.3-3:** Would implementation of the Proposed Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	**Downtown Plan:** No impact **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** No impact **New Zoning Code:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
Migratory Wildlife, Biological Resources Plan	**Impact 4.3-4:** Would implementation of the Proposed Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	**Downtown Plan:** No impact **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** No impact **New Zoning Code:** Less than significant
Local Policies and Ordinances	**Impact 4.3-5:** Would implementation of the Proposed Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
Habitat Conservation Plan	**Impact 4.3-6:** Would implementation of the Proposed Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	**Downtown Plan:** No impact **New Zoning Code:** No impact	No mitigation required.	**Downtown Plan**: No impact **New Zoning Code:** No impact
CULTURAL RESOURCES				
Historical Resources	**Impact 4.4-1:** Would implementation of the Proposed Project cause a substantial adverse change in the significance of a historical resource as pursuant to § 15064.5?	**Downtown Plan:** Significant **New Zoning Code**: Less than significant	No feasible mitigation measures have been identified.	**Downtown Plan:** Significant and unavoidable **New Zoning Code:** Less than significant
Archaeological Resources	**Impact 4.4-2:** Would implementation of the Proposed Project cause a substantial adverse change in the	**Downtown Plan:** Significant	**4.4-2(a) Archaeological Resources Evaluation and Avoidance/Recovery** For discretionary projects that are excavating previously undisturbed land or below previously excavated depths, all	**Downtown Plan:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
	significance of an archaeological resource pursuant to § 15064.5?	**New Zoning Code:** Less than significant	reasonable methods shall be used to determine the potential that archaeological or tribal cultural resources are present on the project site, including thorough searches of databases and records, surveys, and/or consultation with local tribe(s) with ancestral ties to the project area. If there is a medium to high potential that resources are located on the project site and it is possible that resources will be impacted, a Qualified Archaeologist shall monitor and direct all excavation, grading or other ground disturbance activities to identify any resources and avoid potential impacts to such resources. **4.4-2(b) Archaeological Assessment** For all discretionary projects, the City shall require assessment and treatment of all cultural resources identified on a site, whether through monitoring under MM4.4-2(a) or through inadvertent discovery, in a manner consistent with PRC Section 21083.2, as determined appropriate by a Qualified Archaeologist. When an archaeological resource is identified on site, all work shall cease in the immediate area, work may continue unimpeded on other portions of the site. A Qualified Archaeologist shall identify the resource, prepare a mitigation plan consistent with PRC section 21083.2 and the project applicant and its contractors shall comply with the plan. A report shall be prepared according to current professional standards that describes the resource, how it was assessed, and disposition. **4.4-2(c) Notification of Intent to Excavate Language** For all projects not subject to mitigation measure 4.4-2(a) or 4.4-2(b) that are seeking excavation or grading permits, the Department of Building and Safety shall issue the following notice and obtain an acknowledgement of receipt of the notice from applicants: • California Penal Code Section 622.5 provides the following: “Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any	**New Zoning Code:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
			object or thing of archeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor." • Best practices to ensure archaeological resources are not damaged include but are not limited to the following steps: ○ A qualified archaeologist monitors excavation and grading activities in soils that have not been previously disturbed, to identify, record, and evaluate the significance of any archaeological finds during construction. ○ If archaeological resources are uncovered (in either a previously disturbed or undisturbed area), all work ceases in the area of the find until a qualified archaeologist has evaluated the find in accordance with federal, state, and local guidelines. ○ Personnel of the project shall not collect or move any archaeological materials or associated materials. ○ If cleared by a qualified archaeologist, construction activity may continue unimpeded on other portions of the project site. ○ The found deposits shall be treated in accordance with federal, state, and local guidelines and regulations. ○ As provided in Public Resources Code Section 21083.2, archaeological resources should be preserved in place or left in an undisturbed state. When preserving in place or leaving in an undisturbed state is not possible, excavation should occur unless testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, and this determination is documented by an archaeologist. ○ Construction activities in the area where resources were found may commence once the identified	

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
			resources are properly assessed and processed by a qualified archeologist and the archaeologist clears the site for construction activity. **4.4-2(d) Zanja Madre HAER Documentation** Portions of the Zanja Madre are known to exist throughout the Downtown Plan Area. If any portion of the Zanja Madre is uncovered as a result of implementation of mitigation measure 4.4-2(c), the following steps should be taken. If segments of Zanja Madre System are present and disturbance to the System cannot be avoided, they should be inspected by a qualified archaeologist. If the present segment/s are found to retain integrity, documentation meeting the standards and guidelines established the Historic American Engineering Record (HAER) should be undertaken and transmitted to the Library of Congress prior to any alteration or demolition activity. Documentation should include narrative records, measured drawings, and photographs in conformance with HAER Guidelines. In addition to HAER documentation, specific treatments shall be developed and implemented based on potential California Register or eligibility criteria or as a unique archaeological resource as follows: • Treatment Under Criterion 1: Treatment shall include interpretation of the Zanja Madre System for the public. The interpretive materials may include, but not be limited to, interpretive displays of photographs and drawings produced during the HAER documentation, signage at the Zanja Madre alignment, relocating preserved segments in a publicly accessible display, or other visual representations of Zanja alignments through appropriate means such as a dedicated internet website other online-based materials. At a minimum, the interpretive materials shall include photographs and drawings produced during the HAER documentation, and signage. These interpretive materials shall be employed as part of Project public outreach efforts that may include various forms of	

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS				
Impact Category	**Checklist Threshold**	**Level of Impact Before Mitigation**	**Mitigation Measure**	**Level of Impact After Mitigation**
			public exhibition and historic image reproduction. Additionally, the results of the historical and archaeological studies conducted for the Project shall be made available to the public through repositories such as the local main library branch or with identified non-profit historic groups interested in the subject matter. The interpretive materials shall be prepared at the expense of the Project applicant, by professionals meeting the Secretary of the Interior standards in history or historical archaeology. The development of the interpretive materials shall consider any such materials already available to the public so that the development of new materials would add to the existing body of work on the historical Los Angeles water system, and to this end, shall be coordinated, to the extent feasible and to the satisfaction of the Department of City Planning. The interpretive materials shall include a consideration of the Zanja Madre segment located on the Project Site in relation to the entire Zanja system. The details of the interpretive materials, including the content and format, and the timing of their preparation, shall be completed to the satisfaction and subject to the approval of the Department of City Planning. • Treatment Under Criterion 2: No additional work; archival research about important persons directly associated with the construction and use of Zanja Madre would be addressed as part of HAER documentation. • Treatment Under Criterion 3: No additional work; HAER documentation is sufficient. • Treatment Under Criterion 4: No additional work; archaeological data recovery and HAER documentation are sufficient. • Treatment as a unique archaeological resource: Same as Criterion 1 treatment.	

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
Human Remains	**Impact 4.4-3:** Would implementation of the Proposed Project disturb any human remains, including those interred outside of dedicated cemeteries?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
ENERGY				
Inefficient Energy Consumption	**Impact 4.5-1:** Would implementation of the Proposed Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
Renewable Energy/Energy Efficiency Plans	**Impact 4.5-2:** Would implementation of the Proposed Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
GEOLOGY AND SOILS				
Earthquake Fault, Seismicity, and Seismic-Related Ground Failure	**Impact 4.6-1:** Would implementation of the Proposed Project directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a	**Downtown Plan:** No impact **New Zoning Code:** No impact	No mitigation required.	**Downtown Plan:** No impact **New Zoning Code:** No impact

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
	known fault? Refer to Division of Mines and Geology Special Publication 42 ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides?			
Soil Erosion	**Impact 4.6-2:** Would implementation of the Proposed Project result in substantial soil erosion or the loss of topsoil?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
Geologic Hazards / Unstable Soils	**Impact 4.6-3:** Would development of the Proposed Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	**Downtown Plan:** No impact **New Zoning Code:** No impact	No mitigation required.	**Downtown Plan:** No impact **New Zoning Code:** No impact
Expansive Soil	**Impact 4.6-4:** Would development of the Proposed Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	**Downtown Plan:** No impact **New Zoning Code:** No impact	No mitigation required.	**Downtown Plan:** No impact **New Zoning Code:** No impact
Septic Tanks	**Impact 4.6-5:** Would the Proposed Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	**Downtown Plan:** No impact **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** No impact **New Zoning Code:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
Paleontological Resources	**Impact 4.6-6:** Would implementation of the Proposed Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**Downtown Plan:** Significant **New Zoning Code:** Less than significant	**4.6-6(a) Paleontological Resources** For all discretionary projects that are excavating earth for two or more subterranean levels within previously undisturbed land or below previously excavated depths within native soils, a determination shall be made using all reasonable methods to determine the potential that paleontological resources are present on the project site, including through searches of databases and records, and surveys. If there is a medium to high potential that paleontological resources are located on the project site and it is possible that these resources will be impacted, monitoring will be conducted for all excavation, grading or other ground disturbance activities to identify any resources and avoid potential impacts to such resources as follows: *Paleontological Worker Environmental Awareness Program (WEAP).* Prior to the start of construction, the Qualified Paleontologist or paleontological monitor shall conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. In the event of a fossil discovery by construction personnel, all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be contacted to evaluate the find before restarting work in the area. If it is determined that the fossil(s) is(are) scientifically significant, the paleontological monitor shall complete the next two steps. *Fossil Salvage*. The Qualified Paleontologist or designated paleontological monitor shall recover intact fossils. Typically fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case the paleontologist shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. Any fossils shall be	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS				
Impact Category	**Checklist Threshold**	**Level of Impact Before Mitigation**	**Mitigation Measure**	**Level of Impact After Mitigation**
			handled and deposited consistent with a mitigation plan prepared by the paleontological monitor. *Paleontological Resource Construction Monitoring.* Additional ground disturbing construction activities (including grading, trenching, foundation work and other excavations) in undisturbed sediments, below five feet, with high paleontological sensitivity shall be monitored on a full-time basis by a Qualified Paleontologist or designated paleontological monitor during initial ground disturbance. If the paleontological monitor determines that full-time monitoring is no longer warranted, he or she may recommend that monitoring be reduced to periodic spot-checking or cease entirely. Monitoring shall be reinstated if any new or unforeseen deeper ground disturbances are required. **4.6-6(b) Treatment of Paleontological Resources** For discretionary projects, the City shall require that all paleontological resources identified on a project site be assessed and treated. A report shall be prepared according to current professional standards that describes the resource, how it was assessed, and disposition. **4.6-6(c) Notification of Intent to Excavate Language** For all projects not subject to 4.6-6(a) that are seeking excavation or grading permits, the Department of Building and Safety shall issue the following notice and obtain an acknowledgement of receipt of the notice from applicants: • California Penal Code Section 622.5 provides the following: "Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor." • PRC Section 5097.5 provides protection for cultural and paleontological resources, where Section 5097.5(a) states, in part, that: "No person shall knowingly and	

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS				
Impact Category	**Checklist Threshold**	**Level of Impact Before Mitigation**	**Mitigation Measure**	**Level of Impact After Mitigation**
			willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands." • California Code of Regulations, Title 14, Section 4307 states that "no person shall remove, injure, deface or destroy any object of paleontological, archaeological, or historical interest or value." Section 1427 "recognizes that California's archaeological resources are endangered by urban development and population growth and by natural forces….Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archaeological or historical interest or value, whether situated on private lands or within any public park of place, is guilty of a misdemeanor. It is a misdemeanor to alter any archaeological evidence found in any cave, or to remove any materials from a cave." • Best practices to ensure unique geological and paleontological resources are not damaged include but are not limited to the following steps: o Prior to excavation and grading activities a qualified paleontologist prepares a resource assessment using records from the Natural History Museum of Los Angeles County. o If in the assessment, the soil is identified as potentially containing paleontological resources, a qualified paleontologist monitors excavation and grading activities in soils that have not been previously disturbed, to identify, record, and evaluate the significance of any paleontological finds during construction. o If paleontological resources are uncovered (in either a previously disturbed or undisturbed area),	

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
			all work ceases in the area of the find until a qualified paleontologist has evaluated the find in accordance with federal, state, and local guidelines. o If fossils are discovered, a qualified paleontologist shall recover them. Typically fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case the paleontologist would have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. Handline and disposition of fossils is done at the direction and guidance of a qualified paleontologist. o Personnel of the project would not collect or move any paleontological materials or associated materials. o If cleared by the qualified paleontologist, construction activity would continue unimpeded on other portions of the project site. o Construction activities in the area where resources were found would commence once the identified resources are properly assessed and processed by a qualified paleontologist and if construction activities were cleared by the qualified paleontologist.	
GREENHOUSE GASES				
Plans, Policies or Regulations	**Impact 4.7-1:** Whether the Proposed Project be consistent with AB 32, SB 32, SB 375 (through demonstration of conformance with the 2016–2040 RTP/SCS), the Sustainable City pLAn and GreenLA?	**Downtown Plan:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
		New Zoning Code: Less than significant		**New Zoning Code:** Less than significant
HAZARDS AND HAZARDOUS MATERIAL				
Hazardous Materials Transport, Use, Disposal	**Impact 4.8-1:** Would implementation of the Proposed Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
Hazardous Materials Upset or Accident	**Impact 4.8-2:** Would implementation of the Proposed Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
Hazards within ¼ Mile of School	**Impact 4.8-3:** Would implementation of the Proposed Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	**Downtown Plan:** Significant **New Zoning Code:** Less than significant	Refer to mitigation measure 4.8-4.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
Hazardous Materials Sites	**Impact 4.8-4:** Would the Proposed Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	**Downtown Plan:** Significant **New Zoning Code:** Less than significant	**4.8-4(a) Database Review, Investigation, and Remediation.** Prior to issuance of a c, the SWRCB's GeoTracker database (GeoTracker 2017) and DTSC's EnviroStor database (EnviroStor 2017) shall be consulted to determine whether or not the site to be graded is within 500 feet of an identified active hazardous material site.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS				
Impact Category	**Checklist Threshold**	**Level of Impact Before Mitigation**	**Mitigation Measure**	**Level of Impact After Mitigation**
			If the site is identified in the GeoTracker or EnviroStar Database within 500 feet of an identified active hazardous material site, or if the site to be graded is located on a site that was historically used as an industrial use or is currently used as a gas station or dry cleaner, the following process shall be followed prior to issuance of a grading permit: • A Phase I ESA shall be conducted in accordance with ASTM standards. • If the Phase I ESA identifies any recognized environmental conditions (RECs), a Phase II ESA shall be conducted to determine whether the identified RECs have resulted in soil, groundwater, or soil-vapor contamination exceeding regulatory action levels. • If the Phase II ESA identifies contamination exceeding regulatory action levels, remediation or corrective action (e.g., removal of contamination, in-situ treatment, or soil capping) shall be conducted under the oversight of state and/or local agency officials (as necessary) and in full compliance with applicable state and federal laws and regulations. If remediation is determined to be necessary, the grading permit shall not be issued until the applicable regulatory agency has indicated that further remedial action is not required or that any remedial action can be implemented in conjunction with excavation and/or grading. **4.8-4(b) Notification of Intent to Excavate Language** For all projects not subject to mitigation measure 4.8-4(a) that are seeking excavation or grading permits, the Department of Building and Safety shall obtain the following acknowledgement and affidavit from the applicant: No known recognized soil or groundwater contamination exceeding regulatory action levels is present on-site. If contamination exceeding regulatory action levels is discovered during excavation, grading, or construction activities, the applicant and his/her/its contractors shall	

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
			provide evidence of compliance with all applicable federal, state and local regulations for remediation of hazardous materials, including but not limited to notifying the appropriate oversight agency (e.g., DTSC, the Water Board, County Environmental Health) of the contamination, hiring a qualified environmental professional to conduct the necessary assessments and abatement (including soil sampling, preparing a remediation plan to adequately abate the hazardous materials, and ultimately obtaining necessary clearance letters from the oversight agency), and issuance of a No Further Action letter, if applicable, before obtaining an occupancy permit.	
Airport Plan	**Impact 4.8-5:** For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the area?	**Downtown Plan:** No impact **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** No impact **New Zoning Code:** Less than significant
Private Airstrip	**Impact 4.8-6:** For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the area?	**Downtown Plan:** No impact **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** No impact **New Zoning Code:** Less than significant
Emergency Response Plans	**Impact 4.8-7:** Would implementation of the Proposed Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
Wildland Fire	**Impact 4.8-8:** Would implementation of the Proposed Project expose	**Downtown Plan:** No impact	No mitigation required.	**Downtown Plan:** No impact

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS				
Impact Category	**Checklist Threshold**	**Level of Impact Before Mitigation**	**Mitigation Measure**	**Level of Impact After Mitigation**
	people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires	**New Zoning Code:** Less than significant		**New Zoning Code:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS				
Impact Category	**Checklist Threshold**	**Level of Impact Before Mitigation**	**Mitigation Measure**	**Level of Impact After Mitigation**
HYDROLOGY AND WATER QUALITY				
Groundwater Quality / Discharge Requirements	**Impact 4.9-1:** Would implementation of the Proposed Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
Groundwater	**Impact 4.9-2:** Would the Proposed Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
Drainage – Erosion, Runoff, Flooding	**Impact 4.9-3:** Would the Proposed Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces, in a manner which would: (i) Result in substantial erosion or siltation on- or off-site; (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
	(iv) Impede or redirect flood flows?			
Pollutants	**Impact 4.9-4:** In flood hazard, tsunami, or seiche zones, would the Proposed Project risk release of pollutants due to project inundation?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
Water Quality Plans and Policy Consistency	**Impact 4.9-5:** Would the Proposed Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	**Downtown Plan:** Less than significant **New Zoning Code:** No impact.	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** No impact.
LAND USE AND PLANNING				
Physically Divide a Community	**Impact 4.10-1:** Would implementation of the Proposed Project physically divide an established community?	**Downtown Plan:** No impact **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** No impact **New Zoning Code:** Less than significant
Land Use Plans and Policy Consistency	**Impact 4.10-2:** Would implementation of the Proposed Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
NOISE				
Noise Levels	**Impact 4.11-1:** Would implementation of the Proposed Project generate a substantial	**Downtown Plan:**	**4.11-1 Project-Specific Noise Study.**	**Downtown Plan:**

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
	temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	*Permanent* – less than significant *Temporary* – Significant **New Zoning Code:** Less than significant	A Noise Study, prepared by a qualified noise expert to meet the requirements herein, shall be required for all discretionary projects in the Downtown Plan Area located within 500 feet of noise-sensitive land uses and that have one or more of the following characteristics: • Two or more subterranean levels or 20,000 cubic yards or more of excavated material; • Construction duration (excluding architectural coatings) of 18 months or more; • Use of large, heavy-duty equipment rated 300 horsepower or greater; or • The potential for impact pile driving. Noise-sensitive land uses are residences, transient lodgings, schools, libraries, churches (or other places of assembly), hospitals, nursing homes, auditoriums, concert halls, amphitheaters, playgrounds, and parks. The Noise Study shall characterize sources of construction noise, quantify noise levels at noise-sensitive uses, and identify measures to reduce noise exposure. The Noise Study shall identify reasonably available noise reduction devices or techniques to reduce noise levels to acceptable levels and/or durations including through reliance on any relevant federal, state or local standards or guidelines or accepted industry practices, and in compliance with LAMC standards. Noise reduction devices or techniques shall include but not be limited to: mufflers, shields, sound barriers, and time and place restrictions on equipment and activities. Each measure in the Noise Study shall identify anticipated noise reductions at noise-sensitive land uses. Project applicants shall be required to comply with all measures identified and recommended by the Noise Study and shall maintain proof that notice of, as well as compliance with, the identified measures have been included in contractor agreements.	*Permanent* – less than significant *Temporary* – Significant and unavoidable **New Zoning Code:** Less than significant
Groundborne Vibration	**Impact 4.11-2:** Would implementation of the Proposed	**Downtown Plan:**	**4.11-2(a) Vibration Control Plan**	**Downtown Plan:**

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
	Project generate excessive groundborne vibration or groundborne noise levels?	*Operational* – less than significant *Temporary Construction* – Significant **New Zoning Code:** Less than significant	For construction activity for discretionary projects involving heavy construction equipment (e.g., large bulldozer or excavator) within 25 feet of an extremely fragile building (non-engineered masonry) or historical resource (designated or in SurveyLA or other City recognized survey), the applicant shall prepare a Vibration Control Plan. The Vibration Control Plan requirement will also apply to use of pile drivers within 135 feet of an extremely fragile building or historical resource. The Vibration Control Plan shall be prepared by a qualified structural engineer and shall include methods to minimize vibration, including but not limited to: • Use of drilled piles or the use of a sonic vibratory pile driver rather than impact pile driving • Use of rubber-tired equipment rather than metal-tracked equipment • Avoiding the use of vibrating equipment when allowed by best engineering practices The Vibration Control Plan shall include a pre-construction survey letter establishing baseline conditions at potentially affected extremely fragile buildings/historical resources. The survey letter shall provide a shoring design to protect the extremely fragile building/historical resource from potential damage. At the conclusion of vibration causing activities, the qualified structural engineer shall issue a follow-up letter describing damage, if any, to impacted buildings. The letter shall include recommendations for any repair, as may be necessary, in conformance with the Secretary of the Interior Standards. Repairs shall be undertaken and completed in conformance with all applicable codes including the California Historical Building Code (Part 8 of Title 24). A Statement of Compliance signed by the Applicant and Owner is required to be submitted to LADBS at plan check and prior to the issuance of any permit. The Vibration Control Plan, prepared as outlined above shall be documented by a	*Permanent* – less than significant *Temporary* – Significant and unavoidable **New Zoning Code:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
			qualified structural engineer, and shall be provided to the City upon request. **4.11-2(b) Best Management Practices for Vibration** For projects that are not required to comply with mitigation measure 4.11-2(a), the City shall notify developers of the following best management practices to reduce damage to vibration-sensitive uses: • Impact pile drivers shall be avoided to eliminate excessive vibration levels. Drilled piles or the use of a sonic vibratory pile driver are alternatives that shall be utilized where geological conditions permit their use. • Construction activities shall involve rubber-tired equipment rather than metal-tracked equipment. • The construction contractor shall manage construction phasing (scheduling demolition, earthmoving, and ground-impacting operations so as not to occur in the same time period), use low-impact construction technologies, and shall avoid the use of vibrating equipment when allowed by best engineering practices.	
Private Airstrip / Airport Plan	**Impact 4.11-3:** For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Proposed Project expose people residing or working in the project area to excessive noise levels?	**Downtown Plan:** No impact **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** No impact **New Zoning Code:** Less than significant
POPULATION, HOUSING AND EMPLOYMENT				
Induce Substantial Population Growth	**Impact 4.12-1:** Would implementation of the Proposed Project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly	**Downtown Plan:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant.

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
	(e.g., through extension of roads or other infrastructure)?	**New Zoning Code:** Less than significant		**New Zoning Code:** Less than significant.
Displacement of Existing People or Housing	**Impact 4.12-2:** Would implementation of the Proposed Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	**Downtown Plan:** Less than significant. **New Zoning Code:** Less than significant.	No mitigation required.	**Downtown Plan:** Less than significant. **New Zoning Code:** Less than significant.
PUBLIC SERVICES				
Fire Protection	**Impact 4.13-1:** Would the Proposed Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?	**Downtown Plan**: Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan**: Less than significant **New Zoning Code:** Less than significant
Police Protection	**Impact 4.13-2:** Would the Proposed Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response	**Downtown Plan**: Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan**: Less than significant **New Zoning Code:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
	times or other performance objectives for police protection?			
Public Schools	**Impact 4.13-3:** Would the Proposed Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service or other performance objectives for public schools?	**Downtown Plan**: Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan**: Less than significant **New Zoning Code:** Less than significant
Libraries	**Impact 4.13-4:** Would the Proposed Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for libraries?	**Downtown Plan**: Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan**: Less than significant **New Zoning Code:** Less than significant
RECREATION				
Existing Regional Parks or Recreation Facilities	**Impact 4.14-1:** Would the Proposed Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	**Downtown Plan:** Significant **New Zoning Code:** Less than significant	No feasible mitigation measures have been identified.	**Downtown Plan:** Significant and unavoidable **New Zoning Code:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
Recreational and Governmental Facilities	**Impact 4.12-2:** Does the Proposed Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? **Impact 4.12-3:** Would the Proposed Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?	**Downtown Plan**: Less than significant. **New Zoning Code:** Less than significant.	No mitigation required.	**Downtown Plan**: Less than significant. **New Zoning Code:** Less than significant.
TRANSPORTATION				
Circulation System Programs and Policy	**Impact 4.15-1:** Would implementation of the Proposed Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
CEQA Guidelines	**Impact 4.15-2:** Would implementation of the Proposed Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	**Downtown Plan:** No impact **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** No impact **New Zoning Code:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
Design Feature Hazards	**Impact 4.15-3:** Would implementation of the Proposed Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	**Downtown Plan:** Significant and Unavoidable impact related to freeway queuing **New Zoning Code:** Less than significant	No feasible mitigation measures identified.	**Downtown Plan:** Significant and Unavoidable (related to freeway queuing) **New Zoning Code:** Less than significant
Emergency Access	**Impact 4.15-4:** Would implementation of the Proposed Project result in inadequate emergency access?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
TRIBAL RESOURCES				
Historical and Tribal Resources	**Impact 4.16-1:** Would implementation of the Proposed Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: • Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in	**Downtown Plan:** Significant **New Zoning Code:** Less than significant	Refer to mitigation measure 4.4-2(a) through (d). Also, the following is required. **4.16-1(a) Native American Consultation and Monitoring for Discretionary Projects** For all discretionary projects where excavation could extend below previously disturbed levels, notification shall be provided to California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project site and have submitted a written request to the Department of City Planning to be notified of proposed projects in that area. If the potential for tribal resources exists, excavation in previously undisturbed soils shall be monitored by a qualified tribal monitor. If tribal resources are discovered during excavation, grading, or construction activities, work shall cease in the area of the find until an appropriate Tribal Representative has evaluated the find. Construction personnel shall not collect or move any tribal	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
	Public Resources Code section 5020.1(k), or • A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		resources. Construction activity may continue unimpeded on other portions of the project site. Any tribal resources shall be treated with appropriate dignity and protected and preserved as appropriate. **4.16-1(b) Notices for Non-Discretionary Projects.** For all projects not subject to 4.16-1(a) that are seeking excavation or grading permits, the Department of Building and Safety shall issue the following notice and obtain an acknowledgment of receipt of the notice from applicants: ● Several federal and state laws regulate the treatment of tribal resources and make it a criminal violation to destroy those resources. These include, but are not limited to: o California Penal Code Section 622.5 provides the following: "Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor." o Public Resources Code Section 5097.5 (a) states, in part, that: No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express written permission of the public agency having jurisdiction over the lands. ● Best practices to ensure that tribal cultural resources are not damaged include but are not limited to the following steps:	

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
			○ A qualified tribal monitor or archaeologist qualified to identify tribal resources would monitor excavation and grading activities in soils that have not been previously disturbed, to identify, record, and evaluate the significance of any archaeological finds during construction. ○ If tribal resources are uncovered (in either a previously disturbed or undisturbed area), all work ceases in the area of the find until an appropriate Tribal Representative has evaluated the find or, if no Tribal Representative is identified, the qualified archaeologist has evaluated the find in accordance with federal, state, and local guidelines. ○ The found deposits shall be treated with appropriate dignity and protected and preserved as appropriate with the agreement of the Tribal Representative and in accordance with federal, state, and local guidelines. ○ An agreement will be reached with the Tribal Representative to mitigate or avoid any significant impacts to identified tribal cultural resources. ○ The location of the find of tribal cultural resources and the type and nature of the find will not be published beyond providing it to public agencies with jurisdiction or responsibilities related to the resources, the qualified archaeologist, and tribal representatives. ○ Absent an agreement with the Tribal Representative, as provided in Public Resources code Section 21083.2, archaeological resources should be preserved in place or left in an undisturbed state. When preserving in place or leaving in an undisturbed state is not possible, excavation should not occur unless testing or studies already completed have adequately recovered the scientifically consequential information form and about the resource and this	

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
			determination is document by a qualified archaeologist. o Personnel of the project shall not collect or move any archaeological or tribal resources or associated materials, or publish the location of tribal cultural resources. o Construction activity may continue unimpeded on other portions of the project site if cleared by the Tribal Representative or qualified archaeologist. o Construction activities in the area where resources were found may commence once the identified resources are properly assessed and processed by a Tribal Representative or, if not Tribal Representative is identified, a qualified archaeologist.	
UTILITIES AND SERVICES				
Wastewater Treatment	**Impact 4.17-1:** Would implementation of the Proposed Project require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects? **Impact 4.17-2:** Would implementation of the Proposed Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact Category	Checklist Threshold	Level of Impact Before Mitigation	Mitigation Measure	Level of Impact After Mitigation
Stormwater Drainage	**Impact 4.17-3:** Would implementation of the Proposed Project require or result in the relocation or construction of stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
Water Facilities and Supply	**Impact 4.17-4:** Would implementation of the Proposed Project require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects? **Impact 4.17-5:** Would the Proposed Project have insufficient water supplies available to serve the project and reasonably or foreseeable future development during normal, dry and multiple dry years?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
Solid Waste Standards and Capacity	**Impact 4.17-6:** Would the Proposed Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant
Solid Waste Management and Reduction Regulations	**Impact 4.17-7:** Would the Proposed Project not comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	**Downtown Plan:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant

TABLE ES-3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS				
Impact Category	**Checklist Threshold**	**Level of Impact Before Mitigation**	**Mitigation Measure**	**Level of Impact After Mitigation**
		New Zoning Code: Less than significant		**New Zoning Code:** Less than significant
Electric Power, Natural Gas, or Telecommunication Facilities	**Impact 4.17-8:** Would implementation of the Proposed Project require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant	No mitigation required.	**Downtown Plan:** Less than significant **New Zoning Code:** Less than significant

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3.0 PROJECT DESCRIPTION

Consistent with the provisions of the California Environmental Quality Act (CEQA) Guidelines Section 15124, this chapter provides information regarding the Proposed Project, including the Downtown Plan and the New Zoning Code.

This chapter is required to contain the following information: the location of the Proposed Project; a statement of project objectives; a general description of the Proposed Project's technical, economic, and environmental characteristics; and a statement briefly describing the intended uses of the EIR. The *CEQA Guidelines* state a project description need not be exhaustive, but should provide the level of detail needed for the evaluation and review of potential environmental impacts.

The Project Description is the starting point for all environmental analysis required by the State CEQA Guidelines. Section 15146 of the CEQA Guidelines states that the degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity, which is described in the EIR.

3.1 PROJECT OVERVIEW

The Proposed Project consists of two components:

1. **Update the City's Downtown Community Plans ("Downtown Plan").** This is the primary component of the Proposed Project, and the purpose is to update the Central City Community Plan and the Central City North Community Plan, the two community plans covering Downtown Los Angeles. The updates to these two community plans are part of the City's New Community Plan (NCP) Update program to update all 35 of the City's community plans. The City's 35 community plans make up the land use element of the City's General Plan. The community plan updates will require: (i) amending the text of the community plan, including the goals, policies, and programs, (see details in Section 3.6.1) (ii) amending the designations on the community plan land use maps, which express a range of development intensities, distribution of land uses, and provides zoning consistency tables (see details in Section 3.6.3) (iii) adopting zoning ordinances to facilitate implementation of the Community Plans, including adopting zone changes to amend the Zoning Map, and (iv) making all other necessary amendments to the Framework Elements, Mobility Plan, and other General Plan Elements, specific plans, the Los Angeles Municipal Code (LAMC), and other ordinances to implement the above. For the updates to the two community plans, instead of adopting zone changes utilizing existing zoning classifications in Chapter 1 of the LAMC (the City's Zoning Code), the City will adopt and utilize portions of a proposed new zoning code ("New Zoning Code"), discussed below.

   The component of the Proposed Project to update the Central City Community Plan and the Central City North Community Plan, including adopting changes to re-designate property in the Downtown Plan Area utilizing the zone classifications in the New Zoning Code, as well as all other required actions to update the community plans, is referred to in this EIR as the **'Downtown Plan'**.

2. **Adopt and implement the New Zoning Code for the Downtown Plan Area ("New Zoning Code")**[1]. This component of the Proposed Project is to adopt and implement part of the New Zoning

[1] The Notice of Preparation for this EIR referred to the New Zoning Code as defined in this EIR as the, "Downtown Zoning Code."

Code in the Downtown Plan Area. The New Zoning Code is part of a citywide program (the re:code LA program) to comprehensively update the City's zoning ordinances through amendments to the LAMC. The LAMC amendments will add a new Chapter 1A to the LAMC, which will establish a new zoning code for the City. The existing zoning code is found in Chapter 1 of the LAMC. Adoption of the full text of the New Zoning Code is expected to occur over multiple projects and is beyond the scope of the Proposed Project. Implementation of the New Zoning Code outside the Downtown Plan Area will occur through future zone changes to re-designate land utilizing the zoning designations from the new Chapter 1A and is expected to occur through the community plan update process, or other future planning and zoning efforts. As part of the Proposed Project, the City intends to adopt that portion of Chapter 1A that will allow the City to utilize and implement the New Zoning Code in the Downtown Plan Area. This component of the Proposed Project will require adopting or amending regulations in the new Chapter 1A that include at minimum: (i) the new zone districts to be used in the Downtown Plan Area, including substantive requirements for those zone districts, and (ii) adopting all of the background parts of the New Zoning Code that do not already exist that would allow the new zoning to be implemented, which may include definitions, processes, development standard rules, rules for non-conforming uses, and zoning incentive programs, among others. (See details in Section 3.7.4)

The component of the Proposed Project to adopt or amend the new Chapter 1A to the LAMC is referred to in this EIR as the **"New Zoning Code."**

The designation of properties with zoning from Chapter 1A is intended to implement the updates to the Central City and Central City North Community Plans and is part of the "Downtown Plan" component. While the EIR will analyze indirect impacts of the adoption of the New Zoning Code as part of this Proposed Project, future zone changes utilizing the New Zoning Code that are not included in the zone changes made as part of the Downtown Plan component of the Proposed Project would be speculative at this time.

This chapter provides an overview of these two components of the Proposed Project, the Project location, the background for the Proposed Project, the Project objectives, a broad description of the existing environment, and a description of the Project components, and the proposed land use and zone changes for the Downtown Plan.

Downtown Community Plan Updates

A community plan update generally refers to: (i) an amendment to the policies and land use designations in one or more of the City's 35 community plans, (which make up the Land Use Element of the City's General Plan); (ii) the adoption of zoning ordinances to implement the community plan amendments; and (iii) any other necessary and related actions to implement the community plan amendments, including adopting amendments to other elements of the City's General Plan (e.g., the Framework or Circulation Elements) to ensure consistency or adopting other land use related ordinances (such as amendments to housing regulations). A community plan, as a portion of the Land Use Element of the General Plan, is a vision statement for the City's desired growth and development of a particular area of the City. As a general matter, that vision is implemented through zoning ordinances that specifically regulate allowed land uses and standards for development and design for properties throughout the Community Plan Area (CPA).

The Proposed Plan would include amending both the text and the land use map of the Central City and Central City North Community Plans. The Proposed Plan would also adopt several zoning ordinances to implement the updates to the Community Plan, including amending the Zoning Map for all portions of the CPAs to regulate specific uses and apply development standards (including height of structures, Floor Area Ratios, site configuration). The proposed zoning ordinances will primarily take the form of the New Zoning Code. No substantive changes are proposed for the following specific plans located in the Downtown Plan

Area: the Los Angeles Sports and Entertainment District Specific Plan (LASED), the Cornfield Arroyo Seco Specific Plan (CASP) and the Alameda District Specific Plan (ADP).

The amendments to the community plan text and the land use maps for the Downtown Plan are intended to guide development through the year 2040 by establishing the City's broad planning goals, policies, and objectives, the arrangement of land uses and intensities, as well as specific development standards for the Downtown Plan Area. The Downtown Plan is intended to improve the link between land use and transportation in a manner that is consistent with the City's adopted General Plan Framework Element, Mobility Element, Senate Bill 375 and state and regional policies.

No new development would be entitled or built as a direct result of adopting the Downtown Plan. Future development projects would require additional discretionary and/or ministerial approvals. These development projects are expected to occur over the next several decades. The exact type, pace, and intensity of each new development cannot be assured through the adoption of the Downtown Plan, as the level of activity will be determined largely by private investment in Downtown and the condition of the local economy.

New Zoning Code

Realizing the objectives of the Downtown Plan as envisioned requires the application of New Zoning Code regulations, developed through re:code LA, the comprehensive revision of the City's zoning code. The New Zoning Code regulations include new zone designations, intended for application in the Downtown Plan, which require the bundling of several districts to make a zone including: Form, Frontage, Development Standards, Use and Density districts; development standard rules (such as landscaping requirements, on-site sign provisions, light and glare standards and others); definition of terms; rules of measurement (such as how to measure lot width and building height); zoning incentive system(s) tied to public benefits, nonconforming use and development provisions; maintenance of current rules for division of land; street/public right of way improvement requirements; incorporation of overlay district standards and regulations; and enabling language for Environmental Protection Measures, a set of standards that will be used to implement the mitigation measures from the EIR in compliance with CEQA Guidelines 15126.4(a)(2), in addition to other standards intended to protect the environment.

Even when adopted into the LAMC, the New Zoning Code is not effective until it is implemented through zone changes that apply the New Zoning Code zone designations (zone districts) on the City's Zoning Map for particular parcels of land in the City. The timing of the re:code LA initiative in relation to the Downtown Plan provides an opportunity to use the proposed New Zoning Code structure as part of the Downtown Plan and implement the New Zoning Code in the Downtown Plan Area. This Proposed Project will apply the New Zoning Code solely within the Downtown Plan Area. The application of the New Zoning Code outside of the Downtown Plan Area will be an incremental process over time. Ultimately, the New Zoning Code is intended to apply to the entire City of Los Angeles when all community plans and other applicable planning and regulatory documents are amended and adopted through the New Community Plan program. See Section 3.2, *Project Background*, and Section 3.7, *Project Components*, for more details about the New Zoning Code.

Proposed Project Area

As discussed below, the two components of the Proposed Project apply to two different geographic areas.

Downtown Plan Project Area

The Project Area for the Downtown Plan component is the Central City Community Plan Area and the Central City North Community Plan Area (jointly referred to in this EIR as the, "CPAs," "Downtown Plan

Area," or "Plan Area"). The Downtown Plan Area is geographically contiguous, sharing a common boundary along Alameda Street. The Central City Community Plan Area encompasses approximately 2,161 acres and is generally bounded on the north by Sunset Boulevard/Cesar Chavez Avenue, on the south by the Santa Monica Freeway (Interstate 10), on the west by the Harbor Freeway (Interstate 110), and on the east by Alameda Street. Immediately to the east of Alameda Street is the Central City North Community Plan Area, which encompasses approximately 2,005 acres and is generally bounded on the north by Stadium Way, Lilac Terrace, and North Broadway, on the south by the City of Vernon, on the west by Alameda Street, and on the east by the Los Angeles River. The Downtown Plan Area is bordered by the communities of Boyle Heights, Silver Lake-Echo Park, Westlake, Southeast and South Los Angeles, and the City of Vernon. The Downtown Plan Area boundaries are shown in **Figure 3-1**.

New Zoning Code Project Area

The Proposed Project includes implementation of the New Zoning Code regulations applicable in the Downtown Plan Area with adoption of the Downtown Plan. The New Zoning Code regulations adopted with the Proposed Project could be applied or implemented elsewhere in the City through the community plan update process or other future planning and zoning efforts. This would require future legislative action to adopt plan amendments and zoning changes, as well as environmental review. Thus, the New Zoning Code component of the Proposed Project could affect all areas within the City's jurisdictional boundaries, shown in **Figure 3-2** and **Figure 3-3**. Importantly, as community plans are updated and amended to use the new zoning, amendments to the New Zoning Code can also be made to address the policy goals of the plans. The City of Los Angeles encompasses roughly 478 square miles, including about 5 square miles of water area for the Port of Los Angeles and just under 472 square miles of land area within the County of Los Angeles. The City is generally defined by the San Gabriel Mountains in the north, the Santa Susana Mountains, Santa Monica Mountains, and Pacific Ocean in the west, Pacific Ocean in the South, and Verdugo Mountains, San Rafael Hills, and Repetto Hills in the east. The Santa Monica Mountains and Los Angeles River bisect the City, separating the San Fernando Valley in the north from the Los Angeles metropolitan basin in the south. Approximately 76 percent of the City is developed and 24 percent is undeveloped, with 22 percent of the undeveloped portion dedicated to open space.

3.2 PROJECT BACKGROUND

CITY OF LOS ANGELES GENERAL PLAN

California State law (Government Code Section 65300) requires that each city and county, including charter cities and counties, adopt a comprehensive, integrated, long-term General Plan to direct future growth and development and accommodate projected increases in population and employment. The General Plan is a fundamental policy document. It defines how a city should use and manage its physical and economic resources over time. State law requires seven General Plan Elements: land use, circulation, housing, conservation, open space, noise, and safety. Government Code Section 65302(a) requires the General Plan to include a land use element described as follows:

> *(a) A land use element that designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land. The location and designation of the extent of the uses of the land for public and private uses shall consider the identification of land and natural resources pursuant to paragraph (3) of subdivision (d). The land use element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan…*

Figure 3-1 Downtown Plan Area Map

Figure 3-2 New Zoning Code/Citywide Project Area

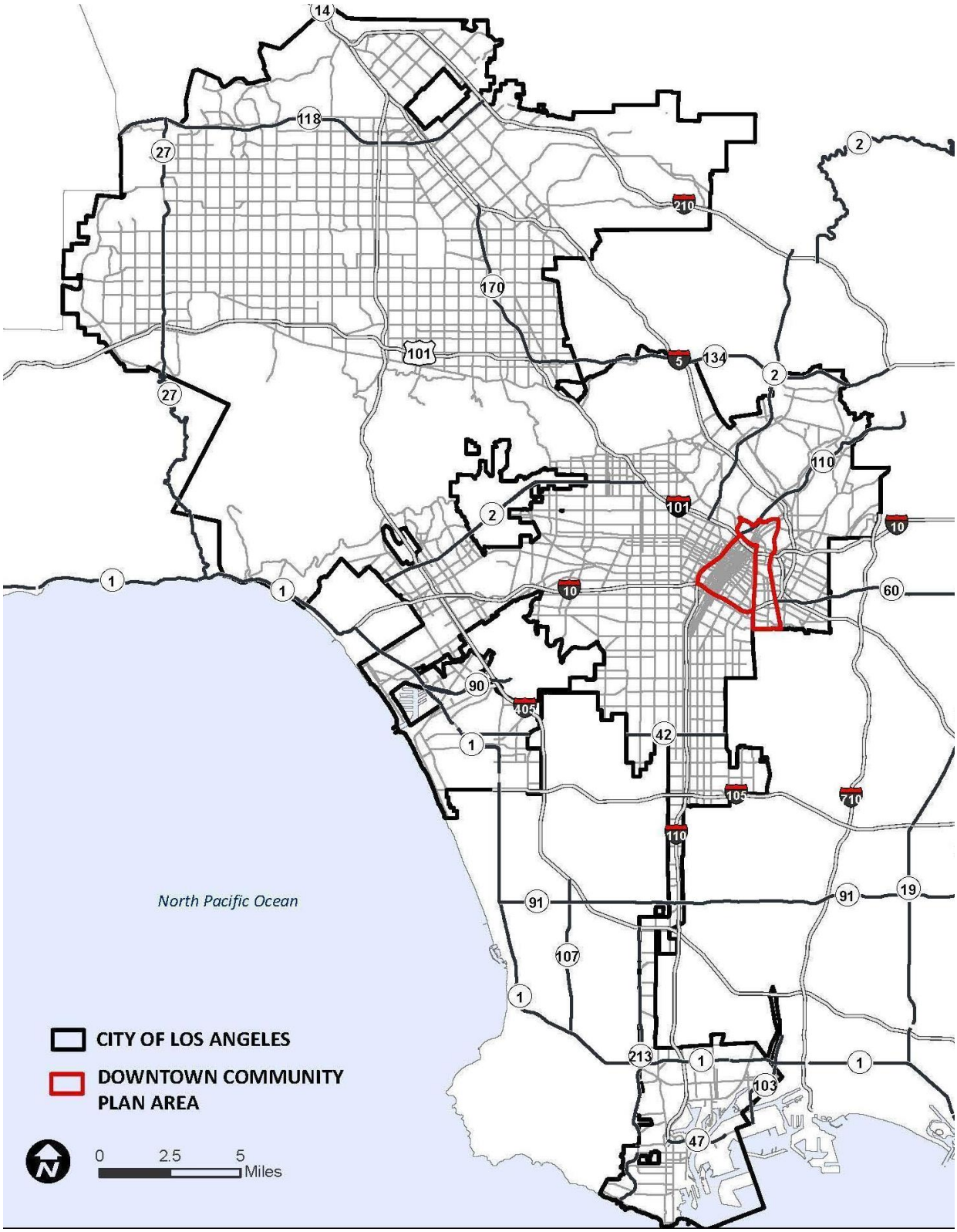
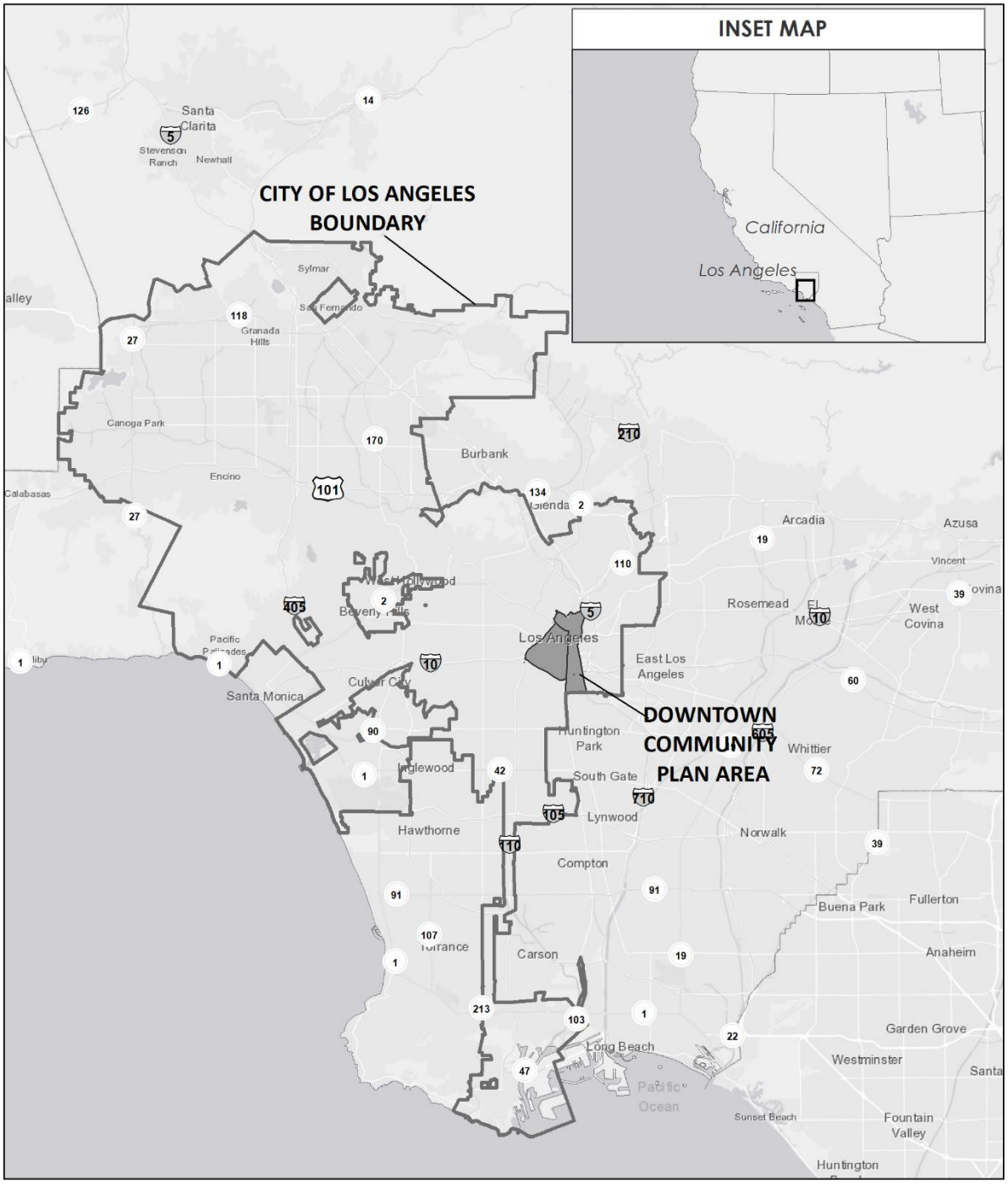


Figure 3-3 Downtown Plan Area and the New Zoning Code Project Area



The State requires that the General Plan be periodically revised to reflect new conditions, community input, and technological advances.

The Los Angeles Charter also requires that the City adopt a General Plan:

> *Sec. 554. General Plan – Purpose and Contents.*
>
> *The General Plan shall be a comprehensive declaration of goals, objectives, policies and programs for the development of the City and shall include, where applicable, diagrams, maps and text setting forth those and other features.*
>
> *(a) Purposes. The General Plan shall serve as a guide for:*
>
> *(1) the physical development of the City;*
>
> *(2) the development, correlation and coordination of official regulations, controls, programs and services; and*
>
> *(3) the coordination of planning and administration by all agencies of the City government, other governmental bodies and private organizations and individuals involved in the development of the City.*
>
> *(b) Content. The General Plan shall include those elements required by state law and any other elements determined to be appropriate by the Council, by resolution, after considering the recommendation of the City Planning Commission.*

The General Plan's guiding document for the City of Los Angeles is the **Framework Element**, which provides ***a strategy for long-range growth and development*** focused around the following guiding principles:

- grow strategically;
- conserve existing residential neighborhoods;
- balance the distribution of land uses;
- enhance neighborhood character through better development standards;
- create more small parks, pedestrian districts, and public plazas;
- focus growth around transit stations;
- improve mobility and access; and
- identify a hierarchy of commercial districts and centers.

The Framework Element, adopted in 1996, establishes a long-range land use strategy to support the City's viability and to accommodate projected growth. Framework Element policies reflect that where growth occurs, it is accommodated in a sustainable manner that protects residential neighborhoods and commercial districts, while guiding growth to higher-intensity commercial and mixed use centers that are served by transportation infrastructure. The Long-Range Land Use Diagram depicts this growth strategy with land use categories, including Neighborhood District, Community Center, Regional Center, Downtown Center, and Mixed-Use Boulevard, which reflect a conceptual relationship between land use patterns and transportation.

The Framework Element characterizes the majority of the Downtown Plan Area as the *Downtown Center*, "the primary economic, governmental, and social focal point of the region with an enhanced residential community." It is described as having uses that serve not only the region, but the state, nation, and the world. The Downtown Center has the largest government center in the region and is the location for major

cultural and entertainment facilities, hotels, high-rise residential towers, the City's Convention Center, and the center of a regional transportation network. As such, Downtown is a primary center for urban activity, with a distinguished built environment characterized by the greatest development densities in the City, the highest permitted FARs of up to 13:1, as well as safe and high quality streets and public realm. The Framework Element anticipates the Downtown Center to continue to accommodate the highest development densities in the City and function as the principal transportation hub for the region. The big-picture goals established in the Framework Element are then further refined in other planning documents such as the community plans and the zoning code. In the City of Los Angeles, the Land Use Element is composed of 35 community plans. The 35 community plans guide the physical development of neighborhoods by establishing goals and policies for land use within each CPA. The community plans implement, at a community level, the citywide goals and policies established in the overarching Framework Element and all other elements of the General Plan.

EXISTING CENTRAL CITY & CENTRAL CITY NORTH COMMUNITY PLANS

The existing Central City and Central City North Community Plans (Existing Plans) are two of the City's 35 Community Plans, which comprise the Land Use Element of the City's General Plan. Community Plans are intended to promote an arrangement of land uses, streets, and services in the Project Area to encourage economic vitality, social and physical well-being, and promote the general health, safety, welfare and convenience of people who live and work in the Project Area.

The Existing Plans were written to guide development occurring through 2010. The Existing Plans were designed to accommodate growth anticipated at that time. They designate the general distribution, general location, and extent of uses of land for housing, business, industry, open space, education, public facilities, and other categories of public and private uses of land.

The Central City Community Plan was last updated in 2003 and the Central City North Community Plan was last updated in 2000. Since then, substantial changes have occurred, most notably, completion of the Los Angeles County Metropolitan Transportation Authority (Metro) Gold and Expo Lines, and implementation of the Metro Bike share system; approval and construction of large-scale commercial and residential developments; development of future plans and infrastructural improvements that need to be accommodated, such as the Los Angeles Streetcar, Metro Regional Connector, and High Speed Rail[2]; and new growth forecasts through the year 2040, released by SCAG. The proposed update to the Downtown Plan responds to these new conditions and aims to maximize associated benefits from these large scale infrastructure improvements.

DEPARTMENT OF CITY PLANNING'S NEW COMMUNITY PLAN PROGRAM

In 2006, the City established the New Community Plan (NCP) Program in order to update the current community plans. The intent of the NCP Program is to update the community plans regularly in order to encourage smart growth, identify appropriate locations for new development, minimize lengthy discretionary approvals, and provide certainty and predictability for developers, homeowners and anyone else concerned with the future development of the City of Los Angeles. *One of the primary goals of the NCP Program is to accommodate projected growth consistent with the Framework Element* (Framework Element, Page 1). The NCP Program also establishes an ongoing method to revise community plans with citizen input in order to address prevailing neighborhood and community issues consistent with the New

[2] Based on recent changes in direction at the State level, the High Speed Rail Station appears unlikely to be built in the foreseeable future.

Zoning Code framework. Recommended changes to Community Plans and their policies and programs are based on public input, as well as collaboration with other City departments and governmental agencies.

NEW ZONING CODE AND *RE:CODE LA*

The current City of Los Angeles Zoning Code (Chapter 1 of the LAMC) was written in 1946, and several overlays and specific plans have been implemented over the 70 years since the code was adopted in order to adjust to changing community needs. As such, the re:code LA program is being undertaken by the City to comprehensively revise the City of Los Angeles Zoning Code. One of the goals of re:code LA is to simplify and clarify the existing zoning regulations and translate the existing zoning, overlays, and specific plan regulations into new regulations that address the unique contexts and forms found throughout the City.

Due to the size and scale of the City and the current Zoning Code, the re:code LA program is a substantial undertaking. It is expected that parts of the re:code LA program will be adopted and implemented incrementally. Specifically, the complete New Zoning Code (proposed to be in Chapter 1A of the LAMC) will not be adopted as a whole or all at once as a part of this Project. Only the new regulations specifically applicable to the Downtown Plan and the general regulations necessary to implement the Downtown Plan are being adopted at this time.

The general regulations of the New Zoning Code that will be adopted as part of the Proposed Project will also be available for use citywide through discretionary review processes, zone changes and general plan amendments, but would not be expected to be used at this time without a community plan update, amendment, and other future planning and zoning effort. These elements include definitions, administrative rules, development standard rules, and general use standards. Consistent with the intent of the re:code LA program, these regulations will be adopted before or simultaneously with the first ordinance to implement the new zone districts of the Downtown Plan. When the New Zoning Code content is adopted into the LAMC as part of this Project, none of the new zone districts, and their respective development standards and requirements, will be operative for any property in the City until the relevant community plan is updated or amendments are completed to utilize the new zoning, which would require environmental review pursuant to CEQA.

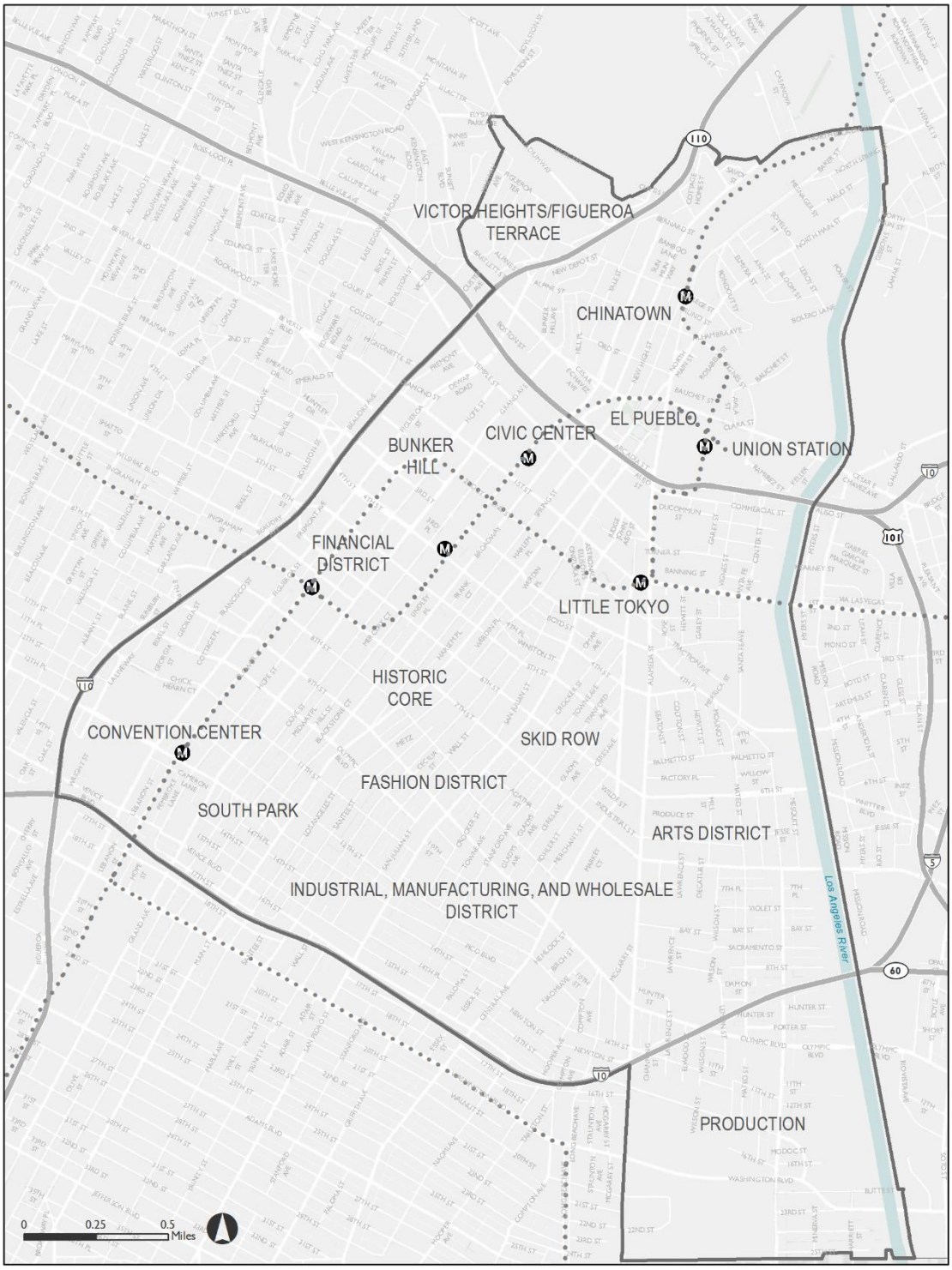
The existing Zoning Code regulations are not being repealed as part of this Project. The existing Zoning Code will continue to be in effect in Chapter 1 of the LAMC for those areas in which the new Zoning Code has not yet been applied. The existing Zoning Code would remain in place until all property in the City is rezoned and all the City's community plans are amended to apply the New Zoning Code.

Ultimately, when all property in the City is rezoned using the New Zoning Code, the existing Zoning Code will no longer apply to any property in the City. At that time, the existing Zoning Code could be repealed.

3.3 CURRENT LAND USE AND REGULATORY SETTING

The Downtown Plan Area contains a variety of residential, civic, commercial, hybrid industrial, industrial, cultural, and open space uses that exist within varying neighborhoods. While the specific names and boundaries of these neighborhoods are subject to interpretation and can vary widely across sources, they are identified here for the purpose of describing the Downtown Plan Area (**Figure 3-4**). These neighborhoods are categorized based on their unique characteristics and mix of uses and are independent of the General Plan designations. Nevertheless, they represent the existing composition of the Downtown Plan Area and are largely recognized by the general public. Consequently, existing uses, zoning and other regulatory controls within the Downtown Plan Area are described within the context of these neighborhoods as follows:

Figure 3-4 Neighborhoods in the Downtown Plan Area



Financial District and Commercial Core. The Financial District and commercial core of Downtown is generally located in the central-west side of the Downtown Plan Area, and contains both modern and historic office buildings, hotels, restaurant and retail destinations, and entertainment and nighttime attractions. These areas have the highest intensity of land uses, with the tallest buildings in the City. This portion of the Downtown Plan Area is well-served by transit, including regional and local bus lines, as well as Metro Rail stations connecting Downtown to the rest of the City of Los Angeles through the Red, Purple, Blue, and Expo lines. Additional infrastructural improvements are proposed for this area, including streetscape improvements for 7th Street, the primary pedestrian corridor for this area, and the Downtown Streetcar route. Buildings are primarily mid- and high-rises and include many of the skyscrapers that define the Downtown Los Angeles skyline.

The Financial District is predominantly designated Regional Center Commercial with C2 Commercial zoning, allowing for commercial, office, retail, housing, hotel, schools, auto sales, and limited manufacturing uses. This area does not have density limitations, due to the Greater Downtown Housing Incentive Ordinance, which applies to the entirety of the Central City Community Plan Area. The area is predominantly assigned Height District 3-D and 4-D and can reach up to 13.0:1 FAR with no height limitations through a transfer of development rights process.

Bunker Hill and Cultural Corridor. Bunker Hill is generally located in the western portion of the Downtown Plan Area and serves as both a center for office activity and a cultural corridor, featuring institutional and cultural landmarks including The Broad Museum, Walt Disney Concert Hall, and Dorothy Chandler Pavilion, and the Colburn School. Integrated with these uses are mixed-use commercial and residential buildings, and a Metro station currently under construction at 2nd Street and Hope Street that is part of the Metro Regional Connector Project.

Bunker Hill is predominantly designated Regional Center Commercial, and has R4 Multiple Dwelling and C4 Commercial zoning, which allows for C2 uses such as commercial, office, retail, multi-unit residential, hotel, schools, and auto sales, with limitations. A portion of this area is regulated by the Bunker Hill Specific Plan, which supports the development of Bunker Hill into a 24-hour environment with a mix of commercial, retail, residential, and cultural spaces, and includes urban design guidelines, transportation and parking regulations, as well as a pedestrian linkages network for the area. There are no density limitations and the area is assigned Height District 3-D and 4-D, allowing for up to 6.0:1 FAR with no height limitations. In certain portions of Bunker Hill, the Bunker Hill Specific Plan allow for up to 13:1 FAR with no height limitations through a transfer of development rights process.

Historic Core and Entertainment Center. The Historic Core and Entertainment Center (including Broadway District), generally located in the heart of the Downtown Plan Area, has one of the largest collections of historic buildings not just in Downtown Los Angeles, but in the country. As a result, the built environment is generally consistent, with 12-story Beaux Arts and Art Deco buildings built out to the property lines and ground floor active uses. While many of these structures were originally built to serve financial and commercial offices, much of the building stock has been adapted into residential apartments and condominiums.

The Historic Core is predominantly designated Regional Center Commercial with C4 and C2 zoning, and Height District 4-D, allowing for up to 13.0:1 FAR with no height limitations through a transfer of development rights process. Broadway between 1st and 12th Street is also governed by the Broadway Theater and Entertainment District Community Design Overlay, the Broadway Signage Supplemental Use District (SUD), and the Broadway Streetscape Master Plan. A description of these planning overlays can be found below, under *Regulatory Setting: Specific Plans, Planning Overlays, and Redevelopment Plans*.

South Park. South Park is in the southwest portion of the Downtown Plan Area. It is a walkable, residential mixed-use neighborhood, supported by commercial, office, and medical uses, and served by a Metro transit

station. A majority of the development in South Park occurred in the past decade, with structures commonly between six and twelve stories with active uses on the ground floor.

South Park is predominantly designated High Density Residential, with R5 Restricted Density Multiple Dwelling zoning and Height District 3-D and 4-D, allowing for up to 13.0:1 FAR with no height limitations through a transfer of development rights process.

Convention Center Area. The Convention Center area sits in the southwestern portion of the Downtown Plan Area and is bounded by State Route 110/Harbor Freeway (110 Freeway) to the west. It is the site of several of Los Angeles' sports and entertainment venues and is regulated by the Los Angeles Sports and Entertainment District Specific Plan (LASED). The district includes the Los Angeles Convention Center, Staples Center, L.A. Live, Grammy Museum, and Microsoft Theater. It also includes hotel, commercial, office, entertainment, and residential uses.

The Convention Center area is predominantly designated Public Facilities with PF or CEC (Convention Event Center) zoning, allowing for a wide range of institutional, office, commercial, and public-serving uses.

Skid Row. Skid Row is in the central portion of the Downtown Plan Area and is a residential neighborhood that has long served people in need. The community is home to family and social service organizations, permanent supportive housing, single room occupancy hotels, as well as homeless and unhoused community members. Structures in Skid Row range between one story to twelve stories in height.

The eastern portion of Skid Row is designated Light Manufacturing with M2 zoning and Height District 2D. The western portion of the neighborhood is designated High Medium Residential with R5 zoning and Height District 2D. Development in Skid Row can reach up to 3.0:1 FAR, and up to6.0:1 through a transfer of floor area process.

Civic Center, El Pueblo, and Union Station. The Civic Center is home to Federal, State, County, and local agencies and is the second largest concentration of governmental offices in the country. It contains civic and architectural landmarks, as well as one of Downtown's primary open spaces, Grand Park.

El Pueblo de Los Angeles Historical Monument is a historical district that includes areas that once formed the original pueblo, or "town," from which Los Angeles later developed. El Pueblo encompasses approximately 44 acres surrounding the Los Angeles Plaza and is roughly bounded by Spring, Macy, Alameda, and Arcadia Streets, and Cesar Chavez Boulevard. It contains a number of historical buildings and features, including the Neustra Señora La Reina de Los Angeles Church (1822), Avila Adobe (1818), the Olvera Street market, and Pico House (1870) (City of Los Angeles 2018).[3]

Los Angeles Union Station is in the northeastern portion of the Downtown Plan Area, bounded by Alameda Street, Cesar Chavez Avenue, Vignes Street, and the U.S. 101. East of Union Station is the Los Angeles River and to the west is the City's historic Olvera Street and El Pueblo de Los Angeles State Historic Park, as well as the Civic Center. Union Station is the City's principal transportation hub, home to local, regional, and national transit providers, and the planned site for the California High Speed Rail (HSR) Los Angeles station.

The Civic Center and El Pueblo are predominantly designated Public Facilities with PF zoning, and Height District 2-D. Development in the Civic Center can reach up to 6:1 through a transfer of floor area process and development in El Pueblo can reach up to 3.0:1 FAR with unlimited height. The Union Station area is regulated by the Alameda District Specific Plan, which encourages a pedestrian-oriented and mixed-use

[3] City of Los Angeles. 2018. Historical Monument: El Pueblo de Los Angeles. http://elpueblo.lacity.org/. accessed April 2018

business district with hotels, retail, entertainment, housing, cultural, and transit-related functions in medium and high density development.

Little Tokyo. Little Tokyo is a historic-cultural neighborhood and the symbolic center for the Los Angeles Japanese-American community. The neighborhood contains a variety of religious and cultural institutions as well as a mix of residential, commercial, and other institutional uses. Small-scale shops, restaurants, and storefronts with unique architectural features occupy buildings that range between one and twenty stories in height. Little Tokyo contains the Little Tokyo First Street National Historic Landmark, which is a historic Japanese commercial district originally settled in the late 19th century (National Park Service [NPS] 2018). The historic district is roughly bounded by 301-349 East First St., 110-120 Judge John Aiso Street, and 119 S Central Avenue.

Little Tokyo is predominantly designated Regional Center Commercial with C2 Commercial zoning and Height District 4D, allowing for up to 6.0:1 FAR with no height limitations. The area has Qualifying [Q] Conditions which limit ground floor activity to neighborhood-serving uses. Little Tokyo is also regulated by the Little Tokyo Community Design Overlay District (CDO) which is further described under *Regulatory Setting: Specific Plans, Planning Overlays, and Redevelopment Plans*.

Arts District. The Arts District is located in the eastern portion of the Downtown Plan Area and predominantly consists of industrial, manufacturing, and wholesale uses and has been transitioning to a more mixed-use environment in the recent past. Many of the existing low-scale warehouses and industrial buildings have been converted into live/work, commercial, and institutional uses. New mixed-use buildings with housing, commercial, light production, restaurants, retail establishments, and business incubation uses have been constructed and other similar projects have been proposed.

The Arts District is predominantly designated Heavy Manufacturing, with M3 Heavy Industrial zoning, which allows for the widest range of industrial uses including commercial, manufacturing uses, and storage. The area assigned Height District 1 allowing for up to 1.5:1 FAR with no height limitations.

The Los Angeles River is an important ecological feature, a portion of which is located in the Arts District on the eastern edge of the Downtown Plan Area. The Los Angeles River was once a free-flowing waterway but was encased in concrete in the 1930s as part of a flood control project undertaken by the United States Army Corps of Engineers ("CoE"). Efforts being led by the CoE and the City of Los Angeles are now underway to restore some of the river's natural qualities over the coming decades. The rail corridor that runs adjacent to the length of the River was constructed in the early 1900s, as part of the Atchison, Topeka & Santa Fe Railway operating a system of both passenger and freight services. The area adjacent to the river is regulated by the River Improvement Overlay (RIO) which is further described under *Regulatory Setting: Specific Plans, Planning Overlays, and Redevelopment Plans*.

Chinatown and Victor Heights/Figueroa Terrace. Chinatown is located in the northern portion of the Downtown Plan Area and is home to a long-standing variety of small and family-owned businesses, family associations, and institutional services that serve the Chinese-American population throughout the region, as well as other communities. The historic center is characterized by walkable commercial corridors and internally oriented courtyard and mid-scale development. Victor Heights, also known as Figueroa Terrace, is a multi-generational residential community with primarily multi-family housing.

The commercial core of Chinatown is designated Regional Center Commercial with C2 Commercial zoning, and Height District 2, allowing for up to 6.0:1 FAR with no height limitations. Victor Heights and Figueroa Terrace are designated High Medium Residential with a mix of RD1.5, R3 and R4 Residential zoning, and Height District 1. The RD1.5 and R3 zoning with Height District 1 allows for up to 3.0:1 FAR and includes a height limit of 45 feet. The R4 zoning with Height District 1, allows for up to 3.0:1 FAR with no height limitations.

Industrial, Manufacturing, and Wholesale Districts. These districts are located in the south-central portion of the Downtown Plan Area and are characterized by large-format and medium to low-scale buildings with wholesale, warehousing and distribution uses. These districts also include a mix of additional uses, including social services, supportive housing, nonprofit, and institutional organizations that serve as an anchor for employment in the City. Some sub-districts, such as the Flower Market and Fashion District, have high levels of pedestrian activity with fine-grained alleys and market halls that attract patrons from across the City and region.

Production. The Production area is located in the southern most portion of the Downtown Plan Area with low-scale one to three story buildings that predominantly house industrial and manufacturing uses. The Production area serves as a jobs base for the region and offers employment in industries such as clean technology, heavy industrial, industrial manufacturing, and fabrication with very limited retail uses.

REGULATORY SETTING: SPECIFIC PLANS, PLANNING OVERLAYS

Specific Plans, planning overlays, and redevelopment plans allow zoning regulations to be tailored to local areas and include various types of regulatory limitations. Examples of these limitations include land use restrictions, maximum heights, building form and massing requirements, intensity limits, etc.

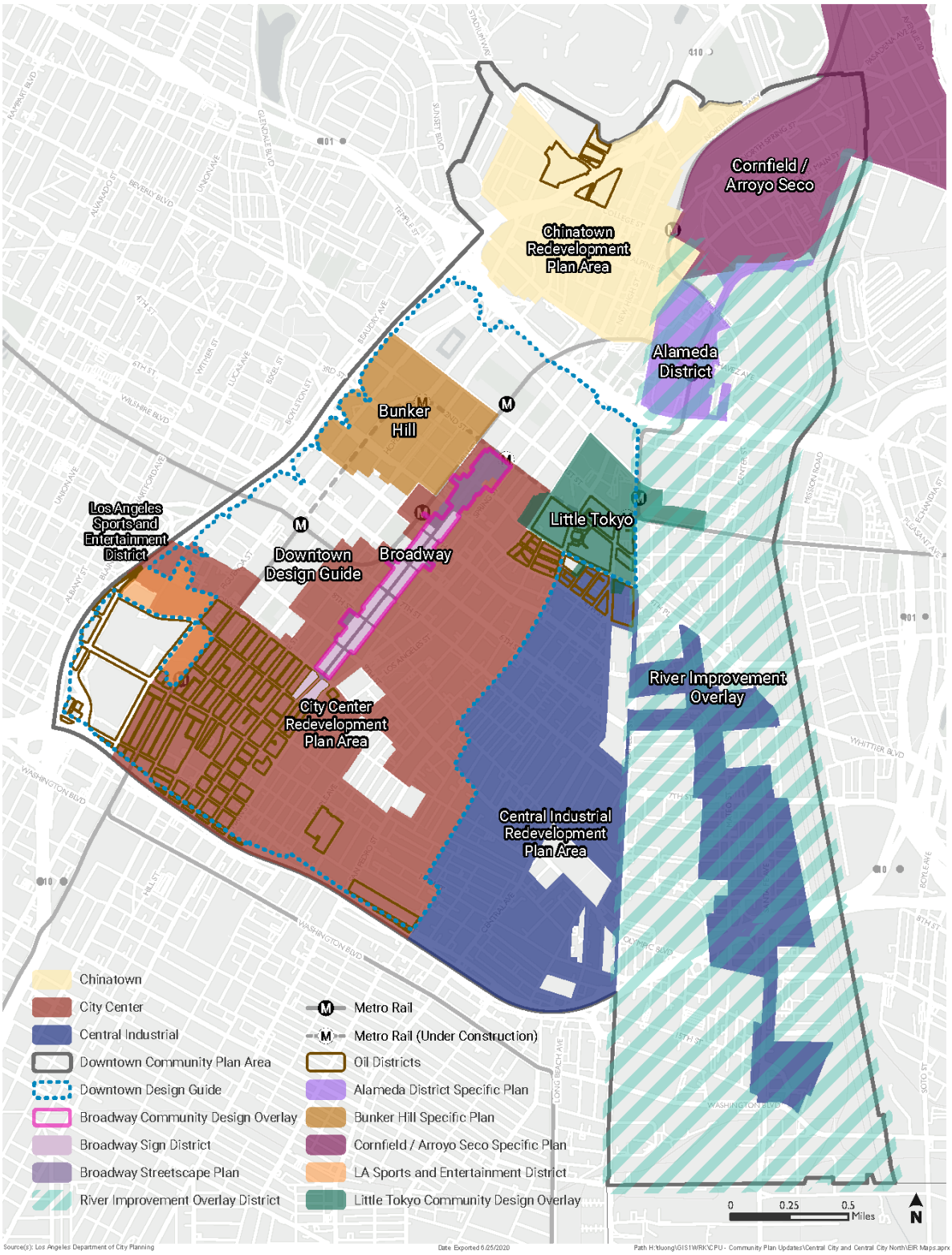
Figure 3-5 shows the Specific Plans, and Overlays that currently exist in the Downtown Plan Area. Below is a description of the existing redevelopment plans, specific plans, overlays, and other such plans within the Downtown Plan Area.

As part of the Downtown Plan, a selection of these specific plans will be amended and/or will become integrated into the New Zoning Code. See Section 3.7.3 for a discussion of how these overlays will be addressed in the Downtown Plan.

Specific Plans

- The **Alameda District Specific Plan (ADP)** applies to a northeastern portion of the Central City North Community Plan Area and includes Los Angeles Union Station. It is generally bounded by Alameda St., North Main St., Vignes St., and the Santa Ana 1-5/101 Freeway. The ADP encourages a pedestrian-oriented and mixed-use business district that is supported by an intermodal transportation center. Encourages hotels, retail, entertainment, housing, cultural, and transit-related functions in medium and high density development.
- The **Cornfield Arroyo Seco Specific Plan (CASP)** applies to a northeastern portion of the Central City North Community Plan Area, just south of the Los Angeles State Historic Park (the Cornfield) and north of the ADP. It establishes four zones to facilitate a mix of light industrial, production, and public-serving uses with new commercial, retail, and residential uses. The zones utilize a system of floor area ratio minimums and density bonus options to incentivize development that provides community benefits, such as affordable housing.
- The **Los Angeles Sports and Entertainment District (LASED) Specific Plan** applies to the southwest portion of the Central City Community Plan Area. It seeks to expand the City's economic base and make Downtown a regional entertainment destination with regulations and incentives to promote tourism and entertainment. The LASED allows for mixed-use, hotel, office, commercial, retail, residential, live theaters, sound stages, and open space uses. It includes streetscape design guidelines and parking strategies for adequate and efficient use of space and resources in Downtown's entertainment district.

Figure 3-5 Specific Plans and Overlays in the Downtown Plan Area



- The **Bunker Hill Specific Plan** applies to Bunker Hill, in the Central City Community Plan Area. It was established to create a mixed-use district with expanded housing, commercial, retail, cultural uses, and to retain the area's identity as a cultural, office and employment center. The Specific Plan includes open space requirements for projects redeveloping a block or large site. It also includes public realm improvement requirements through building setback, ground floor frontage, and massing regulations, and a pedestrian plan to encourage a network of linkages.

Planning Overlays

- The **Broadway Theater and Entertainment Design Guide and Community Design Overlay (CDO)** applies to Broadway between 1st Street and 12th Street within the Central City Community Plan Area. The Broadway CDO encourages the rehabilitation of existing building and guides the design and development of new buildings. Regulations include guidance for building setbacks, form, roof lines, building articulations, storefront and window transparency, facade materials, and lighting.
- The **Little Tokyo Community Design Overlay (CDO)** applies to a portion of the Little Tokyo community within the Central City Community Plan Area. It establishes design and development guidelines to promote a pedestrian-friendly environment and enhance the physical appearance of the area, with a focus on reinforcing the cultural and historic aspects of the neighborhood through a set of design guidelines.
- The **Los Angeles River Implementation Overlay (RIO)** applies citywide to properties abutting the River. It includes development regulations, landscaping screening and fencing requirements, as well as lighting and access regulations to support the goals of the Los Angeles River Revitalization Master Plan and contribute to a positive and sustainable interface between river adjacent properties and the River.
- **Oil Drilling Districts** applies citywide to properties where the drilling of oil wells or the production from the wells of oil, gases or other hydrocarbon substances is permitted, subject to conditions by the Department of City Planning. Within the Downtown Plan Area, the Oil Drilling Districts are located generally in the south-west corner of the Downtown Plan Area, west of Main Street and south of Olympic Boulevard and the blocks generally bounded by Alameda Street to the east, East 4th Street to the south, Los Angeles Street to the west and East 1st Street to the north.

Design Guidelines

- The **Broadway Streetscape Master Plan** applies to Broadway between 1st Street and 12th Street within the Central City Community Plan Area. The Streetscape Master Plan was established to create a multi-modal, pedestrian focused street that can support and revitalize the historic theater district. The Streetscape guidelines call for expanded sidewalks with street elements and limited landscaping to enhance pedestrian interest and activity along the street.
- The **Downtown Design Guide Urban Design Standards and Guidelines ("Downtown Design Guide")** applies to a majority of the Central City Community Plan Area, excluding the central industrial area. The Downtown Design Guide is a set of urban design standards and guidelines to enhance building design and create a high-quality and consistent public realm that emphasizes walkability, sustainability, and transit use in Downtown.
- The **Downtown Street Standards** apply to the Central City Community Plan Area and were developed and adopted in tandem with the Downtown Design Guide. The Street Standards establish a street hierarchy and guidance to balance traffic flow, pedestrian walkability, bicycle routes, and access to create more context-sensitive, *complete streets* within Downtown. The document consists of a series of cross sections establishing future curb and property lines, and in some cases additional sidewalk easements.

Sign Supplemental Use District

- The **Historic Broadway Sign Supplemental Use District (Broadway Sign District)** applies to the same portion of Broadway as the Broadway CDO and the Streetscape Master Plan, which is along Broadway between 1st Street and 12th Street. It includes standards for the design, placement, and orientation of signs along Broadway. The Sign District allows and provides guidance for sign types that are currently on Broadway but are not allowed by the existing Code regulation. It also includes an incentive program to spur building activity, revitalization, and to fund streetscape improvements.

CALIFORNIA REDEVELOPMENT PROJECT AREAS

Community Redevelopment Areas (CRA) are areas identified for revitalization through the building of new housing and commercial projects. Prior to 2012, the Community Redevelopment Agency of Los Angeles (CRA/LA) was the agency in charge of developing, implementing, and overseeing CRA projects in the City (Urban Land Institute, Los Angeles 2012). The passage of AB1x-26 and the California Supreme Court's decision in *California Redevelopment Association v. Matosantos* in 2012 effectively abolished redevelopment agencies in the State. Any existing redevelopment plans remained in effect to be administered by the successor agency until they expired under their own terms. Following the dissolution of the CRA/LA, activities in the redevelopment project areas were administered through the Designated Local Authority (DLA), as the successor to the CRA/LA. On November 11, 2019, the City of Los Angeles adopted an ordinance and resolution to assume the land use authority to implement the land use related plans and functions of the CRA/LA and the successor agency, and currently implements the land use provisions of those redevelopment plans that are still in effect, as well as any related Designs for Development, or similar land use plans. The DLA, in its role as the successor agency, continues to address the financial and other legal obligations of the effective redevelopment plans. The Downtown Plan Area includes three CRAs: Chinatown (expires January 2022), City Center (expires May 2033), and Central Industrial (expires November 2033).

- The **Chinatown Redevelopment Plan** designates land uses and specifies the Agency's powers and requirements in Redevelopment Plan implementation (CRA/LA 2002a). This Redevelopment Plan Area is generally bounded by Cesar E Chavez Avenue to the south, Solano Avenue to the north, Alameda Street to the east, and shares the Downtown Plan Area boundary to the west.
- The **City Center Redevelopment Plan** designates land uses, specifies the Agency's powers and requirements in Redevelopment Plan implementation, identifies distinct development areas within the Redevelopment Plan Area (i.e., City Markets, South Park, Historic Downtown), and includes specific requirements for development within the Redevelopment Plan Area. This Redevelopment Plan Area is generally bounded to the south by the I-10; to the west by Figueroa Street, Grand Avenue, and Hill Street; to the north by Second Street; and to the east by Los Angeles Street, San Pedro Street, Stanford Avenue, and Griffith Avenue.
- The **Central Industrial Redevelopment Plan** designates land uses and specifies the Agency's powers and requirements in Redevelopment Plan implementation and includes specific requirements for development within the Redevelopment Plan Area. The Redevelopment Plan Area encompasses most of the area bounded to the south by the I-10; to the west by Stanford Avenue and San Pedro Street; to the north by Third Street; and to the east by Alameda Street. It also encompasses an irregularly shaped area that is generally bounded by Washington Boulevard to the south, the train tracks paralleling the Los Angeles River to the east, Third Street to the North, and Lemon Street, Wilson Street, and Alameda Street to the west.

3.4 GROWTH TRENDS

The Downtown Plan, as an update to the City's land use element for the Downtown Plan Area, plans for and guides growth and development.[4] This section discusses how the City identifies forecasted growth in population, housing, and employment and why the Southern California Association of Governments (SCAG) is the City's primary source for current and forecasted population, housing, and employment numbers. It also describes the growth trends for the City of Los Angeles and the Downtown Plan Area.

2040 REGIONAL TRANSPORTATION PLAN (RTP) *SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG)*

SCAG is designated as a Metropolitan Planning Organization (MPO) responsible for carrying out federal and state statutory duties within its region which encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities in an area covering more than 38,000 square miles with over 18 million residents.

Federal and state laws require SCAG to develop regional plans for transportation, growth management, hazardous waste management and air quality[5]. SCAG is responsible for producing socio-economic estimates and projections at multiple geographic levels. The socio-economic estimates and projections are used for federal and state mandated long-range planning efforts, such as the Regional Transportation Plan (RTP). The RTP is a 20-year transportation plan for the region that addresses regional growth, air quality and other issues, based on an analysis of past and future regional trends.

Federal laws require that land use allocation in an RTP reflect development patterns most likely to be built in the region. While federal and state laws do not mandate consistency with the RTP, state law does require SCAG to identify and quantify housing needs for the region, prepare the Regional Housing Needs Assessment (RHNA), and for local agencies to update their Housing Elements to plan and zone to accommodate the agency's RHNA. SB 375 coordinates land use and transportation planning to reduce greenhouse gas (GHG) emissions and, to that end, requires SCAG to prepare a Sustainable Communities Strategy (SCS) as an integral part of the RTP. SB 375 also requires the RHNA process to be consistent with an SCS, and that RHNA must be coordinated every eight years (RTP is updated every four years).[6]

A function of SCAG, in preparing the RTP/SCS, is to forecast or prepare population, housing and employment projections in consultation with cities in the region. These projections are derived from a combination of sources and consider factors such as birth rates; migration rates; historical trends; household size; market and economic projections; existing and planned land uses; and consistency with relevant adopted local, regional and state land use policies and growth strategies. The development of the growth forecast is driven by collaboration between SCAG and local jurisdictions. The integration of the regional and local forecasts is achieved through joint efforts and collaboration among the various contributors. The 2016-2040 RTP/SCS is the most recently adopted RTP/SCS.[7]

Many municipalities and government agencies (including public service providers and other City departments) rely on the same source, i.e., the most current SCAG RTP/SCS data, for purposes of planning, both for estimates of current population, housing and employment, as well as for projections of future

[4] Note, the New Zoning Code component of the Proposed Project is not a land use planning project and does not guide growth and development. This discussion is not intended to speak to intent or indirect effects of the New Zoning Code.
[5]Government Code Section 65080(b)(2)(B); Part 450 of Title 23 of, and Part 93 of Title 40 of, the Code of Federal Regulations.
[6]Government Code Section 65080(b)(2)(B).
[7] In preparation for the next RTP/SCS, which is anticipated for adoption in mid to late 2020, at the time of preparation of this EIR SCAG had begun engaging with local jurisdictions, subregions, and other stakeholders to inform development of the upcoming Plan.

population, housing, and employment. Use of such data is a consistent and best practice for local governments. It is also the Department of City Planning's practice to use SCAG RTP/SCS data as a benchmark or as a reference point for estimates and projections locally.

CITYWIDE POPULATION GROWTH PROJECTIONS

The City of Los Angeles is approximately 478 square miles and has a population of approximately 3.95 million. The population is anticipated to increase by 17 percent from the 2016 estimate to approximately 4.6 million persons by the year 2040, according to the SCAG 2016-2040 RTP/SCS (**Table 3-1**). Every four years, SCAG prepares socioeconomic projections that are used by various City departments and agencies for their long-range planning efforts. The growth projection for the City of Los Angeles is based on several factors, including historical development trends, land values, as well as smart growth strategies to direct development to areas in proximity to rail and major bus stations, community centers, regional centers, and Downtown Los Angeles.

TABLE 3-1 PROJECTED POPULATION GROWTH FOR THE CITY

Geographic Planning Area	2017 Estimated Population /a/	2040 Projected Population /a/	Projected Population Growth (2017 – 2040) /a/
City of Los Angeles	**3,950,000**	**4,609,000**	**659,000**
South Valley	754,697	875,559	119,770
South Los Angeles	755,206	874,467	120,352
North Valley	716,405	795,498	79,093
Central	**690,070**	**903,754**	**213,684**
West Los Angeles	430,481	497,159	66,678
East Los Angeles	402,716	448,846	46,130
Harbor	200,100	213,603	13,503

/a/ The 2017 estimated population and the 2040 projected population are based on SCAG's 2016-2040 RTP/SCS. Due to rounding, percentages may not add up to 100 percent.

The City's 35 CPAs are divided into seven larger geographic areas for planning administration (**Figure 3-6**). Each of these geographic planning areas has an Area Planning Commission that reviews certain cases located within their planning area. The Project Area is located within the Central Los Angeles geography. According to the 2016-2040 RTP/SCS, the population in the Central Los Angeles geography, which includes the CPAs of Hollywood, Wilshire, Westlake, Central City, and Central City North, is anticipated to increase by approximately 220,000 by 2040. The Central Los Angeles geography represents approximately 20 percent of the anticipated population growth for the entire City (**Table 3-2**). The following tables summarize projected population growth for the City of Los Angeles.

Figure 3-6 Community Plan Areas in the City of Los Angeles

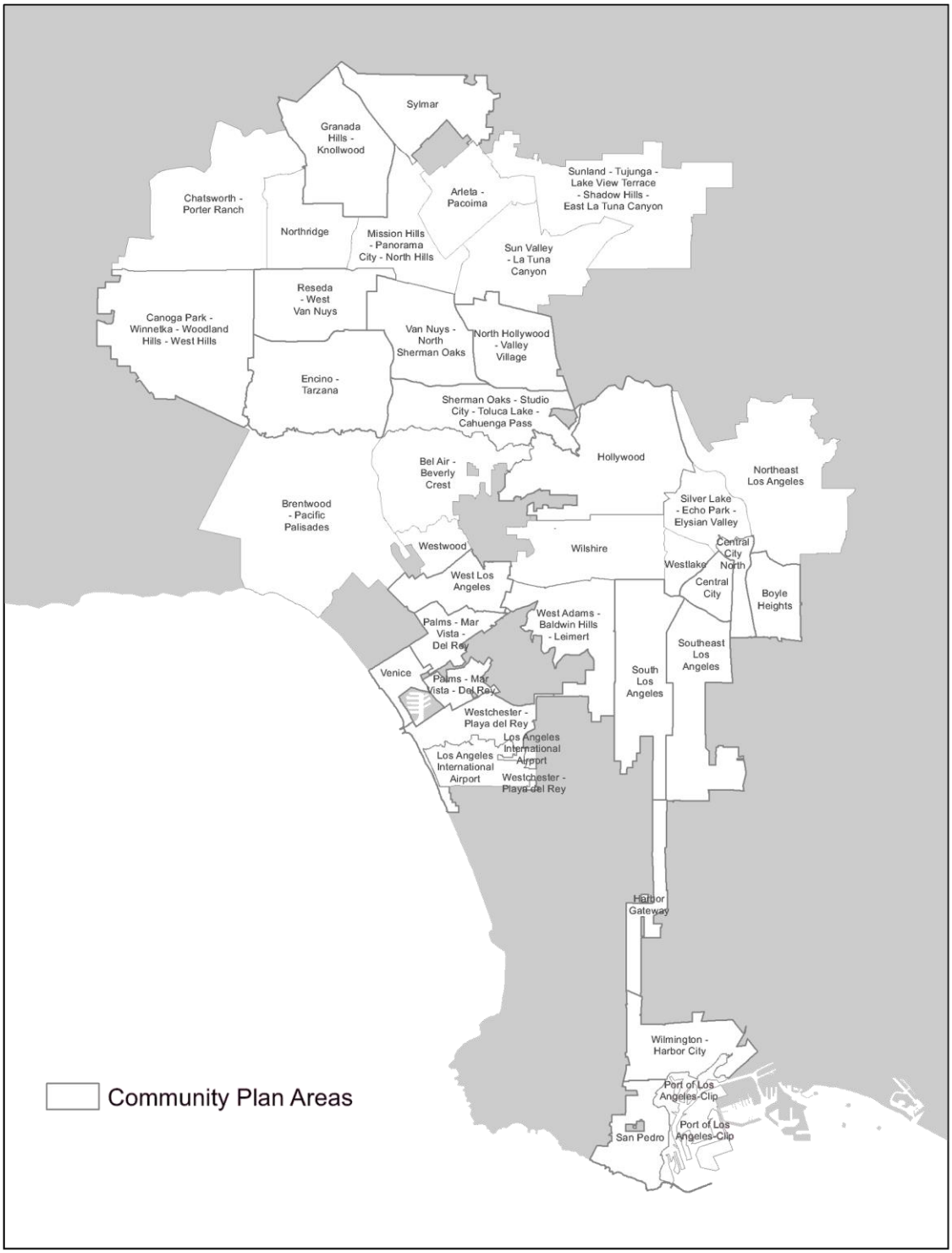


TABLE 3-2 PERCENTAGE OF CITYWIDE POPULATION AND PROJECTED GROWTH

Geographic Planning Area	% of Citywide 2017 Population /a/	% of Citywide 2040 Projected Population /a/	% Change of Citywide Projected Population Growth (2017 – 2040) /a/
City of Los Angeles	**100%**	**100%**	**100%**
South Valley	19%	19%	-
South Los Angeles	19%	19%	-
North Valley	18%	17%	-1%
Central	**17%**	**20%**	**3%**
West Los Angeles	11%	11%	-
East Los Angeles	10%	10%	-
Harbor	5%	5%	-

/a/ The 2017 estimated population and the 2040 projected population are based on SCAG's 2016-2040 RTP/SCS. Due to rounding, percentages may not add up to 100 percent.

The purpose of forecasting future population is to describe the likely future population based on current trends and be able to plan for and accommodate change. In general, projections help City departments to understand where current policies might lead to and determine whether those policies are leading the City towards its stated objectives consistent with federal, state, and local policies. They are also used by each City department in preparing long-range plans, such as community plan updates and infrastructure plans. DCP uses anticipated population growth, or population projections as a benchmark, to determine the level of development that is needed to accommodate this future growth. Population growth is a fundamental consideration in making long-range land use planning decisions. However, it is important to note that these projections are calculations based in part on a number of assumptions and, as with any data reliant on assumptions, projections have limitations. For example, projections are often based on recent trends that may or may not continue as conditions change.

DOWNTOWN PLAN AREA GROWTH PROJECTIONS

The State of California requires that cities plan for changes in demographics, including housing demand, population, and employment. If growth is anticipated, each city must accommodate a share of the region's projected growth. The Downtown Plan Area represents approximately one percent of the City of Los Angeles land area (nearly 6.6 square miles out of 478 square miles) and four percent of the City's population. Over the next few decades, population in the Downtown Plan Area is anticipated to increase by approximately 150 percent by year 2040, as identified by current SCAG projections in 2016 (see **Table 3-3**). The Downtown Plan Area is projected to continue growing at a faster rate than the City of Los Angeles as a whole.

The Downtown Plan would accommodate SCAG's 2040 population, housing, and employment projections based on the amount of development that is reasonably expected to occur during the life of the Downtown Plan, given the Downtown Plan's General Plan designations and policies.

TABLE 3-3 PROJECTED POPULATION GROWTH FOR THE DOWNTOWN PLAN AREA						
Area	**Existing Population (2017)**	**% of Citywide Existing Population**	**SCAG's 2040 Projected Population**	**Projected Population Growth (2017-2040)**	**% of Citywide 2040 Project Population**	**% Change in Project Population Growth (2017-2040)**
City of Los Angeles	3,950,000	100%	4,609,000	659,000	100%	17%
Downtown Plan Area	76,000	2%	189,000	113,000	4%	150%
Note: Numbers are rounded to the nearest thousand. SOURCE: 2016-2040 SCAG RTP/SCS.						

CEQA requires an EIR to compare existing physical conditions ("baseline") to the physical conditions after implementation of a project. For purposes of the Downtown Plan, which is a long-range plan for growth and development, there is no expected direct effect from the Proposed Project (such as for a construction project), but there are expected indirect impacts from the reasonable anticipated development that will occur. To assess the impacts of the Downtown Plan requires determining reasonable anticipated development and identifying current conditions. Both of these determinations rely in part on estimates of the current population, housing and employment, and the forecasted growth in population, housing and employment (See Section 3.4, *Growth Trends*, above for a discussion of the Downtown Plan's forecasted growth).

CEQA Guidelines Section 15125(a) requires that an EIR include a description of the physical environmental conditions in the vicinity of a project, as they exist at the time the NOP is published. This environmental setting normally constitutes the baseline physical conditions to which the lead agency compares the impacts from the project and determines the significance of impacts. The NOP for this EIR was published on February 6, 2017 (see **Appendix A**). Thus, the Draft EIR uses 2017 as the baseline for existing conditions.

CEQA generally requires an analysis of the foreseeable impacts from a project against the existing environment or baseline conditions. However, there are some exceptions to this rule where that analysis would be misleading or not provide useful information for purposes of CEQA impacts from the project, and the lead agency provides a justification for using future baselines (Neighbors for Smart Rail v. Exposition Metro Line Const. Auth.). When this EIR does not analyze the impacts of the Proposed Project against the existing environment, such as in the GHG analysis, the alternative baselines is identified and a justification is provided for the use of the alternative baselines. A description of the methodology for analysis of impacts, including the use of alternative baselines, is included in Chapter 4 Environmental Analysis. The subject of baselines is not always established by population and housing information. The subject of the baseline is related to the particular impact area under consideration. For example, a baseline for purposes of agricultural and aesthetic impacts is related to current legal status and/or the physical condition of land in the project area (e.g., land that is designated prime farmland, a designated state scenic highway, or a valued scenic vista).

3.5 PROJECT OBJECTIVES

CEQA requires an EIR to include a statement of the objectives sought by a project proponent, in this case the City of Los Angeles. The statement of objectives should include the underlying purpose of the project.

UNDERLYING PURPOSE OF THE PROJECT

The underlying purpose of the Downtown Plan is to plan for and accommodate foreseeable growth in the City, including the Downtown Plan Area, consistent with the growth strategies of the City as provided in the Framework Elements, as well as the policies of SB 375 and the Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

The underlying purpose of the New Zoning Code is to create the tools necessary to implement community visions expressed in adopted plans, including the Downtown Plan. The modular zoning tools of the New Zoning Code are designed to be adaptable to future needs throughout the City.

Objectives of the Proposed Project - Downtown Plan and New Zoning Code

The primary and secondary objectives of the Proposed Project are the following:

The **Primary Objectives** of the Proposed Project are to:

- **Primary Objective 1:** Accommodate employment, housing, and population growth projections forecasted through the planning horizon year of 2040 to ensure that Downtown Plan Area continues to grow in a sustainable, equitable, healthy, and inclusive manner, consistent to implement policies of the City of Los Angeles General Plan Framework Element, by focusing new job-generating uses and residential development around transit stations;
- **Primary Objective 2:** Provide for economic diversification and reinforce Downtown Plan Area as a primary center of employment for the City and the Southern California region;
- **Primary Objective 3**: Build upon Downtown's role as a regional transportation center by allowing for intensive development throughout the Downtown Plan Area, and concentrating development opportunity immediately surrounding the transit stations with an appropriate range of building sizes and mix of uses;
- **Primary Objective 4:** Promote a mode-shift from private automobile usage and foster a transit, bicycle, and pedestrian supportive environment;
- **Project Objective 5:** Reduce vehicle miles traveled to meet the goals of the Senate Bill 375, Senate Bill 743, and California Assembly Bill 32 to reduce carbon emissions;
- P**rimary Objective 6:** Support a growing residential population by expanding the areas where housing is permitted and allowing for a full range of housing options;
- **Primary Objective 7:** Celebrate and reinforce the character of each of the neighborhoods in the Downtown Plan Area;
- **Primary Objective 8:** Provide a set of implementation tools that are responsive to the range of physical and functional needs across the Downtown Plan Area, and enable the creation of similar tools across the City.

The **Secondary Objectives** of the Proposed Project are to:

- **Secondary Objective 1:** Refine and expand a system that links development with public benefits to deliver community amenities in the Downtown Plan Area, and is adaptable to the policy needs across the City;
- **Secondary Objective 2:** Maintain a meaningful amount of the Downtown Plan Area that is dedicated to production and high-intensity traditional industry;
- **Secondary Objective 3:** Promote a mix of land uses that fosters sustainability, equity, community, neighborhood density, and healthy living;

- **Secondary Objective 4:** Identify appropriate locations for housing and establish zoning tools that encourage a range of unit typologies;
- **Secondary Objective 5:** Ensure new development provides the appropriate range of outdoor amenity space and other recreational options to tenants and property owners; and
- **Secondary Objective 6:** Support and sustain Downtown's ongoing revitalization.

3.6 PROJECT COMPONENTS

This section describes the two components of the Proposed Project: the Downtown Plan and the New Zoning Code.

DOWNTOWN PLAN LAND USE STRATEGY

The Downtown Plan includes updates to the Central City and Central City North Community Plans, including both the policy text (Plan Text) and the land use map (Plan Map), and adoption of implementing zoning ordinances, in order to accommodate anticipated growth through 2040, while promoting a sustainable Downtown core that is well-connected to the City and the region. The Downtown Plan Text (**Appendix C**) serves as a guide to achieve the vision for the Downtown Plan Area.

The Plan Text also seeks to implement the policies expressed in the City's General Plan Framework Element, regarding citywide sustainable growth strategies. The development patterns described in the Framework Element provide direction for how the City will grow in the future, and a citywide context for updates to the City's 35 community plans. The Framework Element provides guidance for Downtown Plan Area, describing its role to accommodate the highest development intensities in the City and serving as the principal transportation hub for the region.

The Plan Text goals and policies reflect this citywide policy, while creating a sustainable, equitable, and inclusive framework to accommodate anticipated growth in the Downtown Plan Area. The Plan Text also seeks to address challenges facing Downtown and the larger region, such as climate change, housing affordability, and a shifting economy, through strategies that will guide thoughtful growth.

The Downtown Plan articulates a strategy for land use planning that will accommodate projected growth by encouraging higher intensity development and the most expansive mix of uses in areas that are served by high-frequency transit service. This strategy promotes flexibility of uses over time, and a high-quality built environment, while reinforcing the range of unique places within the Downtown Plan Area. These strategies will guide the physical development in the Downtown Plan Area in a sustainable manner that will promote increased access to jobs, housing for all income levels, open space, services, and cultural resources while also implementing policies of SB 375 and SCAG's Sustainable Communities Strategy to reduce overall VMT and greenhouse gas emissions.

DOWNTOWN PLAN "REASONABLY ANTICIPATED DEVELOPMENT"

The underlying purpose and a primary objective of the Downtown Plan is to accommodate future growth in the Downtown Plan Area, and specifically to accommodate the employment, housing, and population growth projections through the planning horizon year 2040. With implementation of the Downtown Plan, the General Plan designations and intensities of the Downtown Plan Area would be revised to accommodate population growth, housing, and employment demand projected by SCAG through the year 2040. The Downtown Plan would also meet the other project objectives and underlying purpose to accommodate growth in the City consistent with the Framework Element policies, the SCS and SB 375, including locating growth in transit centers.

To assess potential environmental impacts of the Downtown Plan, the reasonably anticipated development that is anticipated to occur in 2040 as a result of the Downtown Plan was determined. The reasonably anticipated development of the Downtown Plan Area was determined based on assumptions about the level of development that can be anticipated to occur during the life of the Downtown Plan (through the year 2040, or approximately 20 years into the future, coincident with the most recently adopted RTP/SCS.) A key factor in determining reasonably anticipated development is the allocation of land and the distribution of uses to reflect the development patterns most likely to be built, or that are reasonably expected to occur, including through implementation of the City's growth strategies that are consistent with the Framework Element and SCAG's Sustainable Communities Strategy (SCS) (e.g., locating density near transit, and regional centers). This approach is consistent with the approach used by SCAG to comply with federal laws that require RTPs to reflect development patterns most likely to be built in the region. As SCAG is a guiding precept, it is the City's responsibility while planning for the entire City in light of the Framework Element, the Sustainable Communities Strategy, and SB 375 policies, to determine whether any given community plan should meet, exceed, or be under SCAG's expected projections for that community plan area, and prepare a community plan update in light of that responsibility.

The development growth assumptions for the Downtown Plan, shown in **Table 3-4**, are based on the acreage of land designated for each type of function (by General Plan Designations); allowable development capacity in each designation; anticipated levels of development in the life of the Downtown Plan; and development constraints, such as topography and historic preservation regulations. The City's methodology for determining the reasonably anticipated development and associated reasonably expected growth in population, housing, and employment is further discussed in **Appendix B**.

TABLE 3-4 2040 REASONABLY ANTICIPATED DEVELOPMENT OF THE DOWNTOWN COMMUNITY PLAN COMPARED TO SCAG FORECAST

	2017 Baseline /a/	Existing Plan Reasonably anticipated development /b/	Downtown Plan Reasonably anticipated development /b/	SCAG 2040 Growth Forecast /c/
Housing	34,000	59,000	133,000	96,000
Population	76,000	112,000	252,000	189,000
Employment	219,000	278,000	305,000	257,000

Notes: Numbers are rounded to the nearest thousand, and percentages are calculated from the rounded values.
/a/ 2017 Baselines – SCAG 2016-2040 RTP/SCS
/b/ LADCP 2018a
/c/ SCAG 2016-2040 RTP/SCS.

DOWNTOWN PLAN DESIGNATIONS, ZONING, AND OTHER PLAN COMPONENTS

Proposed General Plan Designations

The Plan Map (proposed land use maps for the Central City and Central City North Community Plans) includes the proposed general plan designations in the Downtown Plan Area, as well as a corresponding zone table to identify the zoning types that are allowed for each type of land use designation (see **Figure 3-7**). The Downtown Plan also includes amendments to the General Plan Framework Element to introduce new land use designations of the Downtown Plan. These designations are designed to reflect the intent of the Plan's land use strategy and the proposed amendments will allow for their limited applicability to the Downtown Plan. The Downtown Plan will also include new policies and other minor amendments to the General Plan Framework Element to reflect the evolving goals of the City since it was first adopted in 1996. General plan designations help guide development by establishing the general location and intensity of different uses of land, in addition to the allowable scale of development. Each designation expresses a variety of goals and policies and corresponds to a set of implementing zones that regulate development, including uses, floor area ratios, and height. The plan map shows the locations of the proposed designations in the CPA. The proposed designations, along with implementing zoning actions, would reinforce a pattern of development that directs future growth to already urbanized and transit-served areas.

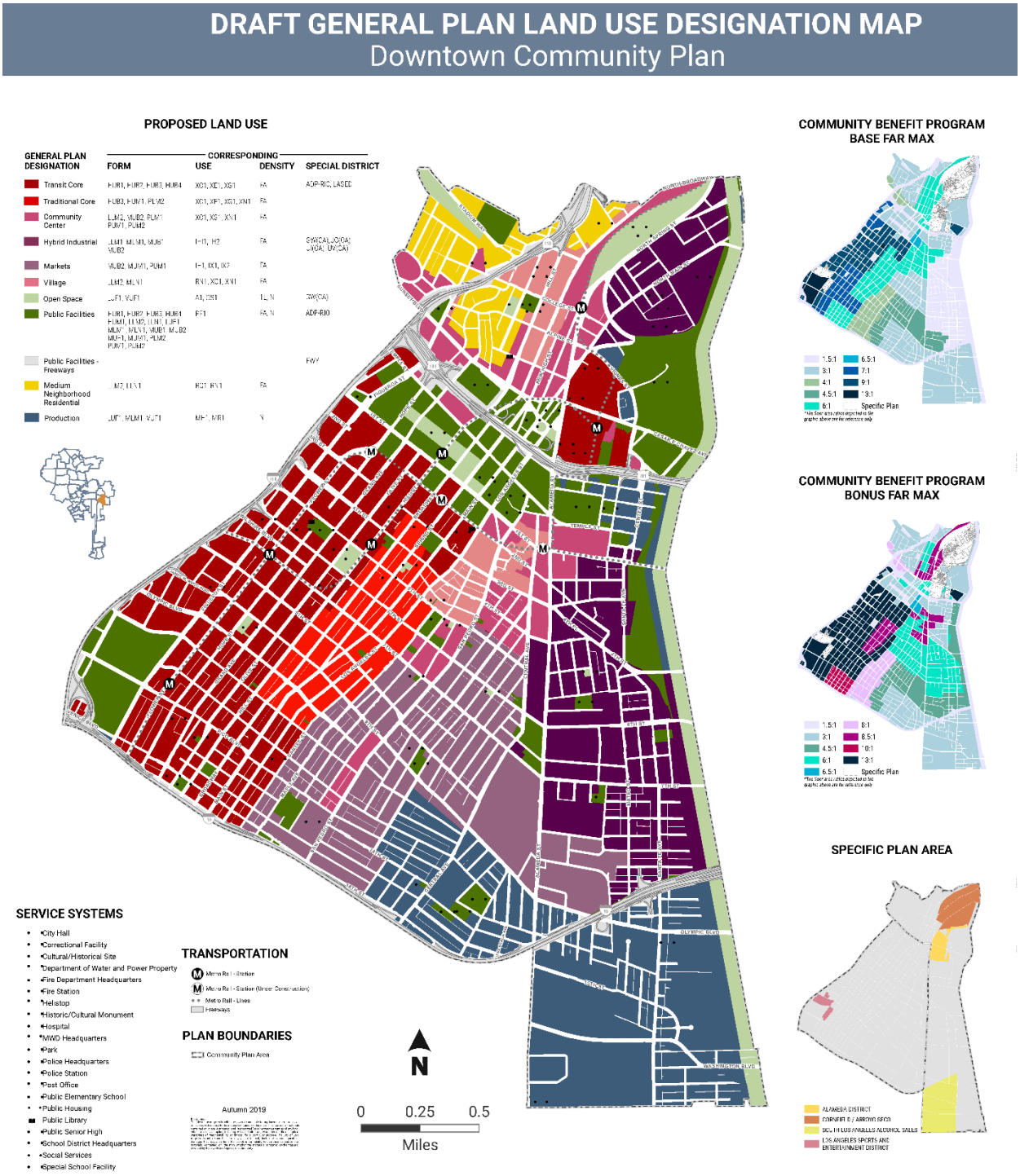
The underlying purpose of the Proposed Project is to accommodate foreseeable growth in the City and specifically to accommodate the employment, housing, and population growth projections through the planning horizon year 2040. The principal way of achieving this underlying purpose and the Proposed Project Primary Objectives (see Chapter 3.6 Project Objectives) is through the creation and application of these proposed General Plan designations. The application of designations and zoning is intended to accommodate the planned projected growth for the Downtown Plan Area through the year 2040 and to implement the policy objectives described in the Community Plan text. This strategy would allow for infill development of additional housing units and job-producing uses in areas with existing transportation infrastructure such as Metro Rail Line stops. Locating jobs and housing near transit to reduce automobile reliance and improve mobility is consistent with state mandates for sustainability. As a result, growth is directed away from low-density areas. The changes would also result in a more pedestrian-friendly environment, protect historical resources, and address updates that have occurred since the last Community Plan updates.

Proposed New Zoning Regulations (Updates to the LAMC as Part of re:code LA)

To implement the Downtown Plan, the Downtown Plan Area, excluding areas governed by the LASED, CASP and ADP Specific Plans will be assigned a set of new zone districts tailored to guide a range of conditions within the Downtown Plan Area. These zone districts are being created as part of the New Zoning Code. All areas within the Downtown Plan Area, excluding areas governed by the CASP, will be assigned a set of new General Plan designations.

As further discussed in Section 3.7.4, *New Zoning Code*, the new zoning system is comprised of a modular zoning system that requires the bundling of multiple districts to compose a complete zone string. The required "base" districts that establish a zone will include: Form, Frontage, Development Standards, Use, and Density districts. An optional Overlay district may be included in the zone string as well. The first three components of the zone string address the built environment, and the second two components address the activity within the structure. When there is a policy need to regulate aspects not covered in the base zoning, Overlay districts may be appropriate, which would allow for overlays such as a Community Plan Implementation Overlay (CPIO). There are many potential district combinations that can be applied to properties to make a zone.

Figure 3-7 Proposed General Plan Land Use Designation Map



A description of the proposed general plan designations and corresponding zone districts for the Downtown Plan Area can be found below. Form and Use Districts reflect a range of development capacities and land uses. See **Table 3-5,** *Proposed General Plan Designation and Zone District Correspondence*, for a general summary of proposed designations and corresponding zones and **Table 3-6** for the land area by designation. See Section 3.7.4, *New Zoning Code,* for more information on the new zoning system.

Transit Core (15% of Downtown Plan Area)

Transit Core areas are dense centers of activity built around regional transit hubs that connect pedestrians, cyclists, and transit users to a variety of attractions. The building form ranges from Moderate Scale to High Rise, with ground floor treatments that contribute to an enhanced and walkable streetscape. A diverse mix of office, residential, retail, cultural, and entertainment uses makes these places centers of activity around the clock.

Transit Core encompasses the largest share of the Downtown Plan Area to reinforce Downtown as a center of activity built around a regional transportation network. The purpose of this designation is to create centers of employment by prioritizing space for office uses, and allowing for entertainment, multi-unit housing, and cultural, retail, and commercial uses. It is intended to create an environment that provides easy access for pedestrians, transit users, and cyclists to a variety of experiences and activities. Transit Core areas are generally characterized by Form Districts with maximum permitted FARs ranging from 6:1 to 13:1 and does not include height limits which fosters an intensive built environment that defines and activates the streets, while supporting development of a distinctive and visually interesting skyline in transit-supported areas. The High-Rise Form Class accounts for the greatest development capacities in the Downtown Plan Area. Regulations for this form class requires high lot coverage, and minimum street walls with no height limitations to frame the street and encourage walkability. Building frontages reinforce a compact and active urban environment.

Transit Core areas are characterized by the 'Commercial Mixed" Use Class which allows for a palette of uses that serve as an attraction to the wider region.

Commercial-Mixed General 1 (XG1) is the most permissive commercial 'Mixed' Use District in the Downtown Plan Area. It allows for the concentration of regional-serving uses such as healthcare facilities, auditorium and entertainment destinations, and hotels, as well as professional office, multi-unit housing, dining, retail, and service uses. There is no establishment size limit in this use district.

Commercial-Mixed Community 1 (XC1) allows for uses necessary for a community's primary commercial district, including office, multi-unit housing, community-serving commercial uses, institutional services, and entertainment activities. Tenant size for establishments in the Financial Services, Personal Services, Indoor Recreation, Eating and Drinking Establishment, and Retail Sales use groups are limited to 50,000 square feet.

Commercial-Mixed Entertainment 1 (XE1) allows for a range of uses similar to Community Mixed 1 (XC1), but prioritizes entertainment-serving uses that attract visitors and support high levels of pedestrian activity. XE1 incorporates use performance standards and a streamlined process to make it easier for these visitor-serving activities to exist in targeted entertainment focused areas.

Traditional Core (6% of Downtown Plan Area)

Traditional Core areas have a time-honored urban development pattern and a collection of historically-significant buildings. The building form ranges from Moderate Scale to High Rise. Traditional Core areas often include residential and office use, neighborhood-serving uses, as well as dining and entertainment that draw visitors and tourists, supporting activity around the clock. New development contributes to a pedestrian-oriented environment with active alleys and inviting shopfronts.

Traditional Core areas are characterized by the Form Districts with maximum permitted FARs ranging from 6:1 to 13:1 and generally includes height limits which guide development that is responsive to the predominant form and encourage the reuse of existing structures. Regulations for these Form Districts include high lot coverage standards, and the building frontages encourage an engaging street life with transparent ground floors, and fine-grained building length facades.

Traditional Core areas are characterized by the **Mixed Use Districts** and apply use districts encouraging mixed-use communities that have entertainment and nighttime serving uses.

Commercial-Mixed General 1 (XG1) is the most permissive commercial 'Mixed' Use District in the Downtown Plan Area. It allows for the concentration of regional-serving uses such as healthcare facilities, auditorium and entertainment destinations, and hotels, as well as professional office, multi-unit housing, dining, retail, and service uses. There is no establishment size limit in this use district.

Commercial-Mixed Community 1 (XC1) allows for uses necessary for a community's primary commercial district, including office, multi-unit housing, community-serving commercial uses, institutional services, and entertainment activities. Tenant size for ground floor establishments in the Financial Services, Personal Services, Indoor Recreation, Eating and Drinking Establishment, and Retail Sales use groups are limited to 50,000 square feet.

Commercial-Mixed Entertainment 1(XE1) allows for visitor-oriented uses such as entertainment venues, hotel, live theaters, professional office, dining, and tourism activities by integrating performance standards into the use standards and streamlining the process for allowing these activities.

Commercial-Mixed Neighborhood 1 (XN1) allows for clusters of commercial, cultural, and institutional uses catering to the local community. In order to maintain space for a high concentration of different uses to enliven the streets, certain commercial uses on the ground floor would have an establishment size limit of 5,000 square feet. These include the Financial Services, Personal Services, Indoor Recreation, Eating and Drinking Establishment, and Retail Sales Use Groups.

Community Center (8% of Downtown Plan Area)

Community Centers are vibrant places of activity typically located along commercial corridors, in concentrated nodes, or adjacent to major transit hubs. The building form ranges from Low Scale to Mid Rise and may extend to Moderate Rise in the Downtown Community Plan. The use range is broad and may include commercial, residential, institutional facilities, cultural and entertainment facilities, and neighborhood-serving uses.

The purpose of this designation is to promote medium-scale and dense urban environments with a flexible mix of multi-unit housing, office, commercial, and service uses to create balanced centers of activity. The Community Center designation provides a transition in scale between areas of high intensity development and activity, such as Transit Core designation, and areas of lower-scale urban forms, such as Village designation.

Community Center areas are characterized by Form Districts, with maximum allowable FARs ranging from 3:1 to 8.5:1 and includes height limits in the core areas while allowing for unlimited height in proximity to transit along the periphery. Development regulations support a variety of forms in a moderate and mid-scale walkable environment. These Form Districts establish a street-wall, shallow setbacks, and high facade transparency to create pedestrian-friendly activity on the street.

Community Center areas are characterized by the Mixed Use Class, specifically the **Commercial-Mixed General 1 (XG1), Commercial-Mixed Community 1 (XC1),** and **Commercial-Mixed Neighborhood 1 (XN1).** As described above, the range of uses allows for retail shops, eating establishments, services, and

residential uses and includes establishment size limits for certain uses on the ground floor. This mix of uses provides opportunities for housing and small business that complement one another.

Hybrid Industrial (13% of Downtown Plan Area)

Hybrid Industrial areas preserve productive activity and prioritize employment uses, but may accommodate live/work uses or limited residential uses. The building form ranges from Very Low Scale to Mid Rise. Uses include light industrial, commercial, and office, with selective live/work uses.

The purpose of this designation is to balance live/work residential uses, with production and employment activity that is supported by commercial, retail, hotel, and community amenities. Hybrid Industrial areas are characterized by the Form Districts with maximum allowable FARs ranging from 3:1 to 6:1, with height limits for portions located in proximity to the river**.** Development regulations emphasize high-quality new construction and repurposed structures to promote a resourceful approach to urban development that can evolve over time. These Form Classes shape development patterns in traditionally industrial areas, and require that large blocks include new pedestrian connections to maintain a balance between facilitating goods movement activity and achieving pedestrian safety and comfort.

Hybrid Industrial areas are characterized by the **Industrial Mixed Use District, specifically, Industrial-Mixed Hybrid 1 (IH1) and Industrial-Mixed Hybrid 2 (IH2)**. These variations require each development to dedicate a base amount of floor area towards production spaces such as office, research & development, clean-tech, wholesale, heavy commercial, and light industrial uses supported by daily retail and service needs. Live/work units and adaptive reuse to household living are the only permitted types of housing in IH2, and IH1 allows for all types of housing. The IH2 use district includes regulations for the size of live/work units and requires a minimum area allocated towards non-residential uses permitted in the Office Use Group, or the Agricultural, Heavy Commercial, and Light Industrial Use Categories.

Markets (18% of Downtown Plan Area)

Markets are bustling centers of commercial activity, each with its own mini-economy of specialized commercial uses, including wholesale. The building form generally ranges from Very Low Rise to Low Rise, and Mid Rise to Moderate Rise. Adaptive-reuse and rehabilitation of structures and warehouses maintain the built environment and support sustainable development. Uses also include retail, limited housing, and goods movement activities. Markets areas are characterized by the Form Districts with maximum allowable FARs ranging from 4.5:1 to 8:1. Development regulations include minimum street walls, high ground floor transparency, and fine-grained blocks with multiple building entrances to create a porous environment. These Form Districts encourage adaptive reuse and rehabilitation of existing structures to promote a resourceful and sustainable approach to development. These Form Districts allow for building frontages that facilitate active alleys and shopfronts to encourage an active pedestrian environment.

Markets areas are characterized by the **Industrial Mixed Use Class**, **specifically, Industrial-Mixed Hybrid 1 (IH1), Industrial-Mixed 1 (IX1) and Industrial-Mixed 2 (IX2)** allowing for a mix of residential hotel, live/work, retail, creative office, wholesale, heavy commercial, assembly and light manufacturing, and warehousing, institutional, or urban agricultural uses to function in close proximity to one another, or in the same structure.

Hybrid Industrial 1 (IH1) allows for a range of production and light industrial uses, and allows for residential uses as long a minimum amount of floor area is dedicated to non-residential uses permitted in the Office Use Group, or the Agricultural, Heavy Commercial, and Light Industrial Use Categories.

Industrial-Mixed 1 (IX1) allows for a mixed use community with a focus on light industrial uses, office, research & development uses, social services, and multi-family housing limited only to restricted affordable income levels.

Industrial-Mixed 2 (IX2) use district supports the ability for productive sectors to cluster - such as product fabrication, wholesale, retail, distributions use, and professional office. The only type of housing allowed is through adaptive reuse of existing buildings to live/work units.

Village (5% of Downtown Plan Area)

Village areas are characterized by walkable and fine-grained block patterns that serve as historic and cultural regional niche market destinations. The building form is Very Low Scale, Low Scale, or Mid-Scale. Commercial uses, such as restaurants, retail, services, and small offices may be interspersed with a range of housing types; commercial uses on the ground floor help promote a pedestrian atmosphere. Adaptive reuse of historic buildings and infill development is responsive to the historic and cultural legacy of these areas.

The purpose of this designation is to encourage a range of housing types for all incomes and family sizes that are integrated with commercial uses such as restaurants, retail, services, and small professional offices to create complete neighborhoods and active streets and alleys to retain a lively and safe pedestrian atmosphere.

Village areas are characterized by the Form Districts with maximum permitted FARs ranging from 3:1 to 6:1 and height limits of 5 to 8 stories. Development standards guide the development of low-scale structures and ensure that adaptive reuse of historic structures and infill development are responsive to the historic and cultural legacy of these areas. These Form Districts reinforce inward orientation and allow for a range of outdoor amenity spaces to be incorporated into its overall development pattern.

Village areas are characterized by the **Residential Mixed** and **Commercial Mixed Use Districts**.

Commercial-Mixed Neighborhood 1 (XN1) supports a range of housing types along with clusters of commercial, cultural, institutional uses catering to the local community. Establishment sizes for ground floor commercial uses are predominantly limited to 5,000 square feet.

Community Mixed (XC1) allows for a broad mix of uses necessary for a community's primary commercial district, including commercial and service uses, and housing uses, while also serving as a regional destination. Establishment sizes for ground floor commercial uses are predominantly limited to 50,000 square feet.

Residential Neighborhood Amenity 1 (RN1) are primarily residential neighborhoods with limited commercial uses such as grocery stores and personal services. Such commercial establishments on the ground floor are limited to 1,500 square feet.

Medium Neighborhood Residential (4% of Downtown Plan Area)

Medium Neighborhood Residential areas are primarily residential and may integrate limited local-serving commercial uses; these neighborhoods are adjacent and connected to commercial and employment areas. The building form is Low Scale, and buildings are typically oriented toward the street.

Medium Neighborhood Residential areas are characterized by the Form Districts with FARs of 3:1 and a height limit of up to 8 stories.

Regulations for these form districts guide development of traditional housing forms and neighborhood features. This includes multi-family duplex, triplex, apartment buildings, and single-family homes with front yard setbacks, and landscaping that contribute to an inviting public realm.

Medium Neighborhood Residential areas are characterized by the **Residential Use District** particularly the **Residential General 1 (RG1) and Residential Neighborhood Amenity 1 (RN1)** use districts.

RG1 prioritizes household living and multi-family residential uses and allows for limited institutional uses such as community centers, garden centers, and parks.

RN1 are primarily residential neighborhoods with limited commercial uses such as grocery stores and personal services. Such commercial establishments on the ground floor are limited to 1,500 square feet.

Production (17% of Downtown Plan Area)

Production areas preserve and sustain industrial activity while serving as a regional jobs base. The building form ranges from Very Low Scale to Low Rise. Site layout and development in these areas are flexible to accommodate goods movement, loading, and distribution needs. Uses include heavy industrial and evolving and innovative industries, such as light assembly and manufacturing, clean technology, incubators, and research and development facilities, are accommodated. Housing is generally not permitted in Production areas but limited residential uses may be allowed, for example, through adaptive reuse of existing buildings.

Production areas are characterized by the low scale Form Districts with FAR's generally limited to a maximum of 3:1. Regulations for this form district guide development of large-format structures in flexible lot configurations to balance goods movement, loading, and distribution needs with pedestrian-scaled design that supports a healthy environment for all users.

Production areas are characterized by the **Industrial Use Class**, particularly **Industrial Restricted 1 (MR1)** and **Industrial Heavy 1 (MH1)** use districts. MR1 is intended to be a center of employment for heavy commercial and light manufacturing activity including research and development facilities, clean technology incubators, production, and distribution, wholesale and manufacturing uses. MH1 allows for the same breadth of heavy commercial and light industrial uses as MR1 while also accommodating the highest intensity of industrial activity, such as heavy manufacturing and storage, resource extraction, and dismantling facilities.

Public Facilities (9% of Downtown Plan Area)

Public Facilities areas serve as centers of civic life, promoting governmental, institutional, and cultural functions. These areas provide for the use and development of land typically owned by government agencies. The building form varies in size and structure, from Residential Agriculture to High Rise, with a variety of site layouts and flexible building designs that support civic activity and an active public realm. Uses include government offices, libraries, schools, and service systems. Housing is not typically associated with Public Facilities but may be permitted on a limited basis.

Public Facilities –Freeways (5% of Downtown Plan Area)

Public Facilities – Freeways comprises of land dedicated to freeways, including storage and parking uses that is owned by the California Department of Transportation (Caltrans).

Open Space (1% of Downtown Plan Area)

Open Space areas primarily serve as public recreational sites or parks but can include reservoirs and nature reserves. These largely open areas are intended for passive and active outdoor recreation, public gathering, and education. The building form, if there are accessory structures or buildings on site, typically facilitates recreational and/or communal activities, such as playground equipment, restrooms, and community centers. The Open Space designation does not allow residential uses.

TABLE 3-5 PROPOSED GENERAL PLAN DESIGNATION AND ZONE DISTRICT CORRESPONDENCE

General Plan Designation	Form Districts (2020 current)	Base FAR (max)	Bonus FAR (max)	Min Story Height	Max Story Height	Corresponding Use Districts
Transit Core	High-Unspecified-Broad 1 (HUB1)	6.0	10.0	4	--	Commercial-Mixed Use Community 1 (XC1)
	High-Unspecified-Broad 2 (HUB2)	7.0	13.0	6	--	Commercial-Mixed Community 1 (XC1); Commercial-Mixed General 1 (XG1);
	High-Unspecified-Broad 3 (HUB3)	9.0	13.0	10	--	Commercial-Mixed General 1 (XG1); Commercial-Mixed Entertainment 1(XE1)
	High-Unspecified-Broad 4 High-Unspecified-Broad 4 (HUB4)	13.0	--	--	--	Commercial-Mixed General 1 (XG1);
Traditional Core	Medium Plus-Limited-Medium 2 (PLM2)	6.0	8.5	6	15	Commercial-Mixed Entertainment 1(XE1) Commercial-Mixed Neighborhood 1 (XN1)
	High-Unspecified-Broad 3 (HUB3)	9	13	10		Commercial-Mixed General 1 (XG1);
	High-Unspecified-Medium 1 (HUM1)	6.0	13.0	10	--	Commercial-Mixed Use Districts 1 (XC1); Commercial-Mixed Entertainment 1(XE1); Commercial-Mixed General 1 (XG1)
Community Center	High-Unspecified-Broad 2 (HUB2)	7.0	13.0	6	--	Commercial-Mixed Use Community 1 (XC1);
	Medium Plus-Limited-Medium 1 (PLM1)	6.0	8.5	--	15	Commercial-Mixed Neighborhood 1 (XN1)
	Medium Plus-Unspecified-Medium 1 (PUM1)	4.0	8.0	--	--	Commercial-Mixed Use Community 1 (XC1); Commercial-Mixed General 1 (XG1);
	Medium Plus-Unspecified-Medium 2 (PUM2)	6.0	8.5	--	--	Commercial-Mixed Use Districts (XC1);

TABLE 3-5	**PROPOSED GENERAL PLAN DESIGNATION AND ZONE DISTRICT CORRESPONDENCE**					
General Plan Designation	**Form Districts (2020 current)**	**Base FAR (max)**	**Bonus FAR (max)**	**Min Story Height**	**Max Story Height**	**Corresponding Use Districts**
						Commercial-Mixed Neighborhood 1 (XN1)
	Low-Limited-Medium 2 (LLM2)	3.0	--	--	8	Commercial-Mixed Use Community 1 (XC1); Commercial-Mixed Neighborhood 1 (XN1)
	Medium-Unspecified-Broad 2 (MUB2)	3.0	6.0	--	--	Commercial-Mixed Use Districts 1 (XC1); Commercial-Mixed General 1 (XG1)
Hybrid Industrial	Low-Limited-Medium 1 (LLM1)	1.5	3.0	--	10	Industrial-Mixed Hybrid 2 (IH2)
	Medium-Limited-Medium 1 (MLM1)	1.5	4.5	--	18	Industrial-Mixed Hybrid 2 (IH2)
	Medium-Unspecified-Broad 1 (MUB1)	1.5	6.0	--	--	Industrial-Mixed Hybrid 2 (IH2)
	Medium-Unspecified-Broad 2 (MUB2)	3.0	6.0	--	--	Industrial-Mixed Hybrid 2 (IH2); Industrial-Mixed Hybrid 1 (IH1)
Markets	Medium Plus-Unspecified-Medium 1 (PUM1)	4.0	8.0	--	--	Industrial-Mixed Hybrid 1 (IH1)
	Medium-Unspecified-Broad 2 (MUB2)	3.0	6.0	--	--	Industrial-Mixed 1 (IX1)
	Medium-Unspecified-Medium 1 (MUM1)	4.5	--	--	--	Industrial-Mixed Use Districts (IX2)
Village	Low-Limited-Medium 2 (LLM2)	3.0	--	--	8	Commercial-Mixed Neighborhood 1 (XN1); Commercial-Mixed Use Community 1 (XC1);

TABLE 3-5 PROPOSED GENERAL PLAN DESIGNATION AND ZONE DISTRICT CORRESPONDENCE

General Plan Designation	Form Districts (2020 current)	Base FAR (max)	Bonus FAR (max)	Min Story Height	Max Story Height	Corresponding Use Districts
	Medium-Limited-Narrow 1 (MLN1)	6.0	--	--	5	Commercial-Mixed Neighborhood 1 (XN1); Commercial-Mixed Use Community 1 (XC1); Residential Neighborhood Amenity (RN1)
Medium Neighborhood Residential	Low-Limited-Medium 2 (LLM2)	3.0	--	--	8	Residential General 1 (RG1); Residential Neighborhood Amenity (RN1)
	Low-Limited-Narrow 1 (LLN1)	3.0	--	--	8	Residential General 1 (RG1); Residential Neighborhood Amenity (RN1)
Production	Low-Unspecified-Full 1 (LUF1)	3.0	--	--	--	Industrial Heavy 1 (MH1); Industrial Restricted 1 (MR1)
Public Facilities	Medium Plus-Limited-Medium 2 (PLM2)	6.0	8.5	6	15	Public Facilities 1 (PF1)
	Medium Plus-Unspecified-Medium 2 (PUM2)	6.0	8.5	--	--	Public Facilities 1 (PF1)
	Medium Plus-Unspecified-Medium 1 (PUM1)	4.0	8.0	--	--	Public Facilities 1 (PF1)
	High-Unspecified-Medium 1 (HUM1)	6.0	13.0	10	--	Public Facilities 1 (PF1)
	High-Unspecified-Broad 1 (HUB1)	6.0	10.0	4	--	Public Facilities 1 (PF1)
	High-Unspecified-Broad 2 (HUB2)	7.0	13.0	6	--	Public Facilities 1 (PF1)
	High-Unspecified-Broad 3 (HUB3)	9.0	13.0	10	--	Public Facilities 1 (PF1)
	High-Unspecified-Broad 4 High-	13.0	--	--	--	Public Facilities 1 (PF1)

TABLE 3-5 PROPOSED GENERAL PLAN DESIGNATION AND ZONE DISTRICT CORRESPONDENCE

General Plan Designation	Form Districts (2020 current)	Base FAR (max)	Bonus FAR (max)	Min Story Height	Max Story Height	Corresponding Use Districts
	Unspecified-Broad 4 (HUB4)					
	Low-Limited-Medium 2 (LLM2)	3.0	--	--	8	Public Facilities 1 (PF1)
	Low-Limited-Narrow 1 (LLN1)	3.0	--	--	8	Public Facilities 1 (PF1)
	Low-Unspecified-Full 1 (LUF1)	3.0	--	--	--	Public Facilities 1 (PF1)
	Medium-Limited-Medium 1 (MLM1)	1.5	4.5	--	18	Public Facilities 1 (PF1)
	Medium-Limited-Narrow 1 (MLN1)	6.0	--	--	5	Public Facilities 1 (PF1)
	Medium-Unspecified-Broad 1 (MUB1)	1.5	6.0	--	--	Public Facilities 1 (PF1)
	Medium-Unspecified-Broad 2 (MUB2)	3.0	6.0	--	--	Public Facilities 1 (PF1)
	Medium-Unspecified-Medium 1 (MUM1)	4.5	--	--	--	Public Facilities 1 (PF1)
	Medium-Unspecified-Full 1 (MUF1)	6.5	--	--	--	Public Facilities 1 (PF1)
Public Facilities - Freeways	Very Low-Unspecified-Full 1 (VUF1)	1.5	--	--	--	Public Facilities Freeways (FWY)
Open Space	Low-Unspecified-Full 1 (LUF1)	3.0	--	--		Agricultural 1 (A1)
	Very Low-Unspecified-Full 1 (VUF1)	1.5	--	--	--	Open Space 1 (OS1)

TABLE 3-6 DOWNTOWN PLAN AREA, LAND AREA BY GENERAL PLAN DESIGNATION		
Proposed General Plan Designation	**Area (acres)**	**Percent of Plan Area**
Transit Core	516	15%
Traditional Core	126	6%
Production	557	17%
Markets	389	18%
Medium Neighborhood Residential	100	4%
Village	85	5%
Hybrid Industrial	425	13%
Community Center	195	8%
Public Facilities	428	9%
Public Facilities - Freeways	197	5%
Open Space	214	1%
Total		**100%**

Proposed Frontage Districts

Each parcel will be assigned a Frontage District designation, which further implements the goals and policies for each General Plan Designation by governing how a building facade interfaces with the street and shapes the built environment. The Frontage District regulates setbacks from the primary and side street lot lines, ground floor story height, the amount of transparency (such as windows) required, pedestrian entry requirements and spacing. There are 12 Frontage Districts being applied throughout the Downtown Plan Area. Their application throughout the Downtown Plan Area is tailored to meet a range of objectives, such as high pedestrian walkability, flexibility of function over time, and reinforcing existing built patterns and architectural features.

Frontage Districts are applied to properties within Downtown Plan Area based on a number of factors, including existing uses and development patterns, transit accessibility, and anticipated, future uses and development patterns. Much of the Downtown Plan Area is transit accessible and walkable today and Frontage Districts that encourage and reinforce this pattern will be prevalent. Frontage Districts such as Alley Shopfront and Markets recognize the unique development patterns that exist in Downtown today and are designed to ensure new development continues, and in some instances expands existing desirable development patterns. Frontages are also used to reinforce the unique features of Downtown neighborhoods that contribute to their distinct character.

Downtown Frontage Districts

Multi-Unit Frontages (Multi-Unit (MU1), Multi-Unit (MU2)) require higher ground floor elevations, relatively low transparency, and frequent entrance spacing. This allows for greater privacy for ground floor

tenants while promoting natural surveillance of the public realm. Frequent entrances activate the public realm with pedestrian activity and visual interest.

General Frontages (General 1 (G1)) require moderate to high build-to widths while allowing a wide range of modifications for pedestrian amenity spaces. These frontage districts have a moderate transparency requirement with flexible entrance spacing standards while ensuring a high-quality pedestrian environment and providing flexibly for a variety of ground story tenants.

Shopfront Frontages (Shopfront 1(SH1), Shopfront 2 (SH2), Ally Shopfront (AL2)) require high build-to widths, high levels of transparency, frequent entrance spacing and ground floor elevations at or near sidewalk grade. This promotes a legible street wall and activates the public realm with pedestrian activity and visual interest. The at-grade ground floor elevation allows for an increased connection between the interior uses and the pedestrian space.

Market Frontages (Market 1 (MK1), Ally Market (AL1)) require high build-to widths and frequent entrances integrated as market stalls and shopfront bays. These entry feature options, paired with frequent entry spacing, activates the public realm with pedestrian activity and visual interest in areas where market stalls are the dominant pattern.

Warehouse Frontages (Warehouse 1 (WH1)) have few standards and allow for a high level of flexibility. These frontage districts are designed for freight service. Warehouse Frontages are intended for areas where pedestrian-friendly environments are not a priority.

Character Frontages (Historic Core (CHC1), Daylight Factory (CDF1), Daylight Factory/River (CDR1)) provide standards for facade articulation, entry features, window design, siding materials, and roof form, in order to reinforce the prevailing architectural characteristics of the city's historically and culturally significant neighborhoods and districts.

Proposed Development Standards Districts

Each parcel will be assigned a Development Standards District, which distinguish areas within the City based on their physical built environment and functional aspects relating to mobility options. These districts package together requirements relating to pedestrian and automobile access, parking requirements, parking structure design treatments, and on-site sign requirements.

Development Standards District 5 is being applied to a majority of the Downtown Plan Area. It is designed to account for walking, biking, and transit as the primary modes of transportation, and thus requires no minimum parking. See Section 3.7.4 for a discussion of proposed Development Standards Districts.

Development Standards District 6 is being applied to the southeastern portion of the Downtown Plan Area, where the Production Designation is being applied. This district is intended to support industrial activity and facilitate goods movement and thus mandates no minimum parking. Parking can be provided in surface lots or other configurations to accommodate a range of functions including loading, distribution and goods movement.

Development Standard Rules

The New Zoning Code also includes Development Standards Rules that are not unique to a specific built environment or context. These standards include regulations for the following: Pedestrian and Motor Vehicle Access; Bicycle and Automobile Parking; Transportation Demand Management; Plants; Fences & Walls; Screening; Grading & Retaining Walls; Outdoor Lighting & Glare; Signs and project review

threshold. See Section 3.7.4 for a discussion of development standards. These development standards will apply to the Downtown Plan Area based on the designated zone districts and relevant regulations.

Density District

Each parcel in the Downtown Plan Area is assigned a Density District, which specifies the maximum allowable density. For a majority of the parcels within Downtown Plan Area, however, density will be limited by the allowable floor area and would not be governed by any additional density limitations.

Community Plan Implementation Overlay

The New Zoning Code enables the Downtown Plan to utilize a Community Plan Implementation Overlay District (CPIO), which identifies sub-areas in the Downtown Plan Area and applicable supplemental development regulations. The CPIO (**Appendix F**) primarily comprises of the Downtown Plan Community Benefits Program and offers neighborhood-specific design best practices that are not mandatory, which are described in detail further below. While Article 9 of the New Zoning Code establishes the framework for a standardized Community Benefits Program, the Downtown Plan CPIO will provide additional standards tailored to the unique conditions of the Downtown Plan Area.

Proposed Zoning Incentive System for Community Benefits

A feature of the Downtown Plan is an integrated zoning incentive system that links development capacity and public benefits. Under this system, proposed developments would be eligible for increased floor area or height in exchange for providing additional public benefits. **Table 3-5** illustrates the zones with a maximum base and maximum allowable floor area ratio (FAR). The base allowable floor area ratio would be permitted by-right. In order to take advantage of the maximum allowable FAR, the project would need to provide public benefits in the form of affordable housing, open space, historic preservation, or community facilities. The proposed menu of public benefits including affordable housing; publicly accessible open space; preservation of historic resources; community amenities; and transit-related infrastructure, are tailored to the needs of Downtown and support the Project Objectives (Section 3.6). In order to encourage projects and streamline their approval process, project review thresholds (same as the current Site Plan Review in Chapter 1 of the LAMC) for projects in the Downtown Plan Area utilizing this program would be higher than the existing threshold of 50 residential dwelling units or 50,000 square feet of non-residential development. For a project on a property zoned with Development Standards District 5 and participating in the Community Benefits Program, the threshold for project review pursuant to the New Zoning Code will be 500 residential dwelling units or 500,000 square feet of non-residential development. Projects located within areas designated as Transit Core in the General Plan and participating in the Community Benefits Program may access the Buildable Area calculation as established in the Downtown Plan CPIO, provided they meet the conditions outlined therein. At this time it is too speculative to identify which projects would participate in the Community Benefits program, so for the purpose of this analysis it is assumed all projects on a property zoned with Development Standards District 5 with a bonus floor area ratio would access the increased project review threshold and all projects within the Transit Core designation would access the Buildable Area calculation.

Additionally, properties outside of the Downtown Plan will not be able to utilize the increased threshold unless the respective community plan is updated or amendments are completed to utilize the new zoning, (specifically Development Standards District 5), which would require environmental review pursuant to CEQA. It is speculative as to whether and where Development Standards District 5 would be utilized outside of the Downtown Plan.

The process and requirements for utilizing this zoning incentive system are outlined in Article 9 (Public Benefits Program) of the New Zoning Code. Additional standards and guidelines specific to the Downtown Plan Area are described in the Downtown Plan CPIO.

Adaptive Reuse

The City's current Adaptive Reuse Programs allows for the retention and conversion of existing, historically significant buildings to dwelling units. Under the Downtown Plan, the proposed Downtown Adaptive Reuse Program will be expanded through the New Zoning Code to allow for the conversion of eligible buildings to any use permitted or conditionally permitted by the designated Use District of the property. Projects that meet at least one of the following criteria may qualify for this program:

- Buildings constructed in accordance with building and zoning codes in effect prior to July 1, 1974
- Buildings constructed in accordance with building and zoning codes in effect on or after July 1, 1974, if five years have elapsed since the date of issuance of final Certificates of Occupancy.
- Buildings designated on the National Register of Historic Places, the California Register of Historical Resources, or the City of Los Angeles List of Historic-Cultural Monuments. Contributing Buildings in National Register Historic Districts or Contributing Structures in Historic Preservation Overlay Zones (HPOZ) established pursuant to Division 13B.8. (Historic Preservation) of this Chapter.
- Any parking garage or structure, or parking area of any existing building, built at least 10 years prior to the date of application, in excess of any required minimum parking.

UPDATES TO SPECIFIC PLANS AND PLANNING OVERLAYS

As part of the Downtown Plan, a selection of the existing specific plans, planning overlays, and redevelopment plans would be amended. See Section 3.3, *Current Land Use and Regulatory Setting*, for a description of the existing specific plans, planning overlays, and redevelopment plans in the Downtown Plan Area.

Below is a discussion of the proposed updates to planning overlays as part of the Downtown Plan.

- **Design Guidelines**

  The Downtown Design Guide Urban Design Standards and Guidelines ("Downtown Design Guide" or "Design Guide") would be revised as part of the Downtown Plan. The applicability of the Design Guide would be clarified, such that the content would apply only to discretionary projects within the Downtown Plan Area, excluding properties that have a Production land use designation. Content within the existing Design Guide that is redundant to proposed New Zoning Code provisions, such as Form District, Frontage, or Development Standards, is proposed to be removed. The Design Guide will include additional content that would provide design guidance tailored to specific neighborhoods. These neighborhood specific guidelines, although not mandatory or enforceable, will serve as informational resource to help guide new infill development towards reinforcing the unique identity of these neighborhoods and complement existing built patterns. See **Appendix F** for proposed amendments to the Downtown design Guide.

- **Community Design Overlays**

  The guidelines and standards of both the Broadway Theater and Entertainment District Guide Community Design Overlay (Broadway CDO) and Little Tokyo Community Design Overlay (Little Tokyo CDO) will be amended to remove content that is redundant to proposed New Zoning

Code provisions, such as Form District, Frontage, or Development Standards. In addition, amendments to address consistency with the New Zoning Code as to form, numeration, and implementation are also proposed. See **Appendix N** and **Appendix O** for the proposed amendments to the Broadway and Little Tokyo CDO, respectively.

- **Specific Plans and other Overlays**

  The Bunker Hill Specific Plan will be rescinded as part of the Proposed Downtown Plan. The purpose and provisions of the Bunker Hill Specific Plan will be implemented through the New Zoning Code provisions.

  Applicable development regulations and measures to protect sensitive biological resources in the existing The Los Angeles River Implementation Overlay (RIO) will be incorporated into Frontage Districts and development standard rules of the New Zoning Code. In addition, the RIO will be amended to remove portions that are currently in the Downtown Plan Area to avoid redundancy with the New Zoning Code provisions.

The following overlays will not be amended as part of the Proposed Project, except as may be necessary to address consistency with the New Zoning Code as to form, numeration, cross-references and implementation:

- Three Specific Plans in the Downtown Plan Area, the Los Angeles Sports and Entertainment District (LASED), the Cornfield Arroyo-Seco Specific Plan (CASP), and the Alameda District Specific Plan (ADP) will remain unchanged under the Downtown Plan.
- The Broadway Streetscape Master Plan applies to properties fronting Broadway from First Street and Twelfth Street. The Master Plan was established to create a multi-modal, pedestrian focused street that can support and revitalize the historic theater district. The Streetscape guidelines call for expanded sidewalks with street elements and limited landscaping to enhance pedestrian interest and activity along the street.
- The Broadway Sign Supplemental Use District (Broadway Sign District) will remain unchanged and continue to be in effect as part of the proposed Downtown Plan.
- The Downtown Street Standards will continue to be in effect as part of the proposed Downtown Plan.
- The Oil Drilling Districts will remain unchanged and continue to be in effect as part of the proposed Downtown Plan.

CALIFORNIA REDEVELOPMENT AREAS

As discussed earlier in the Regulatory Setting of this Chapter, the Downtown Plan Area includes three redevelopment areas, namely the Chinatown, City Center and Central Industrial Redevelopment Areas.

The Downtown Plan allows for a wide mix of land uses, which generally align with the types of uses allowed under the three Redevelopment Plans in the Downtown Plan Area and would be generally consistent with the overall goals and policies of these Redevelopment Plans. Although the broad goals and policies between the Redevelopment Plans and the Downtown Plan are similar, certain regulations and procedures in the Redevelopment Plans are inconsistent or conflict with the goals, objectives, and policies of the Downtown Plan.

The Downtown Plan does not support carrying forward the requirements in the three Redevelopment Plans that are in conflict with the Downtown Plan. For a detailed discussion of regulations and procedures in the Redevelopment Plans that are not entirely consistent with the goals, objectives, and policies of the Downtown Plan, and how those will be addressed, please see Chapter 4.10, *Land Use and Planning*, of this EIR.

OTHER PLAN COMPONENTS

In addition to the General Plan Land Use Map amendments, Community Plan text amendments, Zoning Changes, and Downtown Design Guidelines described above, the Proposed Downtown Plan includes a number of other components.

- As part of the Downtown Plan, certain streets in the CPA will be redesignated in the Transportation Element (Mobility Plan 2035).
- The Greater Downtown Housing Incentive Area will be amended to remove the portions that are currently in the Downtown Plan Area.
- The Downtown Plan proposes a new Community Benefits Program designed to apply for the entire Downtown Plan Area and will provide a pathway for projects to provide for affordable housing in exchange for development potential beyond what's available by-right.
- The Transfer of Floor Area Rights (TFAR) will be replaced with the new Downtown Plan Community Benefits Program.

NEW ZONING CODE

The Proposed Project includes the adoption of those portions of the New Zoning Code (**Appendix G**) needed to implement the Downtown Plan. This portion of the Project Description describes the new "base zoning" districts and the additional New Zoning Code regulations that are required to implement the new zoning proposed for the Downtown Plan Area.

Modularity of the New Zoning System

The new zoning system is modular, requiring the bundling of multiple districts to make a zone. The zoning system includes the following five (5) districts, referred to collectively as the "base zoning": **Form, Frontage, Development Standards, Use, and Density districts**. These are organized within the New Zoning Code into two separate bracket sets addressing the built environment and activities. The diagram below (**Figure 3-8**) outlines the base districts of the new zone string. The first five (5) components of the zone string are mandatory. Not shown in the zone string diagram is an optional third bracket containing a sixth district, **Overlay**. Many of the requirements currently mandated by existing overlays, will be addressed by the first five (5) districts of the zone string, reducing the need for overlays in the new system. However, when there is a policy need to regulate aspects not covered in the base zoning, overlays may apply.

As described in further detail below, there are many potential combinations of Form, Frontage, Development Standards, Use, and Density districts that can be applied to properties to make a zone. Ultimately, the appropriate combinations for any neighborhood or property will be determined by the goals and policies outlined in future community plan updates or other future planning and zoning efforts.

Figure 3-8 Base Zoning Diagram

Content and Organization of New Zoning Code

The New Zoning Code consists of 15 Articles. The five new "base zone" districts for the Downtown Plan are described and contained in Articles 2, 3, 4, 5, and 6. The remaining articles of the New Zoning Code include the optional specific plans and supplemental use districts (Article 8) and the general provisions and standards to implement these new districts, such as definitions. **Appendix G** contains the preliminary draft of the New Zoning Code, including the details about the exact regulations proposed.

Article 1 - Introductory Provisions: Article 1 provides an overview of the Zoning Code, including the intent and applicability of the Code. The intent of the Zoning Code is to provide a comprehensive zoning system that regulates the form and use of buildings and land, balances conservation and development, achieves design excellence in the built environment, and guides the City to a prosperous and sustainable future. Generally, the New Zoning Code will only apply in parts of the City where property has been rezoned and community plans have been amended. The Downtown Plan is the first community plan update; other areas of the City will become subject to the New Zoning Code through future community plan updates or other future planning and zoning efforts. Article 1 also describes the organization of the Zoning Code, establishes zoning districts, and introduces the Zoning Code Atlas, as well as emergency provisions. The Zoning Code Atlas establishes the zoning map, rules regarding zone boundaries, and maps that trigger the application of certain development standards or regulations (e.g. Hillside Area Map, Primary Street Map, Coastal Zone Map, and High Fire Severity Zone Map).

Articles 2 - Forms: Article 2 establishes Form Districts, the first district in the zone string shown above in **Figure 3-8**. Form Districts generally govern the shape and size of buildings. There are two (2) standardized types of regulations, or "metrics" in each Form District: "Lot Parameters" and "Bulk and Mass," as shown in **Figure 3-9** on the following page.

The intent, applicability, measurement, standards, and relief mechanism for each metric shown above in **Figure 3-9** can be found in Part 2C – Form Rules of Article 2 of the New Zoning Code provided in **Appendix G**.

Form Districts are organized into groups by their maximum FAR and maximum building width. These groupings are reflected in the naming of the districts. The FAR categories are Very-Low, Low, Medium, Medium Plus, and High. There are also two categories included in the name that pertain to height: Unspecified, the size of which is primarily regulated by FAR; and Limited, the size of which is primarily regulated by FAR and height limits. The building width categories are Narrow, Medium, Broad, and Full.

Figure 3-9 Example Form District

SEC. 2B.11.1. **MEDIUM-LIMITED-MEDIUM 1 (MLM1)**

A. Lot Parameters

1. LOT SIZE	Div. 2C.1.
Lot area (min)	n/a
Ⓐ Lot width (min)	25'
2. COVERAGE	**Div. 2C.2.**
Ⓑ Building coverage (max)	90%
Building setbacks	
Ⓒ Primary street (min)	see Frontage
Side street (min)	see Frontage
Ⓓ Side (min)	0'
Rear (min)	0'
Ⓔ Alley (min)	0'
Special lot line (min)	see Frontage
3. AMENITY	**Div. 2C.3.**
Ⓕ Lot amenity space (min)	15%
Residential amenity space (min)	10%

B. Bulk and Mass

1. FAR & HEIGHT	Div. 2C.4.
Base FAR (max)	1.5
Ⓐ Base height in stories (max)	15
Bonus FAR (max)	4.5
Ⓑ Bonus height in stories (max)	18
2. BUILDING MASS	**Div. 2C.6.**
Ⓒ Building width (max)	160'
Building break (min)	15'

As part of the Proposed Project, this Article includes a variety of Form Districts appropriate for the range of areas across the Downtown Plan. There are 13 different groups of Form Districts and 23 individual Form Districts that represent the varying scales, intensities and building massing that are found in, and characteristic of the Downtown Plan Area. These Form Districts are further described in Part 2B – Form Districts of the New Zoning Code provided in **Appendix G**. Please also see Section 3.7.3 of the Project Description, which describes in greater detail the proposed Form Districts and how and where they are being applied to implement the goals and policies of the Downtown Plan.

Ultimately, a wide range of Form Districts will be needed to accommodate the variety in scale of development found in the City, including those forms appropriate for areas ranging from rural, single family neighborhoods to high intensity, high rise areas. With future community plan updates, additional Form Districts may be added into Article 2 in order to meet the policy needs across the City. Form Districts that are not being applied in the Downtown Plan Area are not a part of the Proposed Project.

Article 2 also includes Form Rules that provide supporting standards, definitions, and measurements for the metrics included in the Form Districts. For example, Form Rules will outline how Lot Size, Coverage, Amenity, Height and FAR, Upper-Story Bulk, and Building Mass are defined and measured. The FAR rules will also enable to Downtown Community Plan Implementation Overlay to include and utilize a definition of Buildable Area as described in Section 3.7.3.

For informational purposes, the current Zoning Code (Chapter 1 of the LAMC) bases the requirement for useable open space on the number of residential units provided in a building. The New Zoning Code will base the requirement for Amenity Space on a percentage of lot size in addition to including an additive requirement based on the amount of residential floor area. Each Form District specifies the amount of Amenity Space required.

Article 3 - Frontage: Article 3 establishes Frontage Districts, the second part of the zone string diagram shown in **Figure 3-8**. The Frontage District governs how a site or building addresses abutting street(s) or right-of-way(s). There are two (2) types of regulations, or "metrics" in each Frontage District: "Lot" and "Facade" as shown in **Figure 3-10**.

The intent, applicability, measurement, standards, and relief mechanism for each metric shown above in **Figure 3-10** can be found in Part 3C, General Frontage Standards, of Article of the New Zoning Code provided in **Appendix G**.

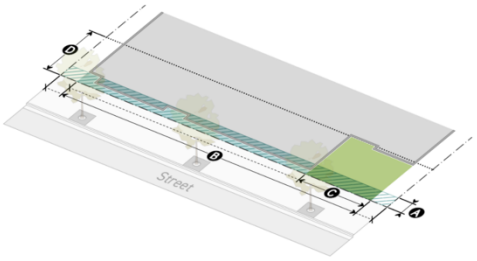
Certain Frontage Districts are called "Character Frontages", which will include additional metrics (regulations) pertaining to articulation and architectural features as well as specific standards for entry features, window transparency and design, cladding materials, and roof design.

A wide range of Frontage Districts are needed to fit the wide-ranging development patterns and uses found citywide, acknowledging differences between areas, for example, that are more transit accessible and walkable from those that have more automobile-oriented development patterns. Frontage Districts ranging from the Shopfront Frontage to the Warehouse Frontage are included in this Proposed Project. The Shopfront Frontage is appropriate for highly walkable places and requires frequent pedestrian entrances and high levels of ground floor transparency to contribute to an active pedestrian environment. The Warehouse frontage requires very little transparency, allows large amounts of blank wall area, and orients to access for freight trucks. Frontage Districts are outlined in Part 3B of the New Zoning Code provided in **Appendix G**; the first section in each of the divisions provides an overview of the range and intent of the groups of Frontage Districts proposed for use in the Downtown Plan Area. See Section 3.7.3 for further discussion of the application of Frontage Districts in the Downtown Plan.

Figure 3-10 Example Frontage District

SEC. 3B.4.2. **SHOPFRONT 1 (SH1)**

A. Lot



	Primary St.	Side St.
1. BUILD-TO	Sec. 3C.2.	
Applicable stories (min)	5	5
Ⓐ Build-to range (min/max)	0'/5'	0'/10'
Ⓑ Build-to width (min)	90%	70%
Ⓒ Pedestrian amenity modification (max)	20%	10%
2. PARKING	Sec. 3C.3.	
Ⓓ Street setback (min)	20'	5'
3. LANDSCAPING	Sec. 3C.4.	
Planted area (min)	30%	30%
Privacy Screen allowed:	A1	A1

B. Facade

	Primary St.	Side St.
1. TRANSPARENCY	Sec. 3C.5.	
Ⓐ Ground story (min)	70%	50%
Ⓑ Upper stories (min)	30%	30%
Ⓒ Blank wall width (max)	20'	30'
2. ENTRANCES	Sec. 3C.6.	
Ⓓ Street-facing entrance	Required	Required
Ⓔ Entrance spacing (max)	50'	75'
Required entry feature	No	No
3. GROUND STORY	Sec. 3C.7.	
Ⓕ Ground story height (min)		
Residential (min)	16'	16'
Nonresidential (min)	16'	16'
Ⓖ Ground floor elevation (min/max)		
Residential (min)	-2'/2'	-2'/2'
Nonresidential (min)	-2'/2'	-2'/2'

With future community plan updates and other planning and zoning efforts, additional Frontage Districts may be added into Article 3 in order to meet the policy needs across the City. Frontage Districts that are not being applied in the Downtown Plan Area are not part of this Project.

Article 4 - Development Standards: Article 4 first establishes Development Standards Districts[8], the third district in the zone string diagram shown in **Figure 3-8**. Development Standards Districts will regulate the following aspects of zoning: pedestrian and motor vehicle access, automobile parking quantities; parking design treatments; on-site signs; project review threshold. Other regulations may be added as needed in future planning efforts that are part of the broader regulatory framework that is needed to guide development. These key regulations will be bundled together into sets that are suited to the many types of places in the City, acknowledging that one set of rules for the entire City may not result in desirable development outcomes. There are two (2) Development Standards Districts that will be applied in the Downtown Plan. Development Standards Districts that would be applicable to the Downtown Plan Area would be designed for the intensely urban nature of the area and will eliminate parking quantity requirements; encompass pedestrian and motor access provisions that reinforce the walkable nature of most of the Downtown Plan Area; and, similarly, tailor regulations like parking design and on-site sign provisions to be more fitting of the intense, urban environment. A variety of additional and future Development Standards Districts will be required to accommodate the range of conditions found across the City of Los Angeles; Development Standards Districts that are not being applied in the Downtown Plan Area are not part of this Project. See Section 3.7.3 for more detail on the application of the specific Development Standards Districts in the Downtown Plan.

Article 4 also establishes Development Standards Rules, which are standards that provide further detail on the regulations included in the Development Standards Districts in addition to general standards that apply anywhere the New Zoning Code is applied. The Development Standards Rules include standards on pedestrian and motor vehicle access, bicycle and automobile parking, transportation demand management, plants, fences & walls, screening, grading & retaining walls, outdoor lighting & glare, signs, and enabling language for Environmental Protection Measures. Additional detail for the Development Standard Rules is included in Part 4C of the New Zoning Code provided in **Appendix G**. Overarching changes to development standards from the existing Zoning Code to the New Zoning Code are discussed below for information purposes.

Pedestrian Access: The intent of the Pedestrian Access Division is to promote walkability, improve pedestrian access from the public realm to the interior of buildings, and ensure that required entrances are conveniently and effectively accessible to pedestrians. The division includes a range of pedestrian access packages which are designated through the Development Standards Districts. The pedestrian access packages range from those intended for highly walkable and pedestrian-oriented areas to those intended for more auto-oriented areas. The division also includes pedestrian passageway requirements, which promote walkability and are intended to improve pedestrian circulation through large sites. The Development Standards Districts designate whether pedestrian passageways are required and the minimum distance allowed between pedestrian passageways.

Motor Vehicle Access: The intent of the Motor Vehicle Access Division is to ensure driveways are located as to minimize conflicts with pedestrians, cyclists, and vehicular traffic on the abutting public right-of-way and to avoid detrimental effects on the surrounding public realm, while providing sufficient access to parking and vehicle use areas. The division includes a range of motor vehicle access packages, which are designated through the Development Standards Districts. The motor vehicle access packages range from those intended for highly walkable areas to those intended for highly walkable and pedestrian-oriented areas

[8] Note that the Notice of Preparation referred to Development Standard Sets as "Context."

to those intended for more auto-oriented areas. The division also includes standards on motor vehicle use area design, loading, and queueing.

Bicycle Parking: The Bicycle Parking Division incorporates the standards from the current Zoning Code regarding the requirements for the provision of bicycle parking spaces, short-term bicycle parking design, and long-term bicycle parking design.

Automobile Parking: The intent of the automobile parking division is to regulate the provision of parking and parking amenity design requirements. The automobile parking section includes requirements for the quantity of automobile parking stalls required, alternative parking strategies, parking area design, parking lot design, and parking structure design.

The automobile parking division includes tandem and valet parking requirements, electric vehicle charging requirements; the location, maintenance, landscaping, lighting, and surfacing of parking lots; parking space and aisle dimensions; and parking structure design and screening. Parking quantity requirements are addressed in specific Development Standards Districts and defined in the Development Standards Rules.

For informational purposes, the current Zoning Code (Chapter 1 of the LAMC) mandates that required parking spaces in many single-family zones be provided within a private garage. The New Zoning Code will not carry this existing requirement forward. Additionally, the current Zoning Code allows parking for non-residential uses to be provided off-site within 750' of the use the parking is intended to serve. The New Zoning Code will extend this provision to include residential uses as well.

Transportation Demand Management: The intent of the Transportation Demand Management (TDM) Division is to reduce vehicle trips generated by developments by encouraging the use of alternatives to single-occupant vehicles. No substantive changes to the content or standards of the existing TDM standards are proposed as part of the Proposed Project; however, the Department of City Planning is, through a separate effort, updating the TDM ordinance. It is the intent of this Project to incorporate the most recently adopted version of the TDM ordinance into the New Zoning Code.

Plants: The intent of the Plants Division is to maintain and increase the City's tree canopy, reduce the consumption of electricity, improve air quality, promote infiltration of stormwater runoff, offset urban heat island effect, mitigate noise pollution, sequester carbon and support urban biodiversity. The Plants Division includes requirements for tree planting and plant design & installation. The Plants Division includes standards that are applicable in lots, amenity spaces, Frontage Districts, parking lots, fences & walls, and screenings. The landscaping standard establishes the types of plants to be planted (e.g., shrubs, trees, etc.), the locations and dimensions of landscaped elements, and supports the State Model Water Efficiency Landscape Ordinance (MWELO) water management and irrigation maintenance requirements.

For informational purposes, the current Zoning Code (Chapter 1 of the LAMC) requires trees to be planted based on the number of residential units provided in a building. The New Zoning Code bases the number of trees that have to be planted on the square footage of floor area provided in a building.

Fences & Walls: The Fences & Walls Division is intended to balance the needs for natural surveillance and visual interest along the public realm with security and privacy for private ground floor uses. The Division includes a range of fence and wall types, which are designated by the Frontage District. The Division also includes standards for side /rear yard fences and walls, in addition to standards for fence and wall design & installation.

Screening: The Screening Division includes a range of screening types to protect the public realm from adjacent uses and abutting lots from impactful uses; to screen outdoor storage, roof-mounted equipment, ground-mounted equipment, and wall-mounted equipment.

Grading & Retaining Walls: The New Zoning Code includes a placeholder for grading regulations which will be needed outside of the Project Area in the future. The intent of the retaining wall standards is to stabilize the soil of a slope. The New Zoning Code will carry forward the retaining wall standards from the current Zoning Code (Chapter 1 of the LAMC) with some minor changes to ensure the regulations are consistent with the other requirements of the new Zoning Code. The New Zoning Code retaining wall standards will only apply where community plans are updated to utilize the New Zoning Code, through the community plan update process and other planning and zoning efforts within the CPAs where the New Zoning Code has been adopted.

For informational purposes, the current Zoning Code retaining wall standards are applicable within the Hillside Area as defined in the Bureau of Engineering Basic Grid Map No. A-13372, while the retaining wall standards in the New Zoning Code will be applicable within the Hillside Area as defined by the Department of City Planning Hillside Area map.

Outdoor Lighting & Glare: The intent of the Outdoor Lighting and Glare Division is to minimize light trespass, shield adjacent properties and the night sky from outdoor lighting, provide lighting standards to support a range of environments, and minimize glare. The division includes regulations preventing the trespass of light onto adjacent properties and includes additional requirements on the amount of illumination allowed in certain zone districts and required for certain uses. The glare standards prohibit the use of materials that typically create high levels of glare and generate excessive heat.

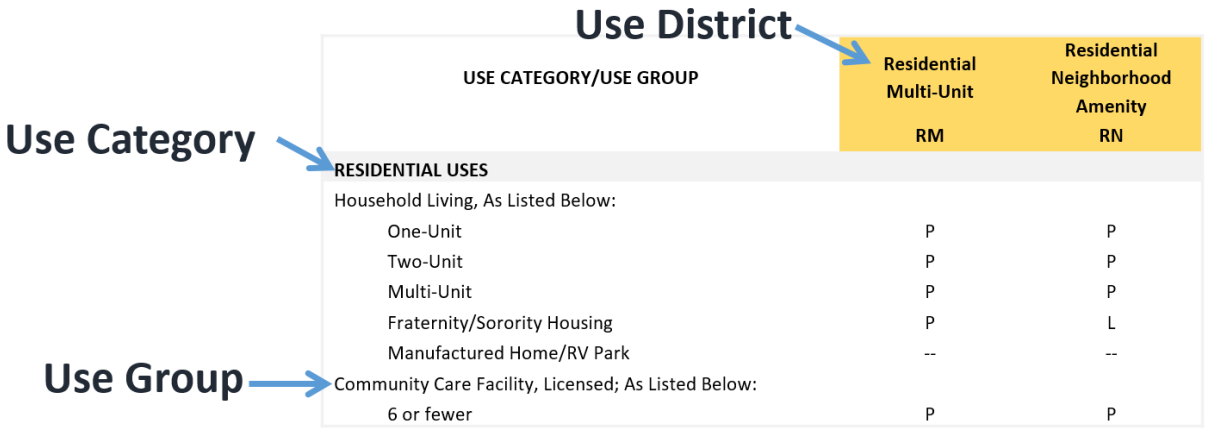
Signs: The intent of the Signs Division is to regulate sign placement, size, and type. The division includes requirements for sign height, placement, materials, and safety (e.g., illumination of signs near roadways). For informational purposes, the sign regulations in the New Zoning Code include minor changes to existing sign standards, such as clarifications of some existing regulations, additional definitions for sign types, and the elimination of content-related regulations. The division include two Sign Packages that regulate on-site signs and are designated through the Development Standards Districts. Sign Package 1 generally maintains the rules for on-site signs from the current Zoning Code, while Sign Package 2 incorporates provisions from other policy documents such as overlays.

Ridgeline Protection: The Ridgeline Protection Division is a placeholder for regulations anticipated to be added into the New Zoning Code through a separate code amendment.

Environmental Protection: The Development Standards Rules will include enabling language for Environmental Protection Measures, a set of standards that will be used to implement the mitigation measures from the EIR in compliance with CEQA Guidelines 15126.4(a)(2), and create a framework to adopt other standards intended to protect the environment through administrative guidelines for future community plan updates or environmental planning projects.

Article 5 - Use: Article 5 outlines standards for Use Districts, the fourth district in the zone string diagram shown in **Figure 3-8**. Use Districts establish which uses are permitted, permitted with limitations, conditionally permitted, or not allowed on a property. The permission levels are communicated in a visual table format where uses are shown on the far left column and each Use District is displayed across the top row, creating a matrix (see **Figure 3-11**). On the far left column are Use Categories, Use Groups, and Call-Out Uses. Use Categories simply organize similar uses together, and carry no regulatory meaning (e.g., Residential Uses). Below Use Categories are Use Groups. Use Groups are a broad term for many uses that fall under that group. All uses within that group are regulated at the same permission level, found by following the Use Group row across the Use Districts. In some instances, Use Groups are broken up into separate components as indicated by the phrase "As Listed Below." In other instances, the phrase "Except as Listed Below" indicates that certain uses within the group have been called out because they are regulated uniquely or differently from the rest of the Use Group. Each use (i.e., Use Group) in the table has a definition which can be found in Division 5D.2 (Definitions) of Article 5. By creating groupings of uses

Figure 3-11 Use Districts



with clear definitions, it is easier to determine if one uses is similar to another and thus how it may be regulated. This creates a use system that is adaptable to considering and regulating new uses.

Use Districts appear on the top row of the table. Each Use District has an intent, as outlined in Part 5B of the New Zoning Code provided in **Appendix G**.

With future community plan updates, additional Use Districts are anticipated to be added into Article 5 in order to meet the policy needs across the City. Use Districts that are not applied in the Downtown Plan Area are not part of this Project.

Article 5 also contains all of the General Use Standards and Use Rules required across all applicable projects and Use Districts. General Use Standards are organized by Use Category and are tied to Use Groups referenced in Part 5B under each Use District. Use Rules, however, are not tied to any specific Use Group, and act as standalone requirements that apply to a variety of uses and circumstances. Use Rules include requirements for how an activity may be conducted. For example, there is a Use Rule requiring that certain industrial uses be enclosed by a 6 to 8 foot tall solid wall and be located at least 500 feet away from Agriculture and Residential Use Districts.

Article 6 - Density: Article 6 contains provisions pertaining to Density, the fifth district in the zone string diagram shown in **Figure 3-8**. The Article contains the Density Districts that may appear in the zone string along with their corresponding density limit. The density limit indicator sets either the amount of lot area required for a Dwelling Unit or Guest Room, or the number of Dwelling Units permitted per lot. If a parcel were to have a Density District of 2, for instance, that would mean one Dwelling Unit is allowed per every 200 square feet of lot area. Division 6B of the New Zoning Code provided in **Appendix G** outlines the range of Density Districts available in the New Zoning Code. Most areas in the Downtown Plan Area do not have existing density limitations and will accordingly not include density limitations in the future as part of the Downtown Plan.

Article 7 – Alternate Typologies: Along with the rights allotted by the zone of a property, some particular situations will allow for the use of what is referred to as "Alternate Typologies." Alternate Typologies are prepackaged exceptions to the different districts of a zone that are intended on producing specific built outcomes for certain types of uses or activities. There is one Alternate Typology intended for application within the Project Area, the Civic Institution 1 Typology.

The Civic Institution 1 Typology is intended to promote placemaking through architectural monuments and publicly accessible spaces. This typology allows greater design flexibility for civic institutions to

differentiate civic assets from the surrounding urban fabric, while maintaining standards essential for ensuring all projects actively contribute to a highly walkable urban environment.

Article 8 – Specific Plans & Supplemental Districts: Article 8 contains provisions pertaining to preparing, processing, adopting, implementing and amending supplemental districts and Specific Plans. The new zoning system will carry forward several types of supplemental districts from Chapter 1 of the LAMC, including Specific Plans, Community Plan Implementation Overlays, Historic Preservation Districts, Community Design Overlays, Oil Drilling Districts, and Sign Districts. However, many of the requirements currently mandated by existing overlays, will be addressed by the first five (5) districts of the zone string, reducing the use of supplemental districts in the new system. When there is a policy need to regulate aspects not covered in the base zoning, supplemental districts implemented through this Article 8 may be appropriate.

As described in further detail in Section 3.7.3, most Downtown overlay plans and regulations will remain intact. Where applicable, some provisions of these plans will be incorporated into the new zoning that will be applied to properties in the respective plan areas, while the remainder of the regulations will remain in the separate regulatory document. Examples of this instance include the Broadway Theater and Entertainment District Community Design Overlay, and the Little Tokyo Community Design Overlay.

In the case of some specific plans, such as the Alameda District Specific Plan, the Cornfield Arroyo Seco Specific Plan, and the Los Angeles Sports and Entertainment District Specific Plan, the specific plan zoning will remain. In other instances, such as the community design overlays, the presence of a supplemental district will be noted in the sixth and final component of the zone string.

Article 9 – Public Benefit Systems: Article 9 establishes a range of Public Benefit Systems including affordable housing incentive programs, public benefits incentive programs, housing incentives programs and Adaptive Reuse, the intents of which are described within Divisions 9.2, 9.3, and 9.4 of the New Zoning Code provided in **Appendix G**. For informational purposes, in the current Zoning Code, the Adaptive Reuse Program generally only allows for the conversion from eligible buildings within specific zones to dwelling units and joint live work quarters. Under the New Zoning Code, the Citywide and Downtown Adaptive Reuse Programs will be expanded beyond their current provisions to allow for the conversion and retention of existing or historically significant buildings, and conversion between uses permitted or conditionally permitted by the designated Use District of the property. For the Citywide Adaptive Reuse Program, a discretionary action will be required. See Section 3.7.3 for further details of the Downtown Adaptive Reuse Program.

The Form Districts described in Article 2 includes a base and bonus Floor Area Ratio. A maximum base and bonus FAR is set for each Form District. A project applicant may utilize the maximum base FAR by-right. In order to access the maximum bonus FAR, an applicant must provide public benefits per a set menu of options from the Affordable Housing Incentive Programs and Community Benefits Programs. The proposed menu of public benefits is tailored to the needs of Downtown as described in Section 3.7.3 of the Project Description. The categories of proposed benefits may include: affordable housing, open space, historic preservation, and community facilities. This Article also outlines additional incentive programs that waiver other development or use requirements in exchange for providing other benefits to the community.

Article 10 – Streets and Parks: Article 10 contains provisions pertaining to street improvement requirements (public or private) and park dedications. For informational purposes, the regulations from the existing City of Los Angeles Zoning Code pertaining to street improvements and park dedications will be carried forward into the New Zoning Code.

Article 11- Division of Land: The Division of Land Article contains the City's regulations regarding Subdivision Maps. The Article contains regulations pertaining to tract maps, the Advisory Agency,

Subdivision Committee, design standards, tentative maps, final maps, street lighting maintenance assessments, sewer pumping and / or drainage facilities and maintenance, improvements, reversion to acreage, merger and re-subdivision, local drainage districts, modifications, park and recreation site acquisition and development provisions, subdivision requiring import or export of earth, modification of recorded final maps, vesting tentative maps, general provisions for parcel maps, filing of preliminary parcel maps, authority of Advisory Agency regarding parcel maps, approvals of preliminary parcel maps, appeals, map identification and reproduction, parcel maps, and other related topics. The regulations contained within the existing City of Los Angeles Zoning Code Article 11 (Division of Land) will be carried forward into the New Zoning Code with nominal modifications to ensure consistency with the New Zoning Code.

Article 12 - Nonconformities: Article 12 outlines modifications to existing nonconforming provisions to ensure consistency with the New Zoning Code.

Article 13 - Administration: Article 13 contains the provisions for administration, general procedural elements, legislative action, quasi-judicial action, clearance, specific plan implementation, relief, compliance, general administration, subdivision review, historic preservation, coastal development, CEQA administration, and definitions for the Zoning Code. The Department of City Planning is currently updating the administration provisions from the current zoning code, the update of which is being undertaken through a separate effort. It is the intent of the Proposed Project to carry forward these updated provisions without making substantive changes.

Article 14 – General Definitions & Measurement: Article 14 defines terms used throughout the New Zoning Code.

Floor Area is an example of a term that is defined in Article 14. For informational purposes, in the Development Standards Districts being used in the Downtown Plan Area, all above-grade parking will count toward Floor Area, while on the ground-floor, all active uses will be exempt from Floor Area.

Additionally, the current Zoning Code generally does not allow spaces that are covered to be exempt from Floor Area. The New Zoning Code would allow for certain types of covered spaces that meet the standards for Outdoor Amenity Space to be exempt from Floor Area. In order to ensure meaningful outdoor spaces, the Outdoor Amenity Spaces would have to be unenclosed and meet a minimum height to depth ratio in order to be covered.

Article 15 - Fees: Article 15 contains fees for submitting applications and approvals to the City. Fees are an on-going, regularly updated portion of the existing zoning code and will continue to be updated regularly through a different process in the New Zoning Code. Article 15 is not part of this Project.

3.7 CONSTRUCTION SCHEDULE AND PHASING

The Downtown Plan is an update to the existing Central City and Central City North Community Plans that would guide development in the Plan Area through 2040. No specifically planned development is proposed as part of the Downtown Plan. Therefore, the Downtown Plan has no construction schedule or phasing. The proposed Downtown Community Plan Update is anticipated to be adopted in 2021 with implementation starting after adoption and continuing through 2040.

3.8 DISCRETIONARY ACTIONS AND APPROVALS

Approval of the following would be required by the City Council in order to implement the Proposed Project:

- Certification of the Downtown Plan Update EIR; and
- Adoption of the proposed Downtown Plan Update and all related documents including:
  - Amendments to the General Plan, consisting of the Central City Community Plan and Central City North Community Plan text and land use maps (including changes to the footnotes and map symbols);
  - Adoption of the New Zoning Code as Municipal Code Chapter 1A;
  - Amendment of the Zoning Map to rezone Downtown with zone classifications from the New Zoning Code;
  - Adoption of the Downtown Community Plan Implementation Overlay (Downtown CPIO)
  - Repealing the Bunker Hill Specific Plan;
  - Amendments to the Downtown Design Guide Urban Design Standards and Guidelines (Downtown Design Guide), the Broadway Theater and Entertainment District Community Design Overlay (Broadway CDO) and Little Tokyo Community Design Overlay (Little Tokyo CDO), and the Greater Downtown Housing Incentive Area;
  - Minor amendments to the Los Angeles River Improvement Overlay (RIO) to address consistency with the New Zoning Code;
  - Amendments to the General Plan Framework, Circulation Map (**Appendix E**), Mobility Plan and other Citywide General Plan Elements, and ordinances, as necessary; and
  - Amendments to all other relevant ordinances and actions as necessary to ensure consistency of regulations and implementation of the Community Plan amendments.

Approval of the Proposed Project would not require action by any agency other than the City of Los Angeles.

4.0 ENVIRONMENTAL ANALYSIS

4.0.1 INTRODUCTION TO THE ANALYSIS

This chapter, Environmental Analysis, is the primary focus of this Draft EIR. The following Sections 4.1 to 4.18 contain discussions of the potential environmental effects of implementation of the Proposed Project. Each environmental issue is considered in a separate section, which contains a discussion of the environmental setting, the regulatory setting, the methodology, and the thresholds of significance applicable to the environmental issue being analyzed. Each section also includes the impact analyses for the Proposed Project, mitigation measures, conclusions regarding the level of significance after mitigation, and cumulative impact analyses for each of the environmental issues.

4.0.2 SCOPE OF IMPACTS

IMPACT ANALYSIS

In the following sections, the analysis considers the indirect impacts from the approval of the Proposed Project.

- 4.1 Aesthetics
- 4.2 Air Quality
- 4.3 Biological Resources
- 4.4 Cultural Resources
- 4.5 Energy
- 4.6 Geology and Soils
- 4.7 Greenhouse Gas Emissions
- 4.8 Hazards and Hazardous Materials
- 4.9 Hydrology and Water Quality
- 4.10 Land Use and Planning
- 4.11 Noise
- 4.12 Population, Housing and Employment
- 4.13 Public Services
- 4.14 Recreation
- 4.15 Transportation and Traffic
- 4.16 Tribal Cultural Resources
- 4.17 Utilities and Service Systems
- 4.18 Effects Found not to be Significant

4.0.3 FORMAT OF SECTIONS

The analysis of each environmental impact category is organized to include the following subsections:

EXISTING SETTING

This subsection includes a description of existing conditions in the area of potential impact under baseline conditions. CEQA Guidelines Section 15125(a) requires that an EIR include a description of the physical environmental conditions in the vicinity of a proposed project as they exist at the time the Notice of Preparation (NOP) is published. The NOP for this EIR was published on February 6, 2017. Thus, the Draft EIR uses 2017 as the baseline existing conditions.

REGULATORY FRAMEWORK

This subsection includes an identification of federal, state, and local laws, regulations, policies, plans, and in some instances, regulating agencies, that regulate, plan or have jurisdiction over the environmental area of concern.

THRESHOLDS OF SIGNIFICANCE

This subsection identifies the criteria by which the components of the Proposed Project are measured to determine if the Proposed Project would cause a substantial or potentially substantial adverse change in the existing environmental conditions.

This EIR relies upon CEQA Guidelines Appendix G thresholds as the threshold of significance unless another is specifically identified in the EIR. The City may rely on thresholds of significance adopted by regulatory agencies, such as South Coast Air Quality Management District (SCAQMD) or any others deemed appropriate by the Cityand supported by substantial evidence.

Discussion in both thresholds and methodology subsections found in the sections associated with each individual impact area provide further explanation of which thresholds are used. As to each environmental topic, the City has selected the thresholds that ensure as comprehensive an analysis of the Proposed Project's potential environmental impacts as possible, given the constraints of attempting to analyze a Community Plan that will be implemented over 20 years or more and a new Zoning Code.

Finally, all impact questions, except as indicated below, are interpreted to take into account the following mandatory findings of significance from CEQA Guidelines Section 15065(a):

> *(1) The project has the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory. [Considered in Sections 4.3, Biological Resources, and 4.4, Cultural Resources.]*
>
> *(2) The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals. [Considered in impact analysis in Sections 4.1 through 4.18.]*

(3) The project has possible environmental effects that are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. [Considered in the cumulative analysis in each impact Sections 4.1 through 4.18.]

(4) The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly. [Considered in all impact analysis Sections 4.1 through 4.18.]

METHODOLOGY

This subsection summarizes the methods, procedures and techniques used to estimate the impacts of the Proposed Project.

As described in the "Thresholds of Significance" discussion above, the methodology subsection also further clarifies which thresholds—Appendix G or the City thresholds or others—are used when describing the methods, procedures and techniques used to estimate the Proposed Project's impacts. Generally, a methodology discussion notes whether the environmental impacts being analyzed identify potential impacts that are localized (e.g., population, housing, employment; land use) or would generally affect the entire Downtown Plan Area, City, or region (e.g., air quality or greenhouse gas emissions). Consequently, this subsection may describe the geographic extent to which the Proposed Project could potentially affect for each environmental topic area. In some instances where applicable , the methodology includes consideration of a broader geographic area beyond the boundaries of the Downtown Plan Area or City.

IMPACTS

This subsection analyzes the effects of the Proposed Project against the baseline conditions to determine whether the Proposed Project would result in significant impacts to the environment. Separate evaluations of the Downtown Plan and the New Zoning Code are included in each impact discussion. As discussed in prior chapters, the baseline, unless expressly provided otherwise in this EIR, is the existing conditions at the time the NOP was published.

For each significant impact or potentially significant impact identified, this subsection also recommends appropriate and reasonable mitigation measures to avoid or minimize impacts to the extent feasible. In addition, this subsection includes a discussion of whether a significant and unavoidable impact would be reduced to a less-than-significant level after mitigation or would remain significant and unavoidable.

The analysis of the Downtown Plan is quantified using growth projections (i.e., housing, population, and employment numbers) for many of the impact areas. As discussed in Chapter 3, Project Description , the EIR identifies and analyzes reasonably anticipated housing, population, and employment in the future.

The following terms are used to describe the level of significance of impacts, including before and after mitigation measures are imposed:

No Impact

No Impact applies where an environmental issue is evaluated, and it is determined that the Proposed Project would have no effect or impact in that category. No Impact conclusions are supported by information showing that the impact does not apply to the Proposed Project (e.g., the Project Area falls outside a fault rupture zone).

Less-Than-Significant Impact

Less-Than-Significant Impact applies where the Proposed Project would create only less than significant impacts that do not exceed the defined threshold of significance. CEQA does not require mitigation for less-than-significant impacts.

Less-Than-Significant with Mitigation Incorporated Impact

Less-Than-Significant with Mitigation Incorporated Impact applies to an impact that exceeds the defined threshold of significance, but for which mitigation is identified to reduce the impact to a less-than-significant level.

Significant and Unavoidable Impact

Significant and Unavoidable Impact applies to an impact that exceeds the defined threshold of significance and cannot be eliminated or reduced to a less-than-significant level through implementation of feasible mitigation measures.

The Impact Analysis discussion includes the following parts:

a. Discussion
Provides discussion presenting evidence that substantiates the impact conclusion.

b. Mitigation Measures
When an impact is initially identified as significant or potentially significant, feasible mitigation measures that would avoid or reduce the magnitude of impact are identified. If the impact conclusion is no impact or less than significant after the impact analysis discussion, this part is not included or is identified as not applicable.

c. Significance of Impacts/Summary of Impacts After Mitigation
This part identifies the level of significance after mitigation. If the Proposed Project would have a potentially significant impact before mitigation, a discussion will be provided to determine whether the potentially significant impact would be reduced to a less-than-significant level after mitigation or would remain significant and unavoidable.

CUMULATIVE IMPACTS

This subsection analyzes cumulative impacts associated with the Proposed Project. Pursuant to CEQA Guidelines Section 15130, an EIR shall discuss cumulative impacts of a project when its incremental effect is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of the Proposed Project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. A finding of No Impact would also mean that the effect is not cumulatively considerable.

Cumulative impacts are the changes in the environment that result from the incremental impact of development of the Proposed Project and other projects with related impacts. For example, transportation

impacts of two nearby projects may be insignificant when analyzed separately but could have a significant impact when analyzed together.

CEQA Guidelines Section 15130 allows that the discussion of cumulative impacts shall reflect the severity of the impacts and the likelihood of occurrence, but the discussion need not provide as much detail as is provided for the effects attributable to the project alone.

CEQA Guidelines Section 15130 allows for two approaches to study cumulative impacts: using a list of past, current and probable future projects or relying on a summary of projections (growth forecasts) from adopted local, regional or statewide plans. Because the Proposed Project is community plan update covering a large area of the City over a 20-year planning period and a new Zoning Code, unless otherwise indicated, the cumulative impacts analysis in this EIR relies on the summary of projections method, utilizing the Southern California Association of Governments (SCAG) projections as discussed in Appendix B.

REFERENCES

This subsection identifies the sources and technical studies utilized in the preparation of this EIR. These reports are referenced throughout the document where appropriate.

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4.1 AESTHETICS

This section provides an overview of aesthetics and evaluates the impacts related with the Downtown Plan and New Zoning Code. Topics addressed include visual character, views and vistas, scenic resources, and light and glare.

ENVIRONMENTAL SETTING

GENERAL VISUAL CHARACTER

Citywide

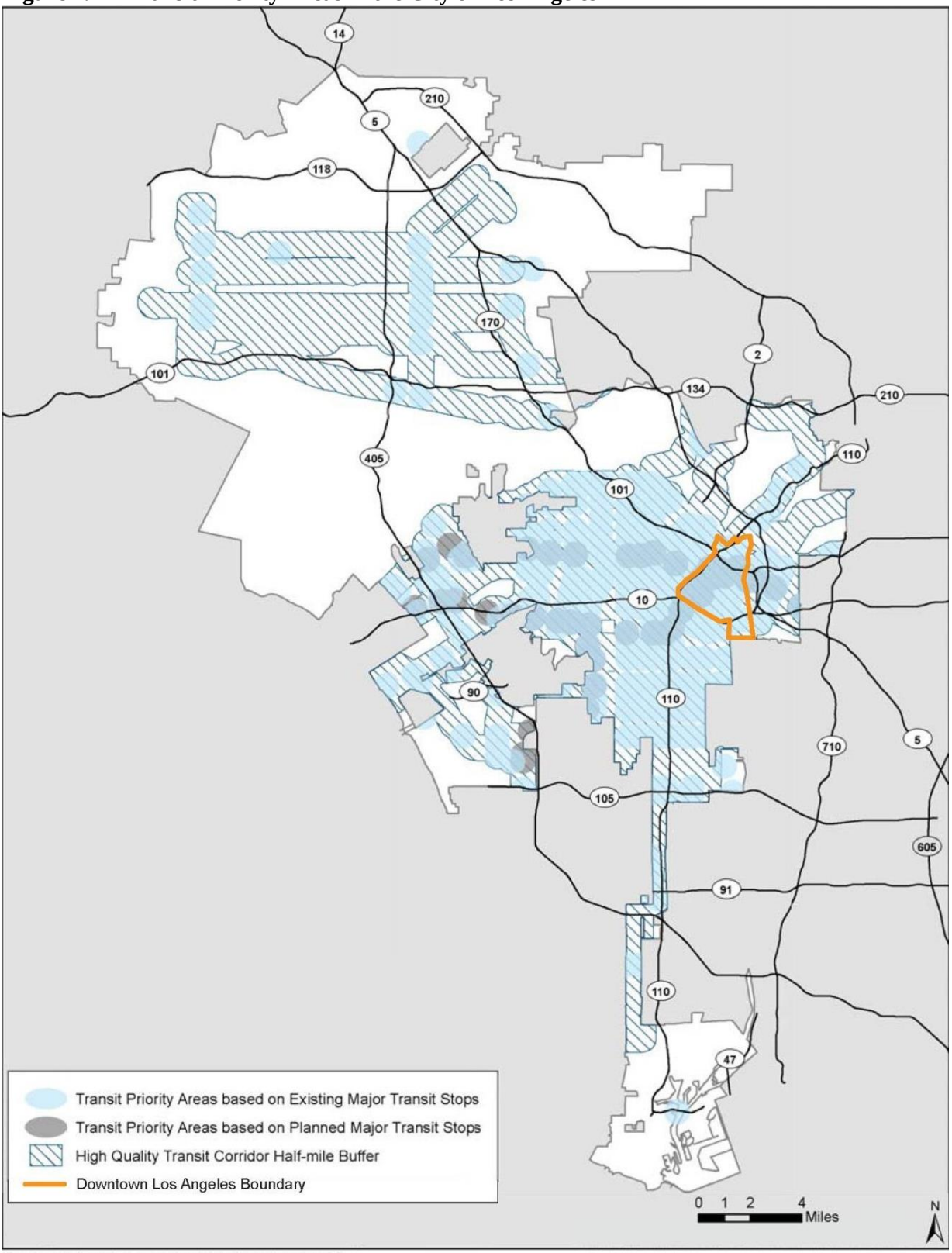
The City of Los Angeles is visually and aesthetically diverse. The City is generally defined by the San Gabriel Mountains in the north, the Santa Susana Mountains, Santa Monica Mountains, and Pacific Ocean in the west, Pacific Ocean in the South, and Verdugo Mountains, San Rafael Hills, and San Gabriel Valley in the east. The Santa Monica Mountains and Los Angeles River bisect the City, separating the San Fernando Valley in the north from the Los Angeles metropolitan basin in the south. Generally, northern Los Angeles, specifically the San Fernando Valley, is comprised of larger areas of open space and natural elements. Central Los Angeles to the southern tip of the City is highly urbanized.

Downtown Plan Area

The Downtown Plan Area is located in the eastern portion of Los Angeles and a majority of the area is a Transit Priority Area (TPA), as shown on **Figure 4.1-1**. The Downtown Plan Area is generally bounded to the north by Stadium Way, Lilac Terrace, and North Broadway, on the west by the Harbor Freeway (Interstate 110), on the south by the Santa Monica Freeway (Interstate 110) and the City of Vernon, and on the east by the Los Angeles River. The Downtown Plan Area is almost entirely urbanized and primarily characterized by a variety of high and low intensity development areas with an assortment of different development scales and a variety of visual character, including scattered parks, small pockets of residential neighborhoods, commercial districts, restaurants, high-rise skyscrapers, governmental buildings, and industrial manufacturing facilities. The Downtown Plan Area is generally flat and does not contain substantial geographic features as the northern boundary of the Downtown Plan Area ends just south of the Santa Monica Mountains in Elysian Park. However, the Downtown Plan Area provides limited views of the nearby mountain ranges that border Los Angeles. The visual character of the Downtown Plan Area consists of urban development and streetscapes characterized by different cultural and architectural enclaves that have become iconic to the city landscape. **Figure 4.1-2** shows the general geographical layout of districts[1] within the Downtown Plan Area, though it should be recognized that there are no hard boundaries between districts and the boundaries illustrated are for purposes of description and analysis of the variety of built environment conditions found in the Downtown Plan Area. Further information on the Downtown Plan Area districts can be found in **Table 4.1-1. Figure 4.1-3** shows the locations of the Downtown Plan Area photos provided in **Figures 4.1-4** through **4.1-28**.

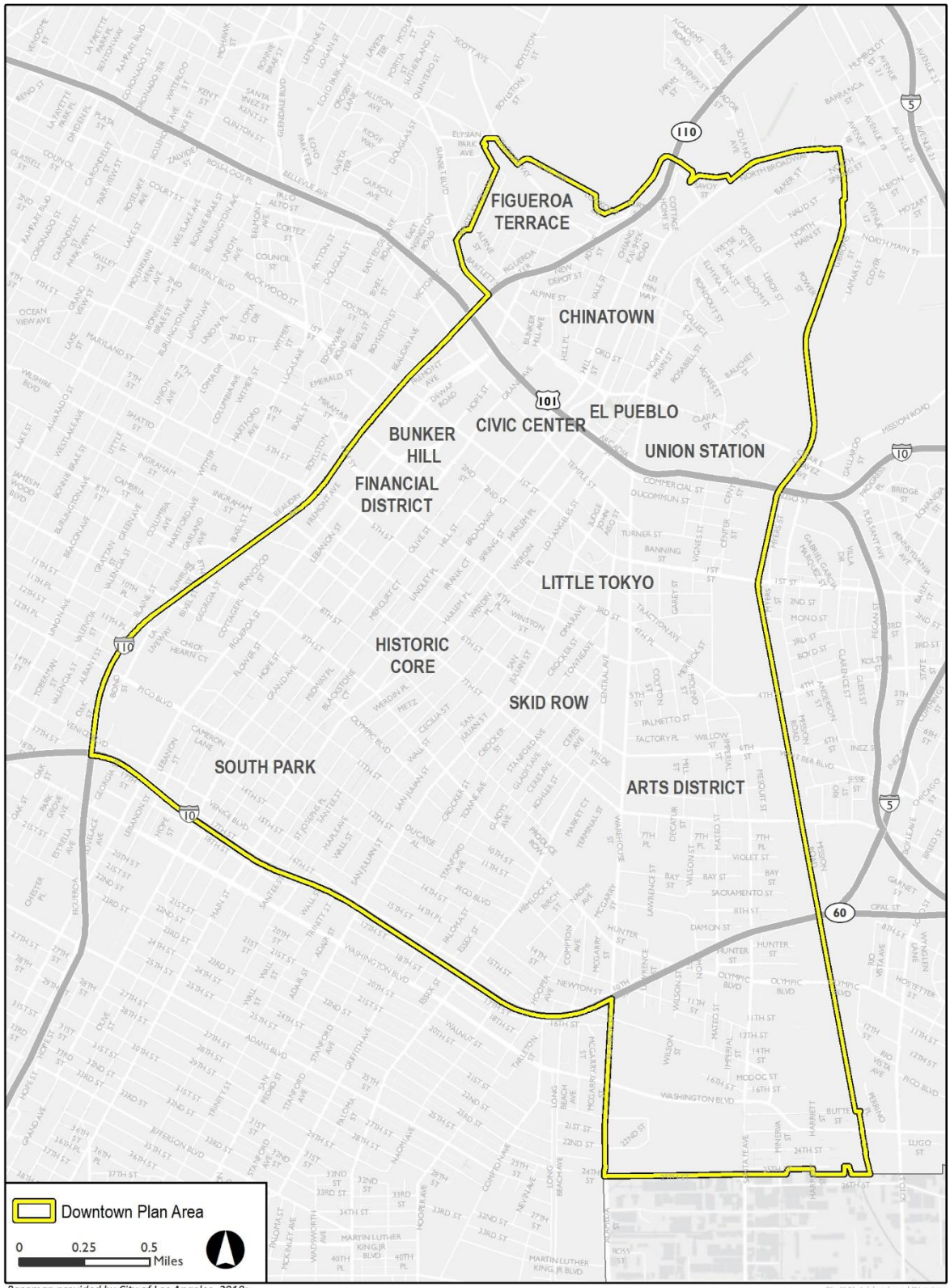
[1] Districts are defined as areas with a common built environment and characteristics rather than specific areas with boundaries.

Figure 4.1-1 Transit Priority Areas in the City of Los Angeles



Source: City of Los Angeles Planning Department

Figure 4.1-2 Downtown Plan Neighborhood Districts



Basemap provided by City of Los Angeles, 2018;
Additional data provided by Los Angeles County, 2017.

Fig X Neighborhood Districts

Figure 4.1-3 Photo Locations

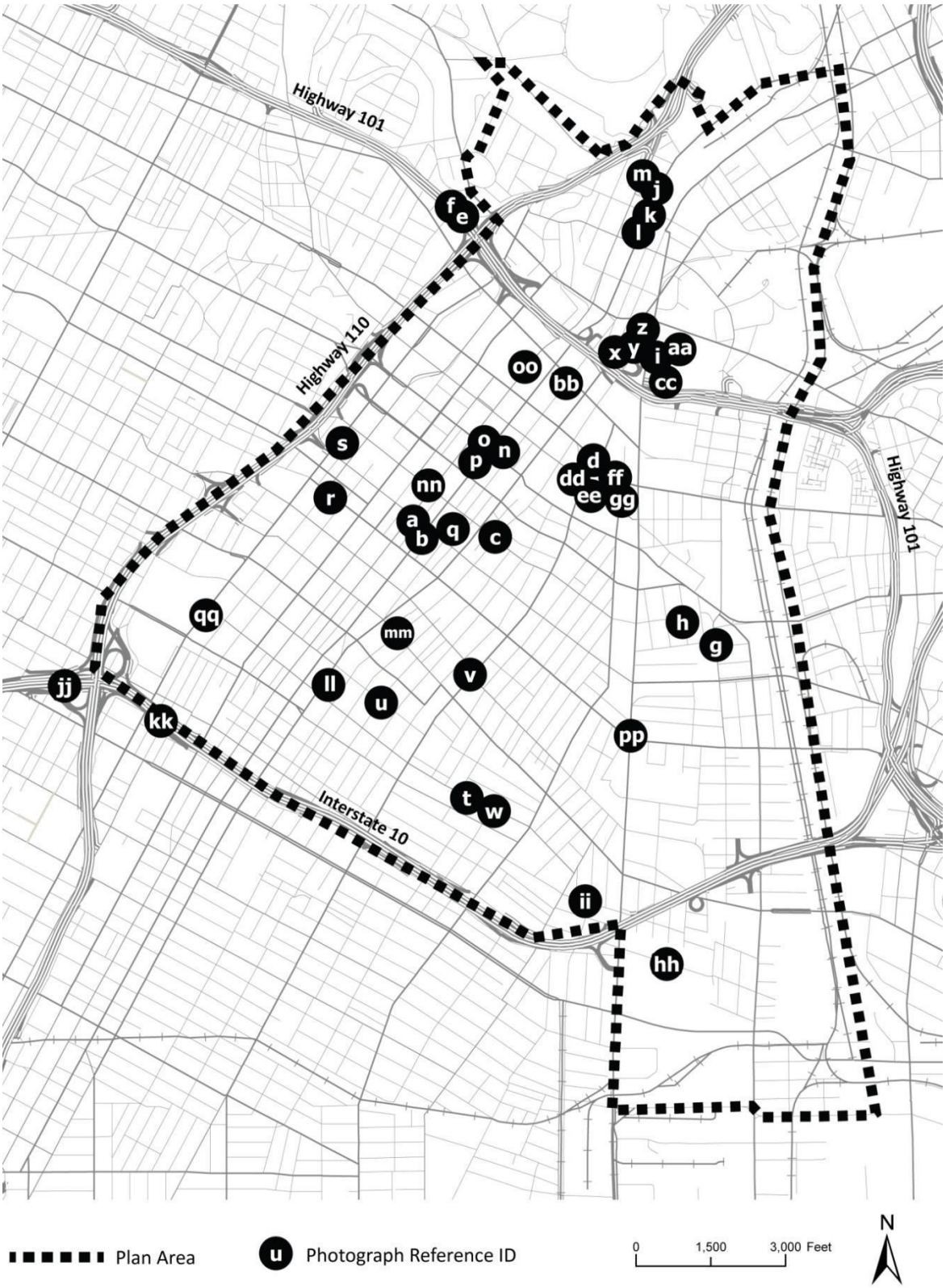


Figure 4.1-4 Downtown Plan Area Views

Photo 1: View of Downtown Plan Area Looking Southeast from Griffith Park

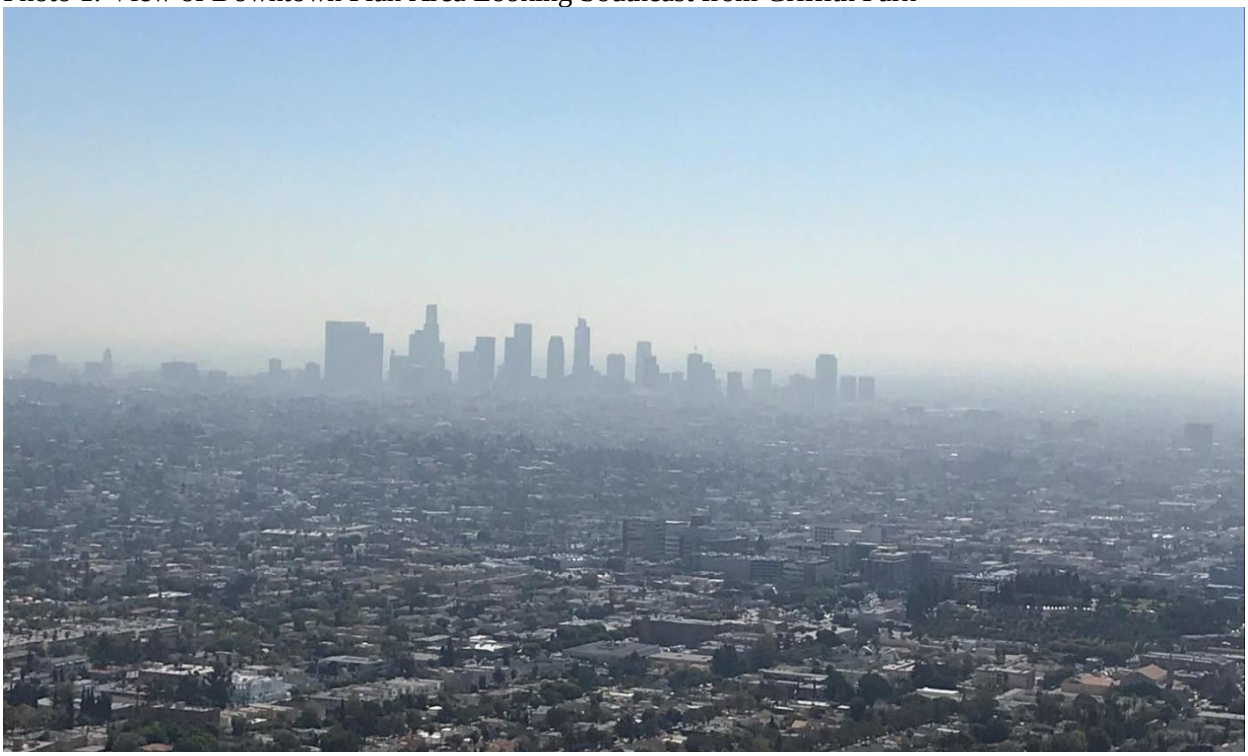


Photo 2: View of Financial District Skyscrapers from Civic Center District

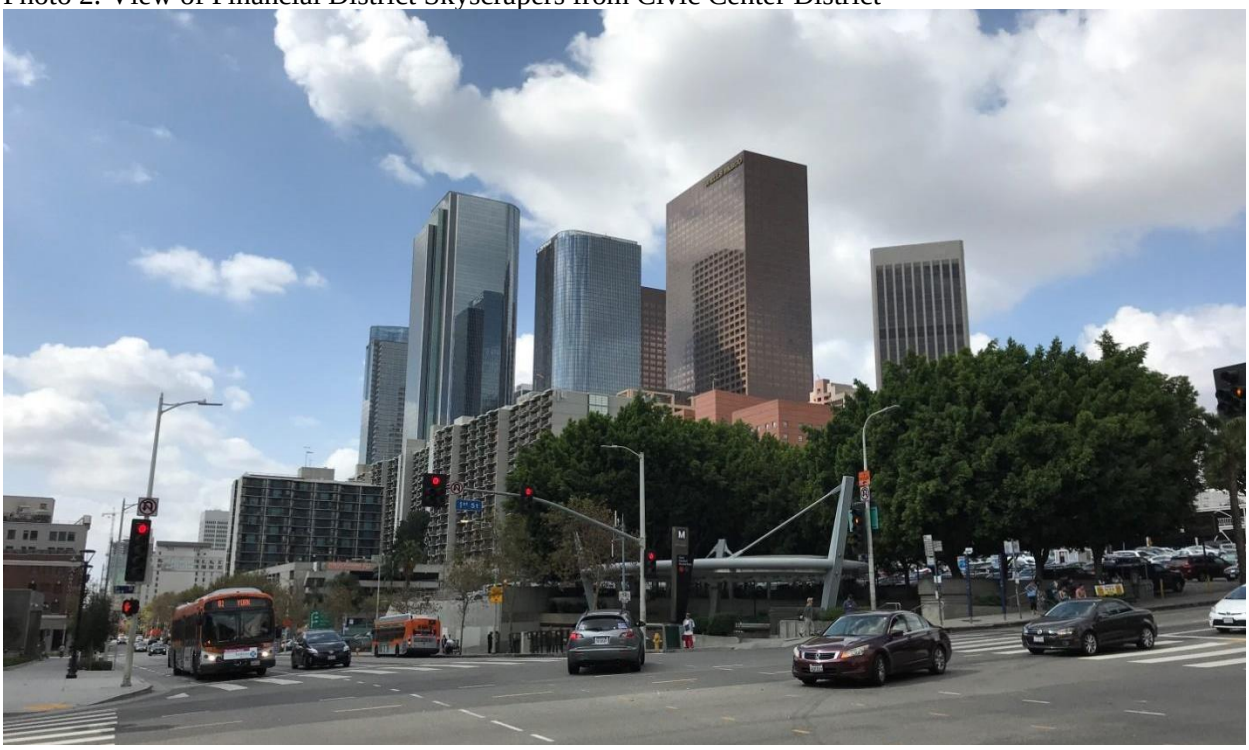


Figure 4.1-5 Downtown Plan Area Views

Photo 1: View of Historic Buildings in Broadway Theater District (a)

Photo 2: View of Historic Buildings in Broadway Theater District (b)

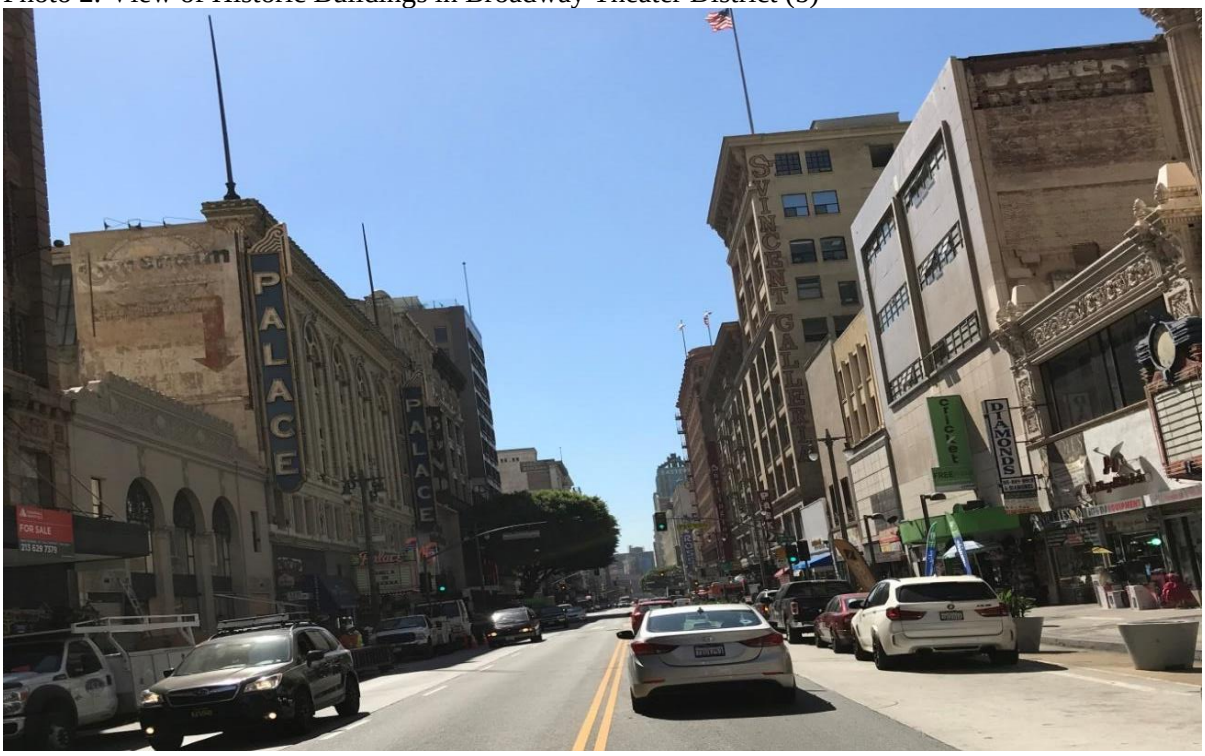


Figure 4.1-6 Downtown Plan Area Views

Photo 1: View of Historic Buildings along Los Angeles Street near the Fashion District (c)

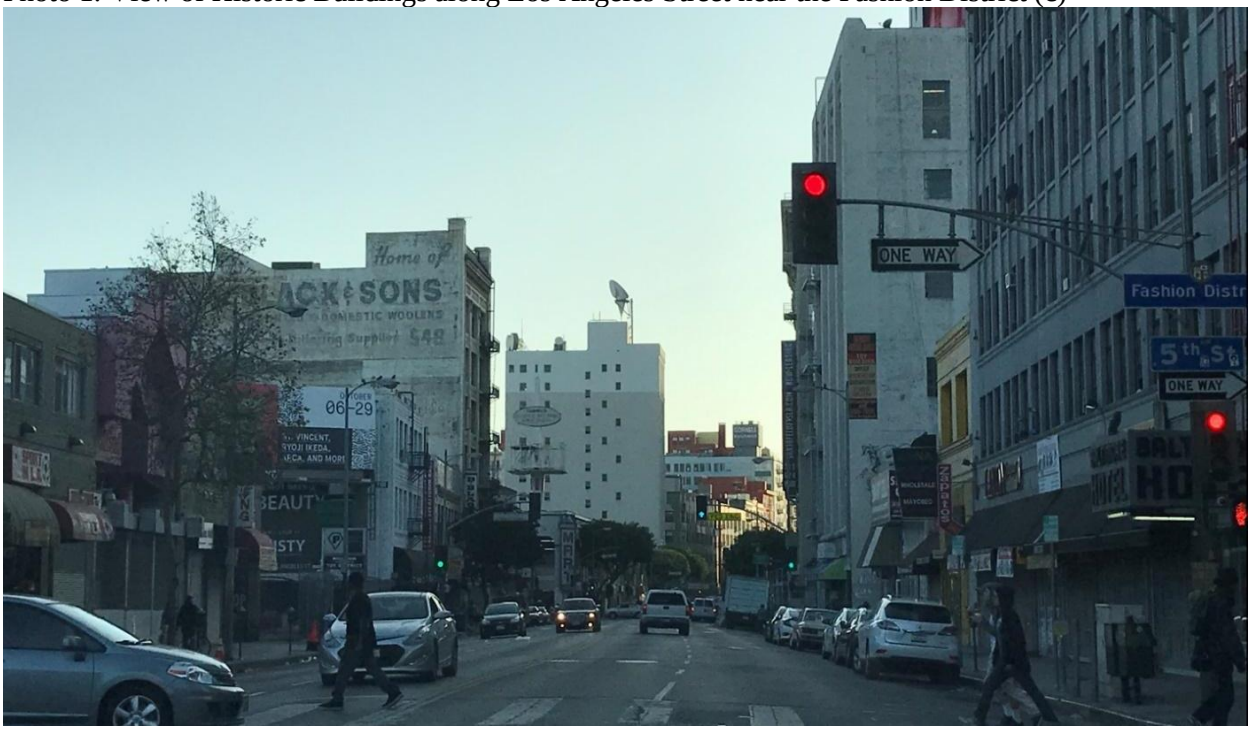


Photo 2: View of Commercial Development on East 1st Street in Little Tokyo (d) First Street National Register Historic District

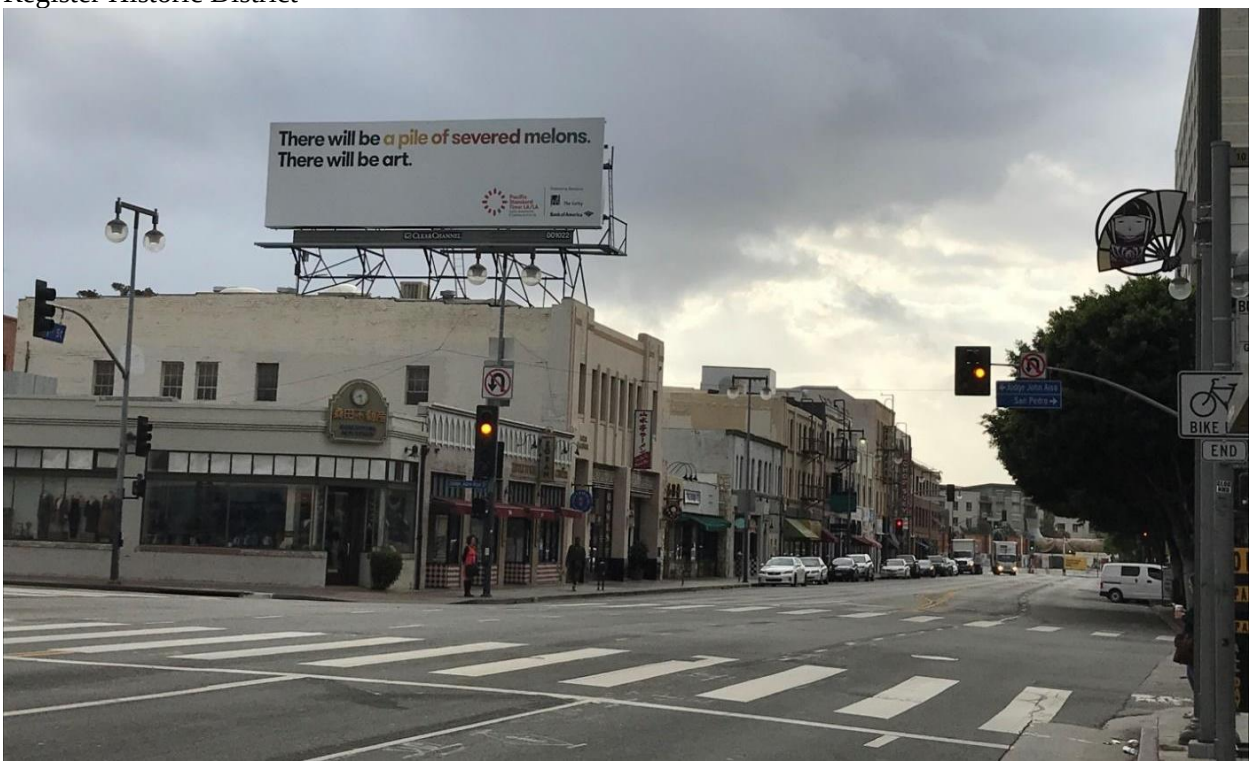


Figure 4.1-7 Downtown Plan Area Views

Photo 1: View of Residential Uses North of U.S. 101 Freeway in Figueroa Terrace Subarea (e)

Photo 2: View of Residential Uses North of U.S. 101 Freeway in Figueroa Terrace Subarea (f)

Figure 4.1-8 Downtown Plan Area Views

Building at Intersection of Mateo Street and Palmetto Street in Arts District (g)

Figure 4.1-9 Downtown Plan Area Views

Arts District Park (h)

Figure 4.1-10 Downtown Plan Area Views

Photo 1: Main Union Station Entrance along Alameda Street (i)

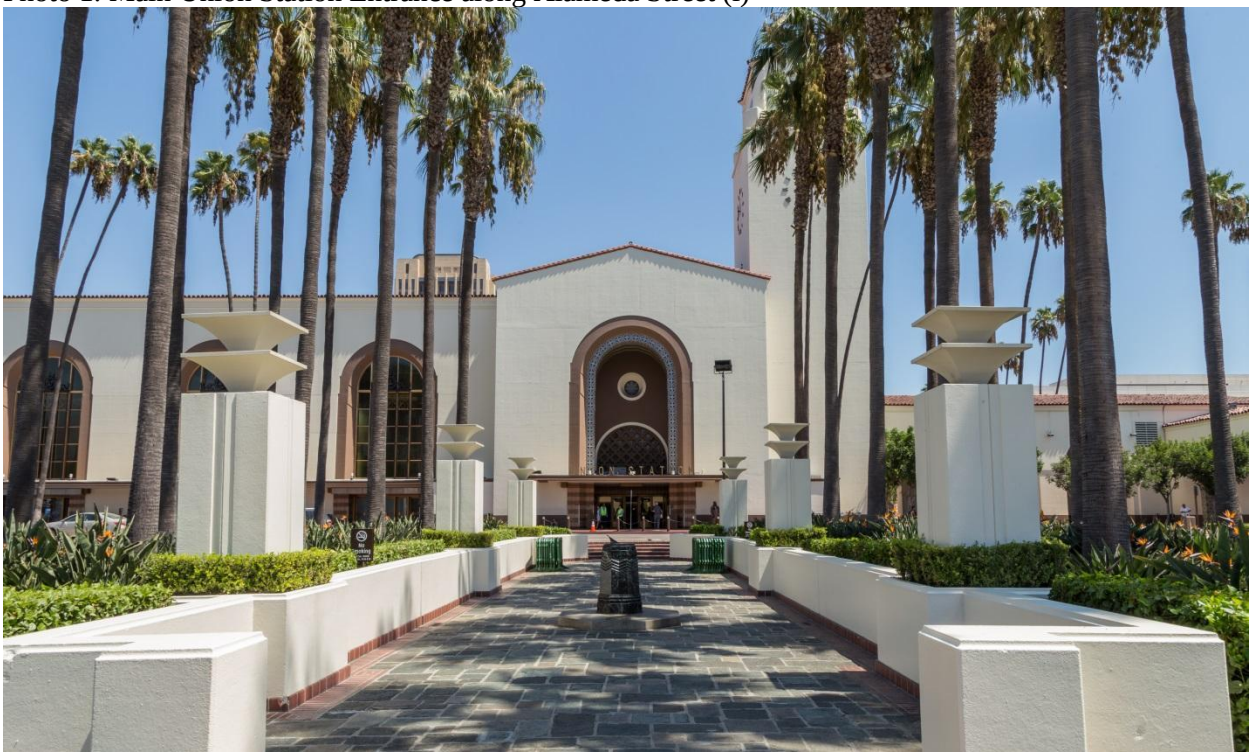


Photo 2: Chinatown Central Plaza Entrance on Broadway and Gin Ling Way (j)

Figure 4.1-11 Downtown Plan Area Views

Photo 1: Chinatown Shopfront on Corner of N. Broadway and College Street (k)

Photo 2: Chinatown Shopfront at 839 North Broadway (l)

Figure 4.1-12 Downtown Plan Area Views

Photo 1: View of Chinatown Gold Line Station Platform from Blossom Plaza

Photo 2: Chinatown Central Plaza, Gin Ling Way and Sun Mun Way (m)

Figure 4.1-13 Downtown Plan Area Views

Photo 1: Historic Core, Broadway and 3rd, View of Bradbury Building from 3rd Street looking southwest (n)

Photo 2: Historic Core, Grand Central Square Building (o)

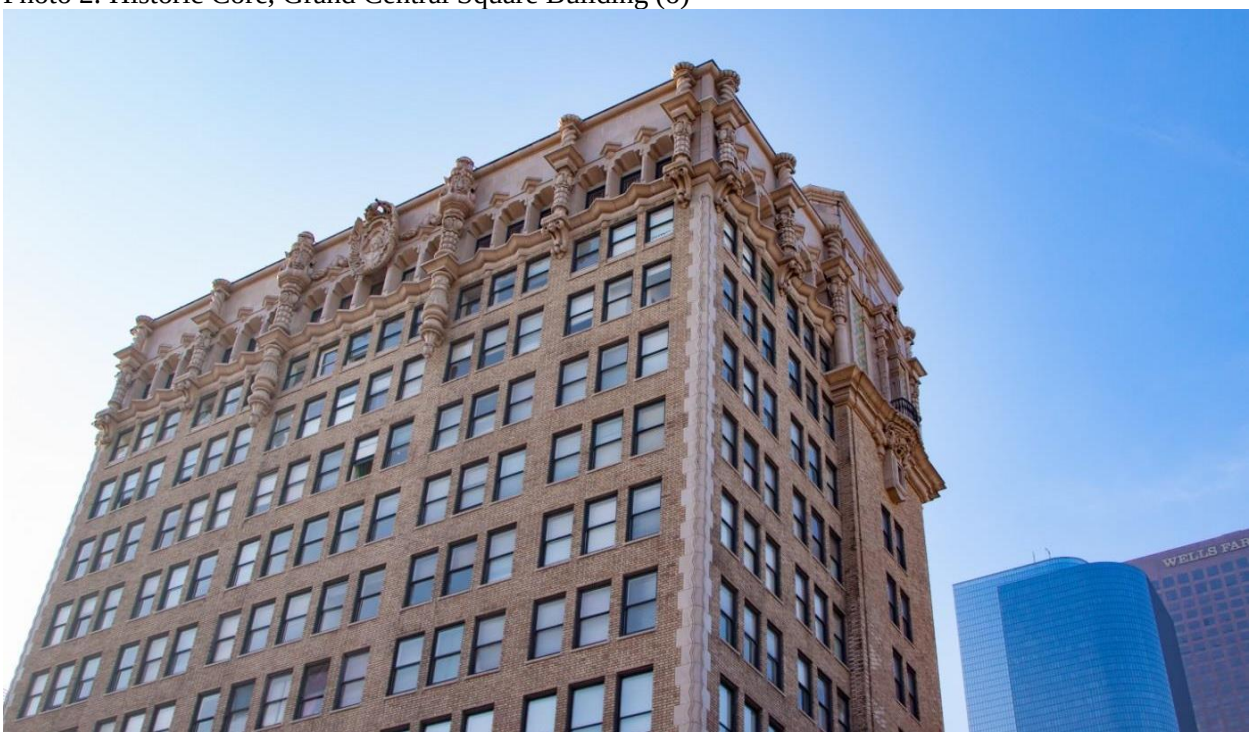


Figure 4.1-14 Downtown Plan Area Views

Photo 1: Historic Core, Broadway and 3rd, view of sidewalk fronting Grand Central Market looking south (p)

Photo 2: Spring Street Arcade at 541 Spring Street (q)

Figure 4.1-15 Downtown Plan Area Views

Photo 1: Financial District, the Bloc on 7th Street between 7th and Hope Streets looking south (r)

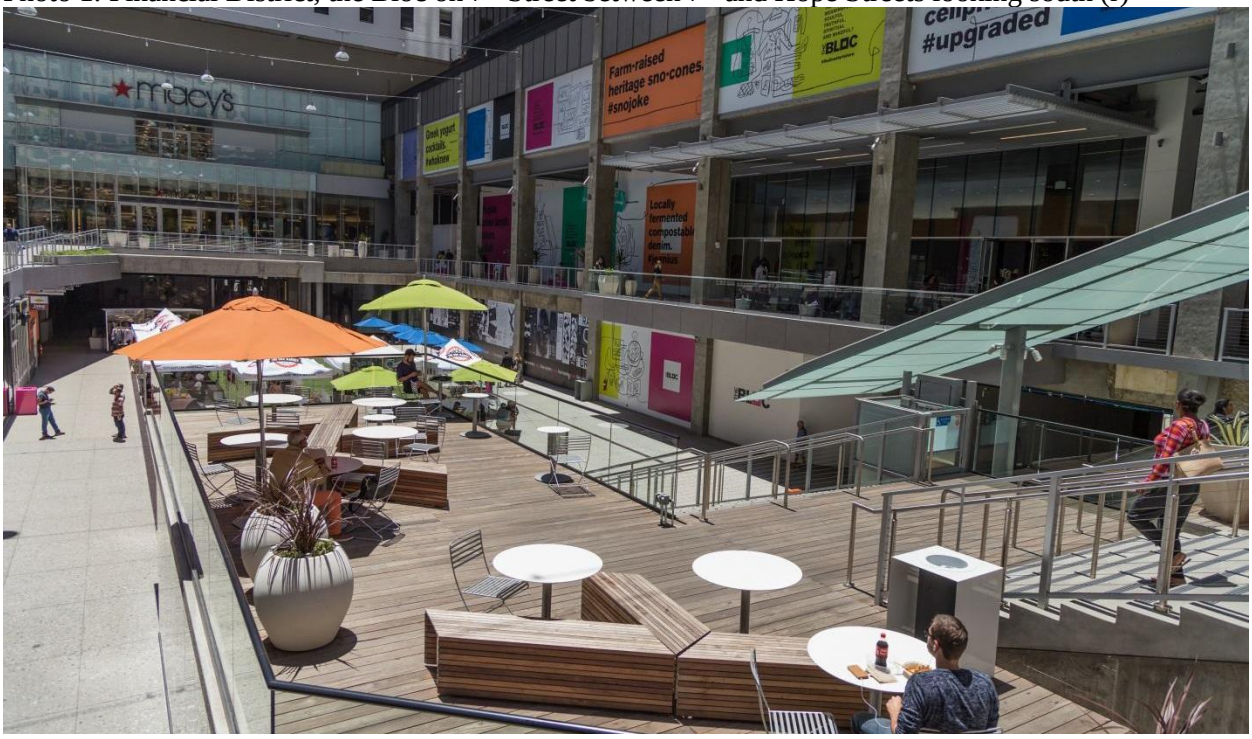


Photo 2: Financial District, City National Plaza looking west (s)

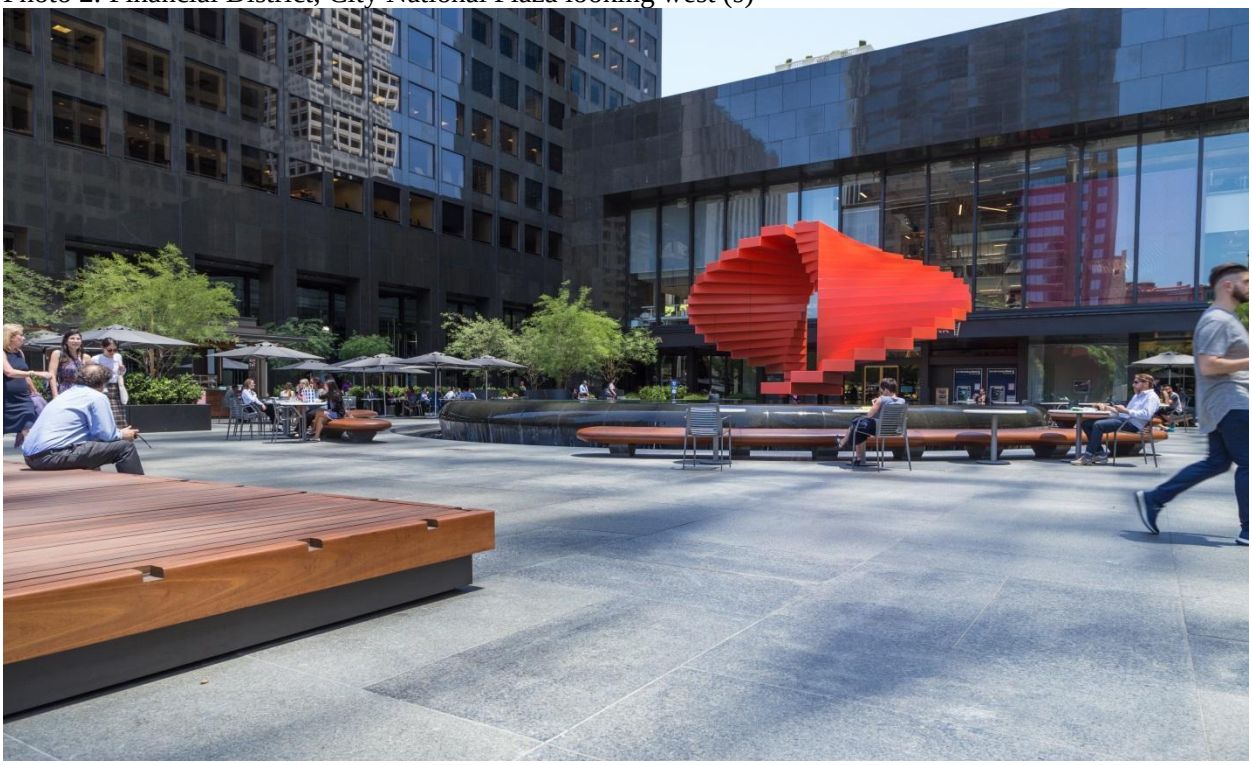


Figure 4.1-16 Downtown Plan Area Views

Photo 1: Shops along 12th Street in the Fashion District looking southeast (t)

Photo 2: Fashion District, 400 E. 11th Street looking south (u)

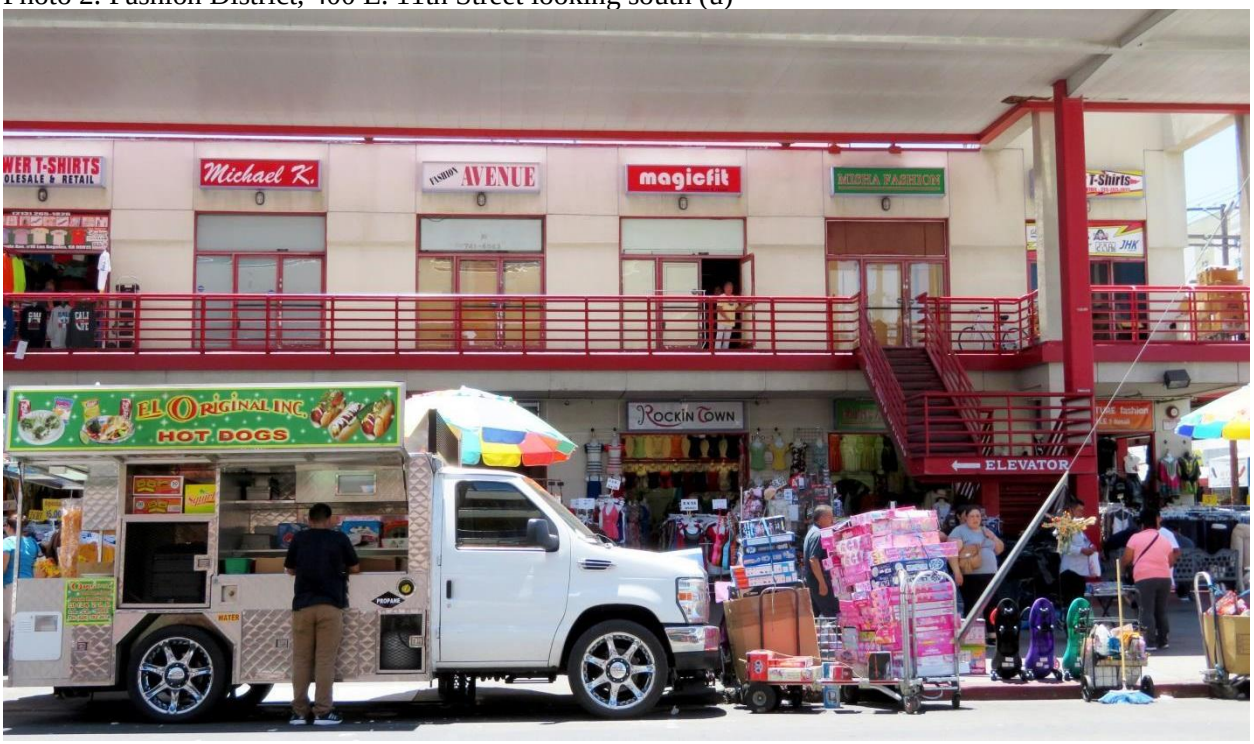


Figure 4.1-17 Downtown Plan Area Views

Photo 1: Flower District, 817 San Pedro Street looking south (v)

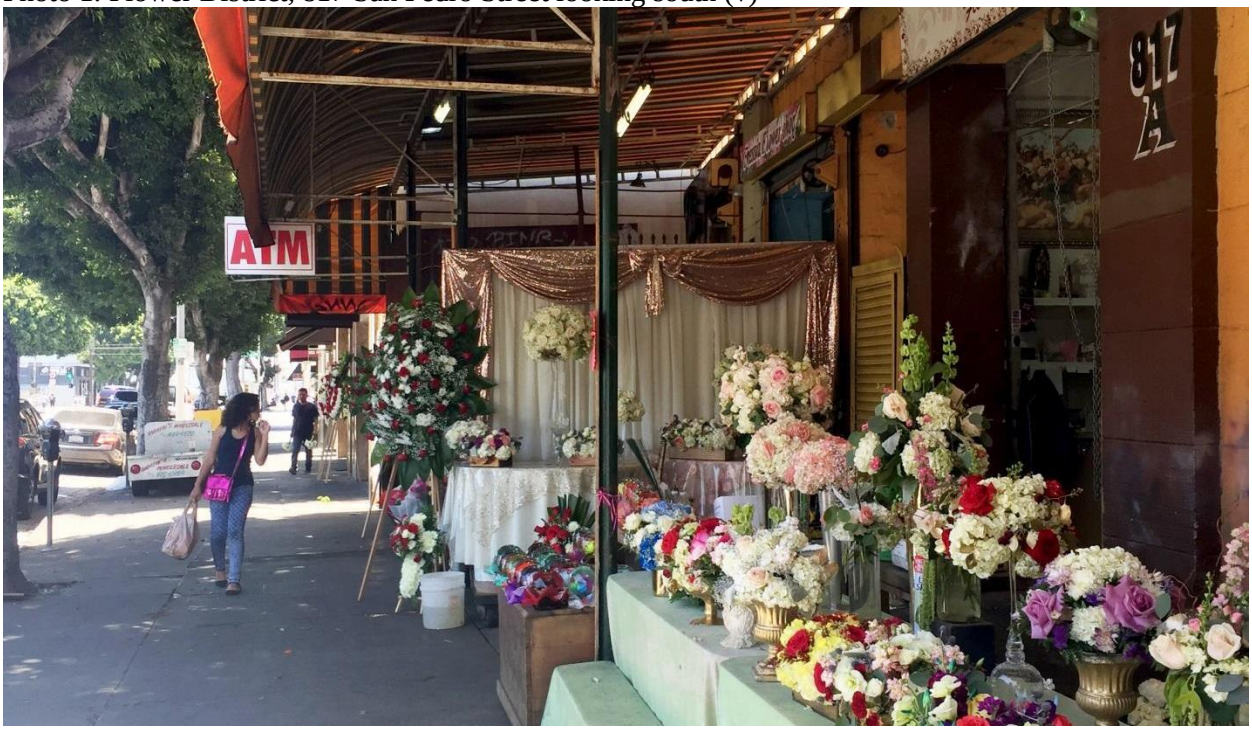


Photo 2: Fashion District, shopfronts on 12th Street and Paloma Street corner looking east (w)

Figure 4.1-18 Downtown Plan Area Views

Photo 1: El Pueblo Historical Monument, 535 N. Main Street, La Plaza del Cultura Y Artes (x)

Photo 2: El Pueblo del Los Angeles Historical Monument, Plaza Park (y)

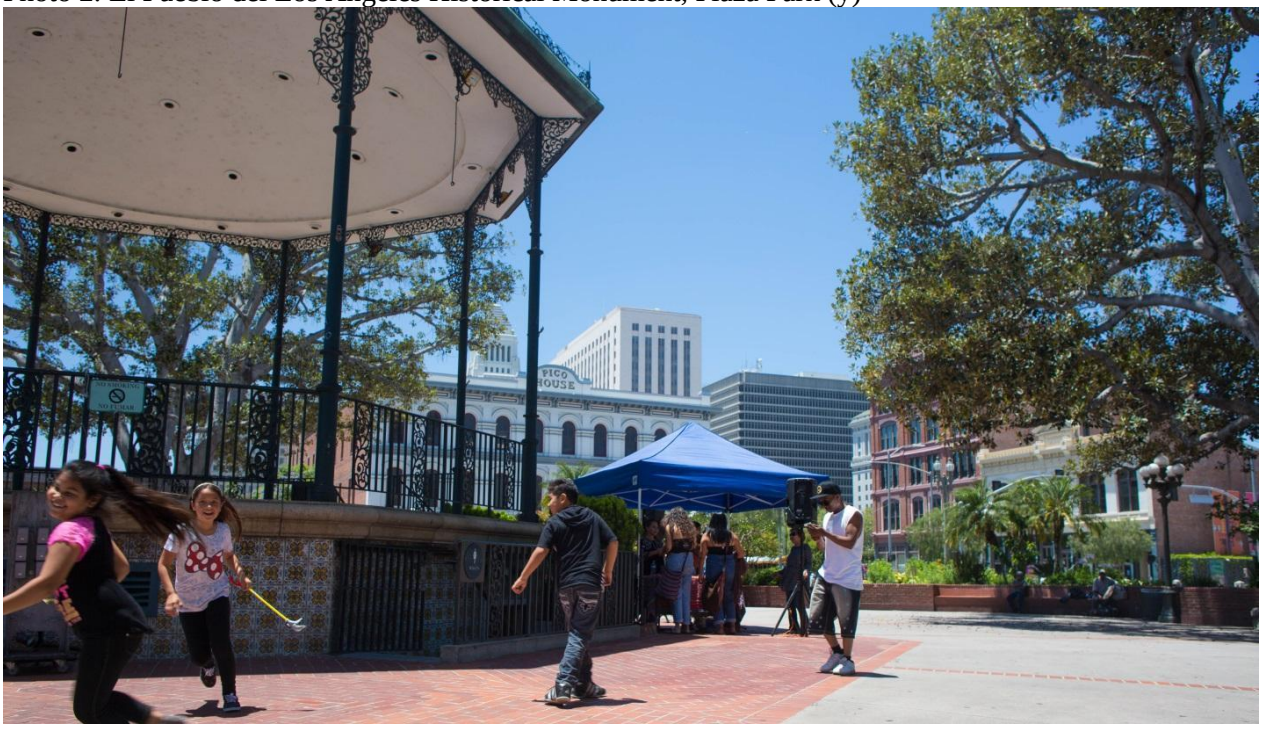


Figure 4.1-19 Downtown Plan Area Views

Photo 1: Olvera Street between Main Street and Alameda Street (z)

Photo 2: Union Station (aa)

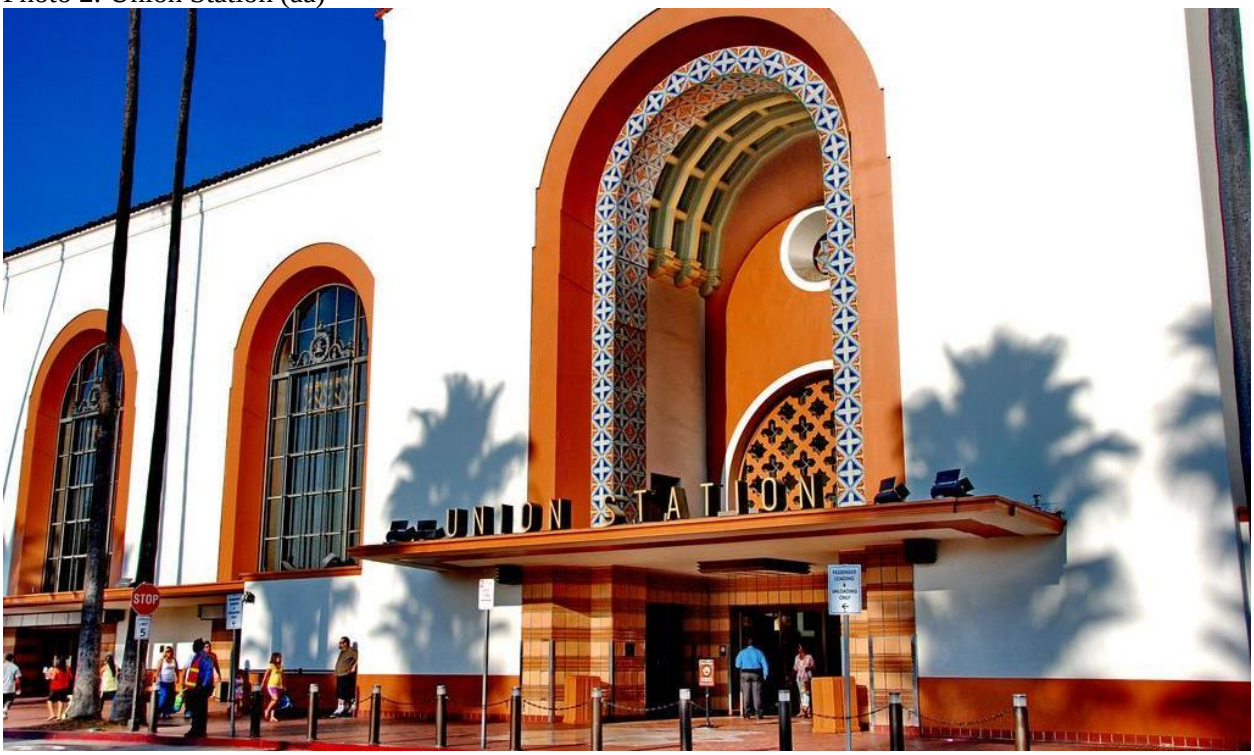


Figure 4.1-20 Downtown Plan Area Views

Civic Center, Image of City Hall Spring Street entrance looking east (bb)

Figure 4.1-21 Downtown Plan Area Views

Civic Center, Skyline of City Hall/DT looking southwest (cc)

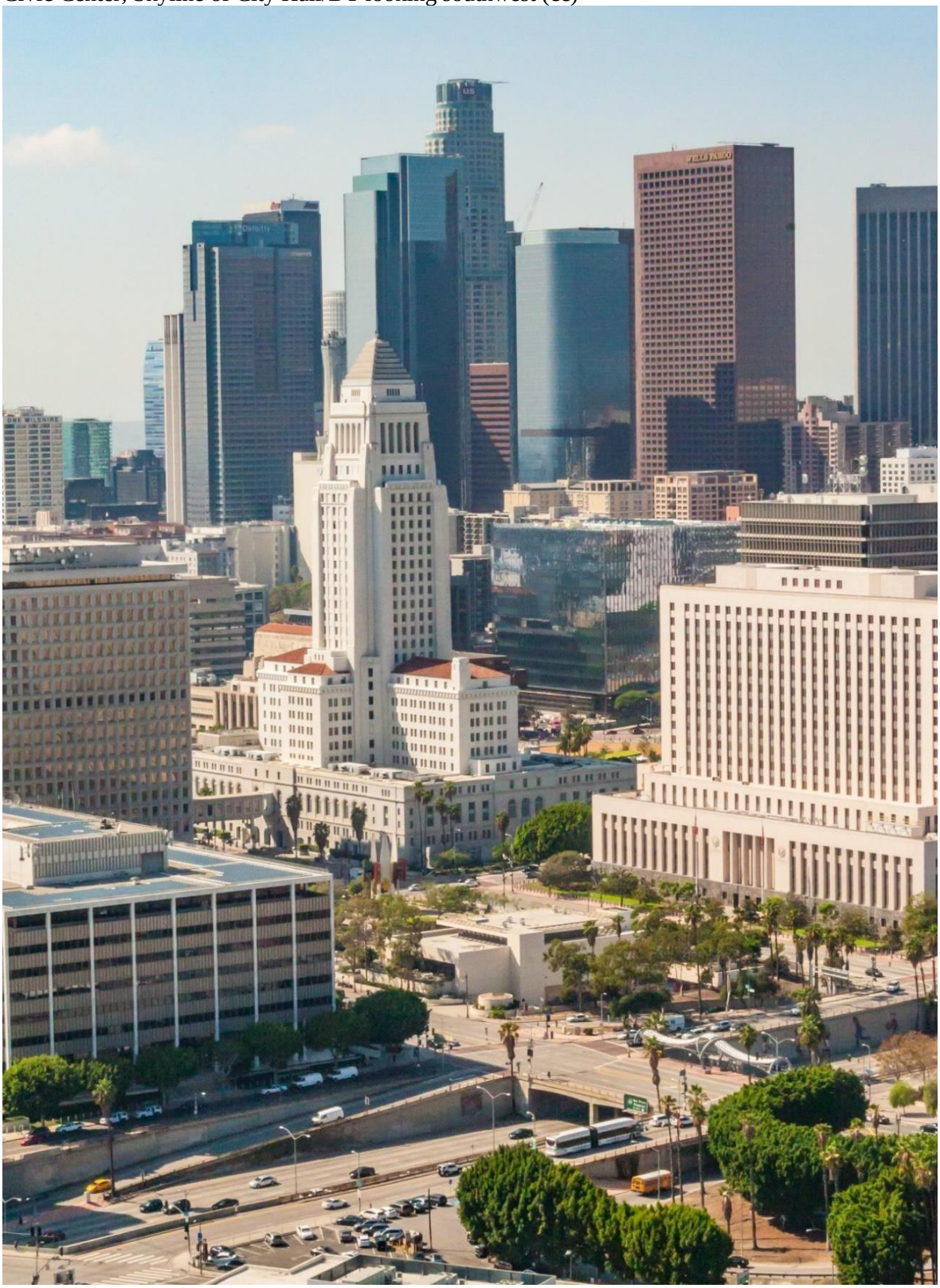


Figure 4.1-22 Downtown Plan Area Views

Photo 1: Little Tokyo, View from 2nd and San Pedro looking northwest (dd)

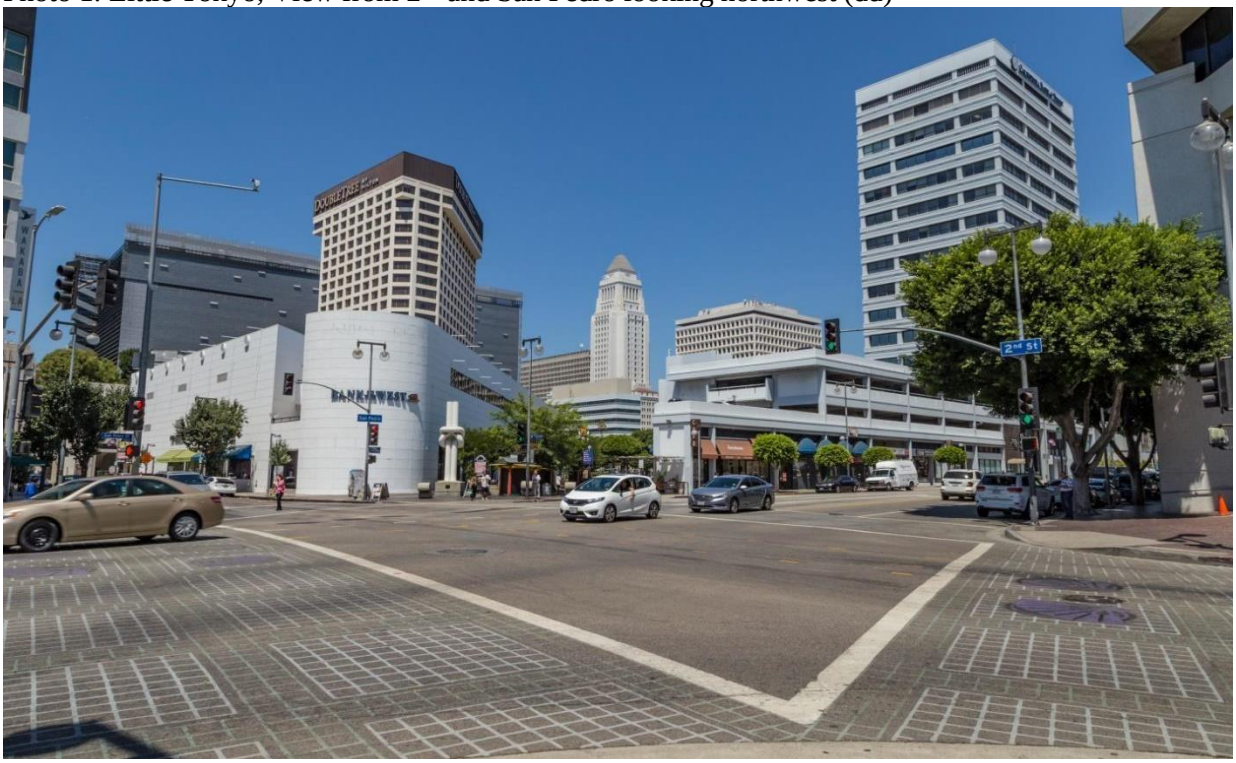


Photo 2: Little Tokyo, View of Japanese Village Plaza looking east (ee)

Figure 4.1-23 Downtown Plan Area Views

Photo 1: Little Tokyo, View of First Street National Register Historic District between San Pedro and Central Avenue looking northwest (ff)

Photo 2: Little Tokyo, View from Onizuka Street looking northwest (gg)

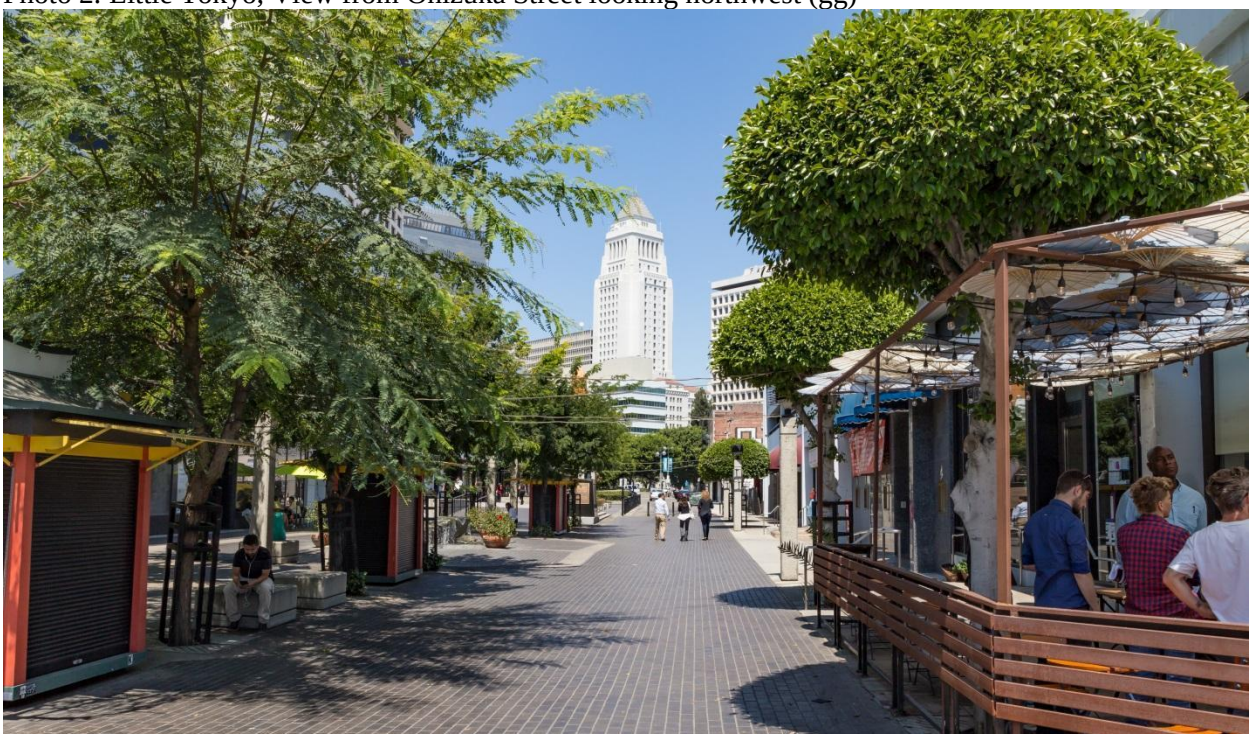


Figure 4.1-24 Downtown Plan Area Views

Photo 1: South Industrial, View of Warehouses at 2010 East 15th Street (hh)

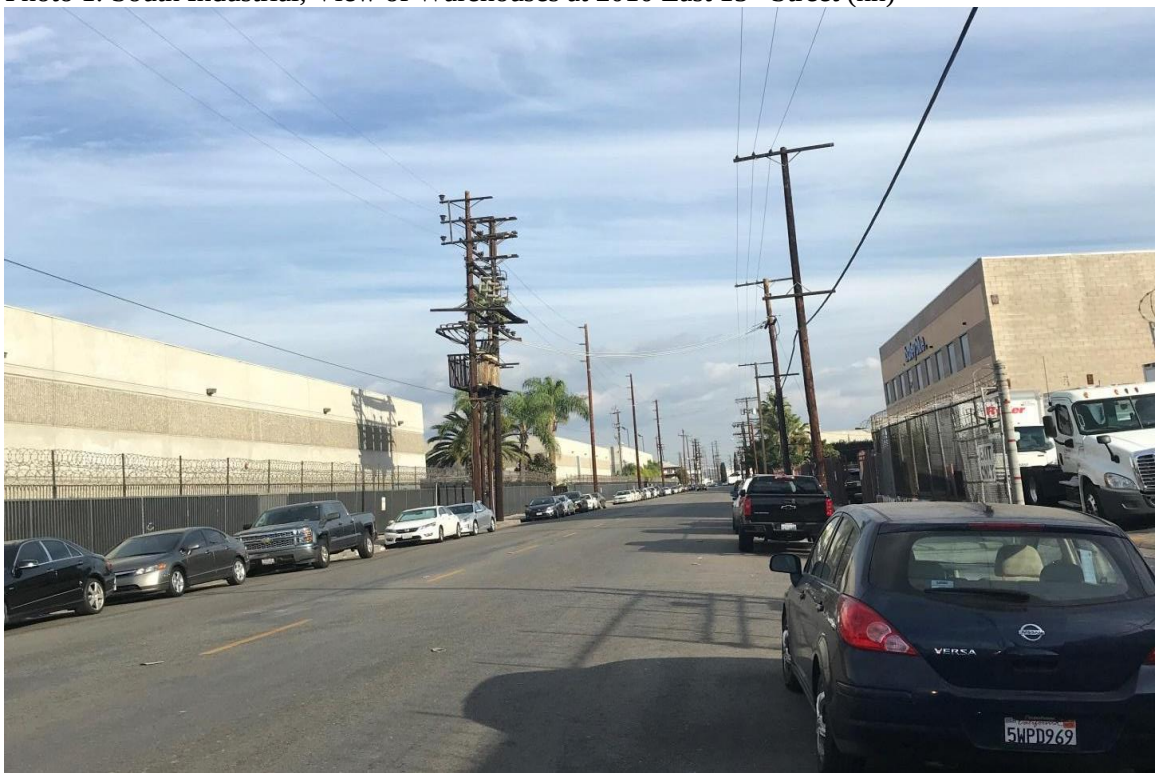


Photo 2: South Industrial, View of Warehouses at Corner 14th Street and Compton Avenue (ii)

Figure 4.1-25 Downtown Plan Area Views

Photo 1: Eastbound View looking northwest from 10 Freeway (jj)

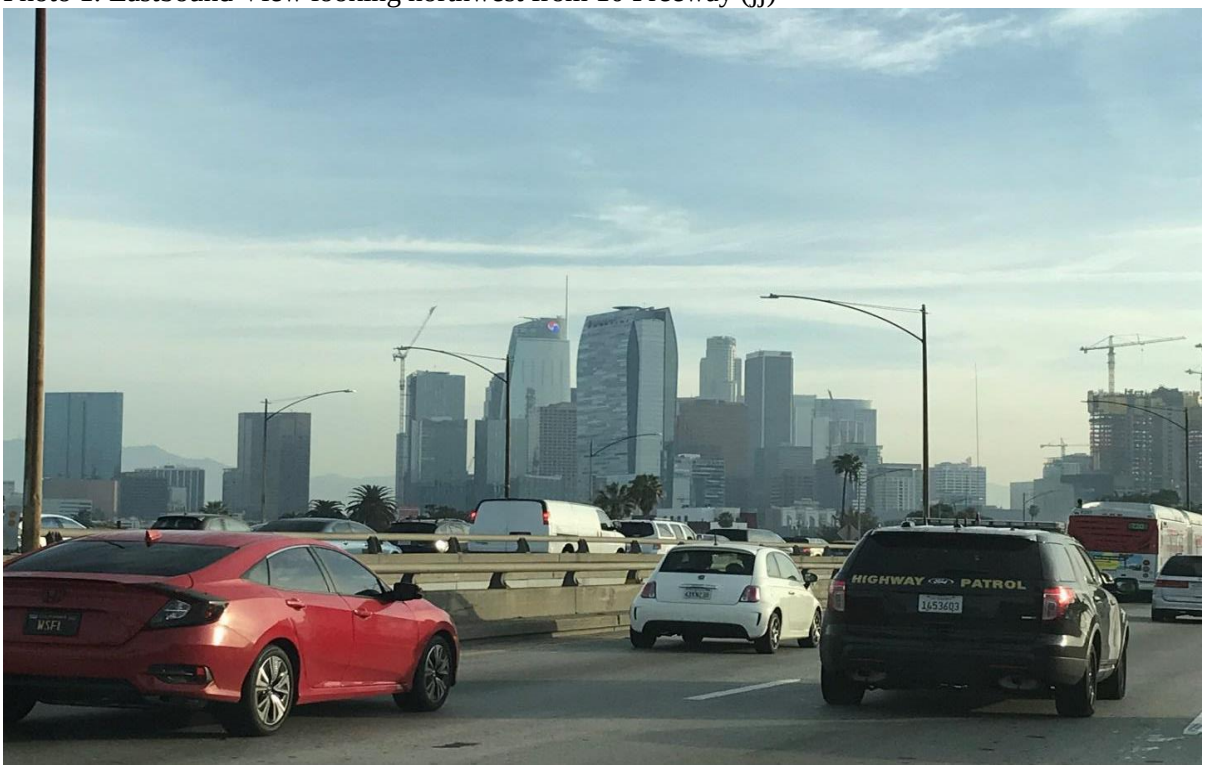


Photo 2: Westbound View looking north from 10 Freeway (kk)

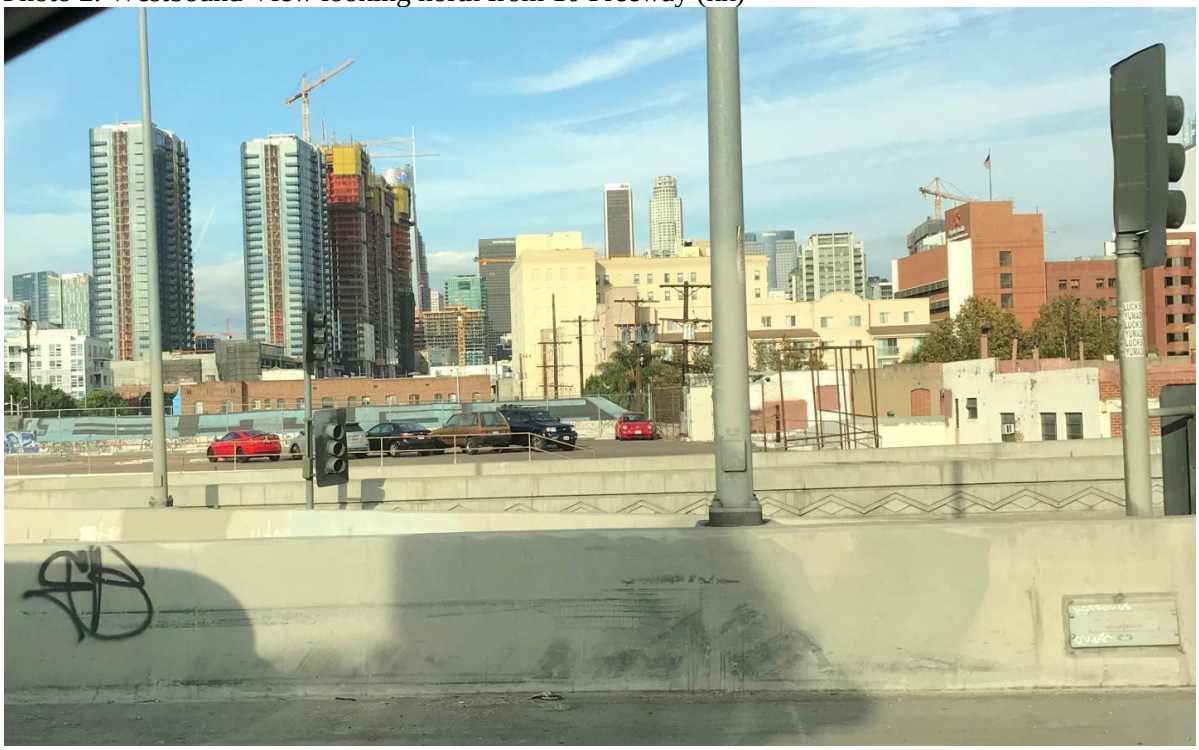


Figure 4.1-26 Downtown Plan Area Views

Photo 1: View of Commercial Development in Industrial, Manufacturing and Wholesale District (ll)

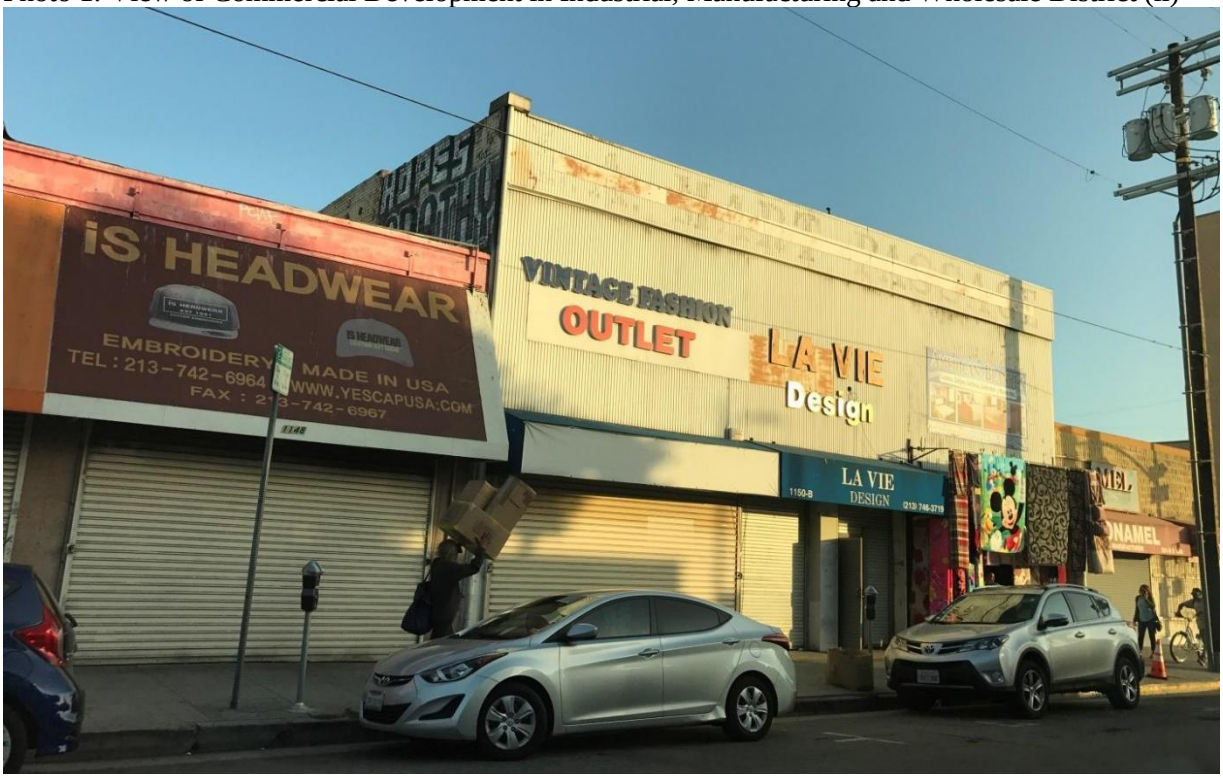


Photo 2: View of Commercial Development on 9th Street in the Fashion District (mm)

Figure 4.1-27 Downtown Plan Area Views

Photo 1: View of Skyscrapers and Highrises in Financial District (nn)

Photo 2: View of Los Angeles City Hall from Grand Park (oo)

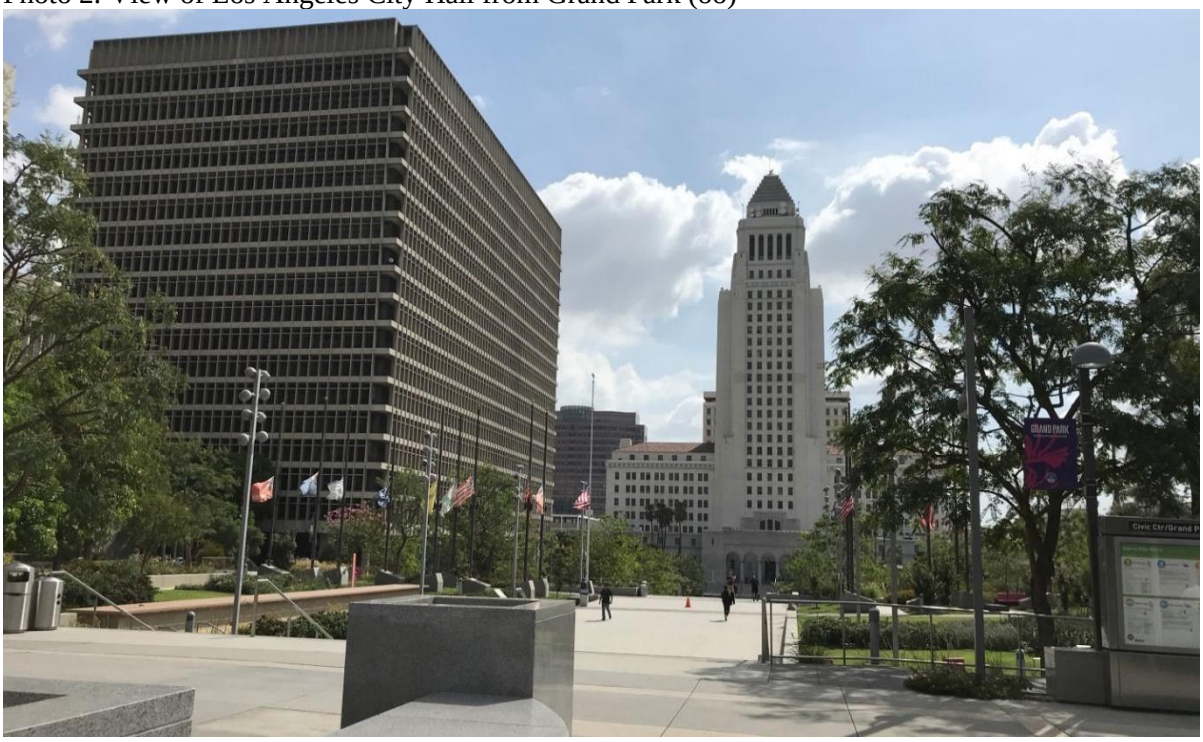


Figure 4.1-28 Downtown Plan Area Views

Photo 1: View of Factories Industrial, Manufacturing and Wholesale t District along Alameda Street (pp)

Photo 2: View of Staples Center and Los Angeles Convention Center (qq)

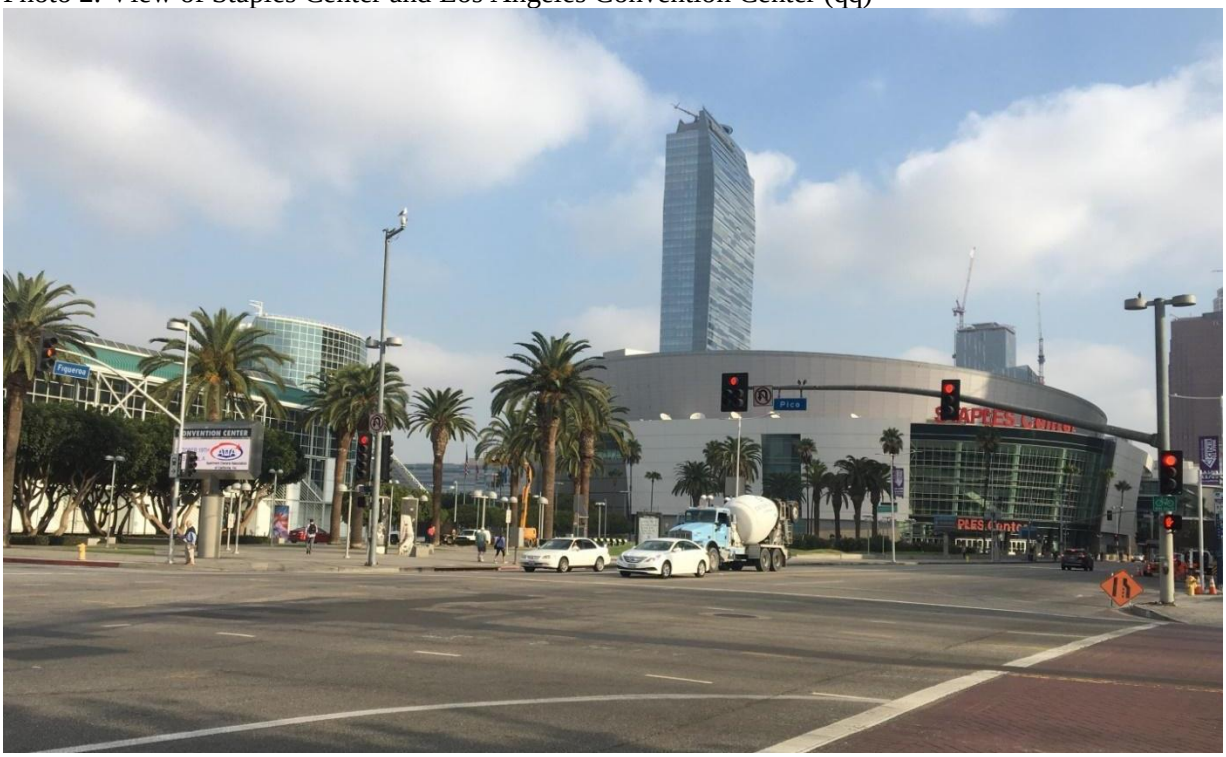


TABLE 4.1-1 DOWNTOWN PLAN AREA DISTRICTS	
Civic Center	The Civic Center straddles the City's original settlement and area of first expansion and extends from a former riverbed to hillside topographies. Federal, State, County and local government offices are situated in the Civic Center District. Civic Center has the second largest concentration of civic buildings in the country, located primarily along the Civic Center Mall north of First Street, and generally from the Harbor Freeway to Alameda Street and dominated by the historic City Hall. The U.S. 101 Freeway to the north of the Civic Center, forms a strong edge to the district and forms a barrier between El Pueblo Historic Park and the Civic Center area. There are a number of facilities designed for all types of performance, cultural, and artistic uses. The Civic Center contains the Music Center at its western edge which contains three performance venues. Also located in the Civic Center is the Cathedral of Our Lady of the Angels on Temple Street across from the County Hall of Administration. The construction of the Cathedral of Our Lady of the Angels introduced an important institutional use and landmark building to the Civic Center Complex. In addition, the state Department of Transportation (CalTrans) District 7 headquarters and the U.S. Federal Courthouse also provide architectural landmarks to the downtown skyline.
Bunker Hill	Bunker Hill is downtown's first redevelopment area. The area was at one time filled with stylish residences, many of which had deteriorated by the time redevelopment was proposed. Adopted in 1959, the Bunker Hill Redevelopment Project was conceived as a new mixed use development, including office, residential, hotel, retail, commercial, museums and cultural uses. Bunker Hill is the site of the Museum of Contemporary Art (MOCA). Adjacent to MOCA is the Colburn School of Performing Arts, the Frank Gehry designed Disney Concert Hall, and the Music Center. Bunker Hill has over 3,200 housing units mostly located at its northwestern end and is generally in mid-or high-rise buildings. The Bunker Hill development attempted to create glittering towers in lush garden-like settings, and avoid a "street wall" or block pattern typical of many older downtown high-rise developments. Pedestrian circulation routes are largely separated from vehicle circulation and a series of plazas provide a variety of public spaces. Major developments in Bunker Hill include Arco Center, Wells Fargo Center, and California Plaza. Each development is arranged to maximize light, air and open space. The Bunker Hill Steps at Hope and Fifth Streets link Bunker Hill with the Financial District to the south through a series of stairs and landscaped terraces. The Angels Flight funicular built in 1901 and restored in 1996 connects Bunker Hill with the Historic Core to the east. Pedestrian skyway bridges connect the upper hill area to the lower hill areas to the west.
Financial District	Contemporary high-rise office buildings dominate the landscape in the Financial District. Among the most prominent are Library Tower, Citicorp Center, the Gas Company Tower, the AT&T Building and the twin towers of Arco Plaza. This area also encompasses a few of the many historically significant buildings from the early part of this century, including the 818 Building, Engine Company 28, and the Giannini Building. The streets of the Financial District have varying character, from Figueroa Street's broad tower-lined boulevard to Hope Street's axial focus on the Central Library. Seventh Street had been the upscale shopping district of downtown from the early part of this century. Over the past twenty years, however, due to the construction of a large number of suburban shopping centers, the change in the demographics of the population shopping in downtown Los Angeles, and the extensive amount of office construction within downtown, the role of Seventh Street has changed. To compete with new retail marketing needs, Seventh Market Place at Seventh and Figueroa was completed in 1985, and Macy's Plaza (formerly Broadway Plaza) was developed in 1973. However, the landmark Robinson's Department Store closed in the early 1990s and many of the retail shops east of Hope Street have also closed. The Central Library has been a focal point of the area since its construction in 1926. Following two fires, it has been restored and expanded and now crowns the axis of Hope Street. The U.S. Bank Tower lies north of the library and is downtown's tallest building landmark at 73 stories and is visible for miles. The Bunker Hill Steps encircle the building and connect the Financial Districtwith Bunker Hill.
South Park	The South Park area is generally bounded by Eighth Street, Main Street, the Santa Monica Freeway, and the Harbor Freeway and houses a mix of residential, medical, commercial, and retail uses. Warehouse space in one-story unreinforced masonry buildings is scattered throughout the district. Grand Hope Park, the center of the new South Park community is located on Hope Street between Ninth Street and Olympic Boulevard. The park is surrounded by the Fashion Institute of Design and Merchandising, housing including the Skyline condominiums, Metropolitan apartments, Renaissance Tower apartments, and other residential projects. Hope Street Promenade, a pedestrian street featuring landscape design by Halprin,

TABLE 4.1-1 DOWNTOWN PLAN AREA DISTRICTS	
	will connect the residential community of South Park with the Financial District and the Central Library. South Park is recognized to be a mixed-use community with a high concentration of housing. This thriving residential community includes the proximate siting of auxiliary support services such as retail and commercial developments that provide employment opportunities for area residents. Towards that end, and in the interest of creating a linkage between jobs and housing, the development of substantial, community benefitting commercial projects will be encouraged.
Convention Center/Arena	The expanded Convention and Exhibition Center is situated on 63 acres close to the downtown hotel community and the Financial District. Strategically, it is located at the hub of the Interstate Freeway System, the developing Metro and Light Rail System, and in relatively close proximity to the Los Angeles International Airport. The Staples Arena is located adjacent to the Convention Center. This sports and entertainment complex houses a 20,000 seat arena as well as other entertainment and retail uses. The recently adopted LASED Specific Plan is located immediately east and north of the Staples Arena. This adopted Specific Plan, which envisions a 3.75 million square foot mixed-use/entertainment development, takes advantage of the investment made in the area and its potential to evolve into an economically and physically prominent area based on the cumulative impact of existing assets such as the Convention Center and the Staples Center arena. Due to the proximity of the LASED Specific Plan Area to the Convention Center and arena, development of these properties has focused on hotels and event and entertainment-related uses that support the Convention Center and Arena.
Center City/Historic Core	The Historic Core extends from First Street to approximately Eleventh Street between Los Angeles and Hill and includes two National Register Historic Districts-- the Spring Street Financial District between 4th and 7th Streets and the Broadway Theater District between 3rd and 9th Streets. The Historic Core forms the spine of Central City and has evolved into three distinct subareas: a) the northern portion with its concentration of government related uses, b) the middle portion encompassing largely vacant, historic theaters and a dynamic retail shopping district along Broadway, and c) the southern portion, which is emerging as an extension of the Fashion District and the South Park residential neighborhood. The Historic Core/Center City contains a concentration of some of the most architecturally significant buildings in Southern California including a number of nationally recognized historic theater buildings. Spring Street houses the core of historic buildings. Built as financial palaces in the 1920's in the Beaux Arts style, most are now used as retail at the ground level and abandoned on the upper floors. There are a number of older hotels in the area as well. Several existing commercial buildings along Spring Street have been renovated by the City and used as offices for City agencies, extending governmental uses into the Historic Core and contributing to downtown revitalization.
Skid Row/Central City East	Skid Row and Central City East are generally composed of one, two, and three-story buildings. However, there are several taller buildings, including hotels from the early part of the century such as the King Edward and Baltimore at Fifth and Los Angeles Streets, and the El Rey (now the Weingart Center) at Sixth and San Pedro Streets. Much of the building stock in the area is of unreinforced masonry construction from the early part of the century. The Central City East area is characterized by wholesale and warehousing uses including produce, fish and food processing, the Flower Market, an emerging toy import-export industry and a mixture of other commercial activities.
Industrial, Manufacturing and Wholesale District	The Industrial, Manufacturing and Wholesale District is the hub for garment sales and retailing and manufacturing, the produce industry, the flower wholesale industry, toy industry, and serves as a staging area and major distribution point for the region. Much of the area is characterized by low-rise buildings constructed at the turn of the century. Taller buildings are more evident in and around Los Angeles Street, and near the produce market district. This district has close ties with, and is an extension of, the Central City East district.
Little Tokyo	Little Tokyo is the spiritual, cultural and symbolic center of the largest Japanese-American community in the continental United States. The Little Tokyo Historic District on First Street, between San Pedro Street and Central Avenue, its two and three-story masonry buildings and shop fronts create a lively shopping district, which attracts both office workers in the area and tourists from all over the world. The district's buildings vary from low-rise commercial vernacular buildings of the early 1900's to modern multi-story structures, such as the Double Tree Hilton Hotel and Sumitomo Bank. References to Japanese culture exist throughout the district in the form of decorative roofs, signs, garden design, materials and various other Japanese architectural and cultural elements. Traditional design is often employed for religious

TABLE 4.1-1 DOWNTOWN PLAN AREA DISTRICTS	
	buildings such as the Higashi Hongwanji Buddhist Temple. Little Tokyo is the location of the Japanese American National Museum, the Union Center of the Arts, the Japan America Theater, and the Geffen Museum of Contemporary Art. Little Tokyo is a mixed-use neighborhood with a residential community of 850 people, retail, hotel, office and commercial uses. Housing projects in the area include both new development and rehabilitation.
Figueroa Terrace	Figueroa Terrace is bounded by Stadium Way, Lilac Terrace, Marview Avenue, Sunset Boulevard, and the Pasadena Freeway. This neighborhood is characterized by high to medium density multi-family residential, especially along Figueroa Terrace. Most of these have been built in the last decade and can be seen from the U.S. 101 Freeway. The former Metropolitan Water District headquarters building is also located in this part of Central City North along Sunset Boulevard.
Alpine Hill	Alpine Hill is bounded by Yale street, the Pasadena Freeway, and Cesar Chavez Avenue. This small section of Central City North is predominantly low and medium density residential apartments with small scale commercial along Cesar Chavez Avenue. The Community Redevelopment Agency manages several apartment complexes for low income residents in this area.
Chinatown	Chinatown is bounded by N. Main Street, Bernard Street, the Pasadena Freeway, Yale Street, and Cesar Chavez Avenue. Predominantly commercial, this section is the commercial hub of Central City North. Asian restaurants and businesses dominate the major arteries of Broadway, Spring street, and hill Street. Residential complexes are mixed with commercial development along the western boundaries of this neighborhood.
North Industrial / CASP	North Industrial is bounded by Bernard Street, N. Main Street, Elysian Park, and the Los Angeles River. This area is the site of the large Cornfield/Bullring site, formerly a Southern Pacific Railroad yard. There are some residential uses west of the Cornfield site along Broadway, but the majority of the land uses are industrial and warehousing.
Government Support	Government Support is bounded by Ducommon Street, the Los Angeles River, N. Main Street, and Alameda Street. City and County uses dominate this neighborhood. The Mens Central jail, Piper Technical Center, DWP yards and the Alameda District Plan are all a part of this area. The William Mead Housing complex is located off Main Street and is the only housing component in this area.
Arts District	The Arts District is bounded by First Street, the Los Angeles River, Sixth Street, and Alameda Street. This area located just outside Little Tokyo boundaries, is primarily made up of old warehouses now converted to artists' lofts and studios.
Production	South Industrial is bounded by the City of Vernon, the Los Angeles River, the I-10 Freeway, Olympic Boulevard, and Alameda Street. Industrial uses dominate this section of Central City North with large warehouses, truck and railroad yards. The Alameda Corridor terminates in this area and connects the Ports of Los Angeles and Long Beach with downtown Los Angeles.

SCENIC VIEWS AND VISTAS

The term views generally refers to visual access to, or the visibility of, a particular natural or man-made visual resource (e.g., a prominent geologic feature or historic resource) from a given vantage point or corridor. Scenic views focus on a particular object, scene, setting, or feature of visual interest. Panoramic views, or vistas, provide visual access to a large geographic area, for which the field of view can be wide and extend into the distance. Panoramic views are usually associated with vantage points looking out over urban or natural areas that provide a geographic orientation and view not commonly available. Examples of panoramic views might include an urban skyline, a valley, a mountain range, the ocean, or other water bodies. The City's General Plan Conservation Element defines scenic views or vistas as the panoramic public views of natural features, including views of the ocean, striking or unusual natural terrain, or unique urban or historic features. Public access to these views is typically from park lands, publicly-owned sites, and public rights-of-way.

Citywide Views and Vistas

As noted above, scenic views or vistas are the panoramic public view access to natural features, including views of the ocean, striking or unusual natural terrain, or unique urban or historic features. Public access to these views is from park lands, private and publicly owned sites and public rights-of-way. Scenic views and vistas are located throughout the City. Some prominent scenic views and vistas in the City include Pacoima Wash, San Gabriel Mountains, Santa Susana Mountains, San Pedro's coastal bluffs, Griffith Park, and Elysian Park.

Scenic protection provisions are contained in the community plans for the City. Some protections include height limits and building setback requirements. Some scenic highways, including the Mulholland Drive Scenic Parkway, are regulated by specific plan ordinances that contain design provisions intended to protect natural ridge tops, neighborhood visual ambience, public views and other features.

Downtown Plan Area Views and Vistas

Scenic vistas in the Downtown Plan Area include the downtown skyline and limited views of the San Gabriel Mountains, Elysian Park, and the hills surrounding Dodger Stadium. Due to the density and relative heights of buildings and urban development throughout a majority of the Downtown Plan Area, views of these vistas are largely obstructed at the ground level. Intervening buildings, street bridges, freeway overpasses, and street trees block most views of these areas. Though the Elysian Park hills and the San Gabriel Mountains are visible from several of the bridges that cross over the Los Angeles River into Downtown Los Angeles, such as those on 1st Street, 4th Street, and 7th Street, these views are also partially obstructed by buildings, transmission towers, and electric lines. Limited views of the San Gabriel Mountains are available from the ground level along various north-south streets primarily in the northern half of Downtown Plan Area, including areas generally north of Olympic Boulevard and between the Los Angeles River and the Interstate 110 Freeway. Limited views of Elysian Park and the hills surrounding Dodger Stadium are also available at the ground level primarily at discrete vantage points in the northern portion of the Downtown Plan Area. Upper floors of many of the high-rise structures and skyscrapers throughout the Downtown Plan Area provide less obstructed, panoramic views of these vistas. However, these are private views that are not publicly accessible scenic vistas. The only publicly available access point for such views is the City Hall observation deck located at 200 North Spring Street.

Publicly accessible panoramic views of the Downtown Plan Area are provided from freeways in and adjacent to the Downtown Plan Area as well as surrounding areas such as the Hollywood Hills and Griffith Park, due to their elevation relative to the flat nature of the Downtown Plan Area. From these vistas, the intense urban development that characterizes both the low-rise commercial and industrial structures and the high-rise skyscrapers of the Financial District can be observed. Photo 1 of **Figure 4.1-4** depicts panoramic views of the Downtown Area Plan from Griffith Park outside of the Downtown Plan Area and Photo 2 depicts views of high-rise skyscrapers from within the Downtown Plan Area.

The streets, sidewalks, and freeways that traverse the Downtown Plan Area generally provide views of urban development and urban streetscapes, including public views of historic buildings, parks, and iconic skyscrapers. These views are typically limited to close-in foreground views, though some high-rise skyscrapers can be viewed from over 0.5-mile away at street level. These structures are primarily massed in the northwestern portion of the Downtown Plan Area with 9th Street to the south, Hill Street to the east, 2nd Street to the north, and the Interstate 110 freeway to the west.

SCENIC RESOURCES

Scenic resources may include natural or urban features. Natural features can include open space; native or ornamental vegetation/landscaping; topographic or geologic features; and natural water sources. Urban features can include structures, or a collection of structures of architectural or historic significance or visual prominence; public plazas, art or gardens; trees or landscaping protected by the City; consistent design elements along a street or within a district; pedestrian amenities; and landscaped medians or park areas. Scenic resources contribute to the aesthetic character or image of a given area.

Citywide Resources

Landforms and Geology

The City of Los Angeles has several features that contribute to its visual landscape. The Los Angeles Basin is located at the center of the mountain ranges that surround the City and County of Los Angeles. Approximately 214 of 478 square miles within the City are comprised of hills and mountains, and include portions of several mountain ranges: Santa Monica Mountains, Santa Susana Mountains, Verdugo Mountains, and San Gabriel Mountains. The Santa Monica Mountains are the most visible feature from many areas of the City (City of Los Angeles 2001).

The western boundary of the City is the coastline, characterized by sandy beaches, rocky cliffs, and open space. Another prominent feature, the Los Angeles River, bisects the northern portion of the City from the central portion; however, much of the river is channelized and concrete-lined and is not considered a scenic resource.

Open Space and Parks

The City of Los Angeles Department of Recreation and Parks (DRP) owns and operates parks and recreational facilities throughout the City. Within the City of Los Angeles there are several hundred small and large public recreational sites, including over 444 park sites (DRP 2018). The City's open spaces include the San Gabriel Mountain Range, beaches, an intricate network of rivers and trails, and 36,000 acres of park and recreation spaces, and the pedestrian paths (City of Los Angeles 2017). The City is also home to Griffith Park, one of the largest urban parks in North America. The DRP also maintains 13 lakes and 92 miles of hiking trails (DRP 2018). For additional information on parks and recreational facilities, refer to Section 4.17, *Parks and Recreation*.

Historical Resources

The City of Los Angeles is full of rich history. As of November 7, 2017, there are 1,150 historic-cultural monuments in the City of Los Angeles, including residences, government buildings, places of worship, natural elements, and parks (City of Los Angeles 2017). The City has also designated 35 Historic Preservation Overlay Zones. For additional information on historical resources, refer to Section 4.4, *Cultural Resources*.

Scenic Highways

State scenic highways are designated by Caltrans. Although the Mobility Plan 2035 identifies a number of state scenic highways, the official Caltrans list of state scenic highways is available online. As shown in **Figure 4.1-29**, the only officially designated state scenic highway that crosses through the City is a small portion of a 3.5-mile segment of Topanga Canyon Boulevard (State Route 27), which is in the western portion of the Palisades Highlands community. This segment was designated a state scenic highway in 2017. Several eligible state scenic highways pass through portions of Los Angeles, including Interstate 5 from Interstate 210 to the northern City limit, U.S. Route 101 from Topanga Canyon Boulevard to the

western City limit, State Route 118 from De Soto Avenue to the western City limit, Interstate 210 from Interstate 5 to the eastern City limit, State Route 1 from Venice Boulevard to the City boundary adjacent to Santa Monica, and State Route 1 north of Interstate 10. There are no designated or eligible state scenic highways located in the Downtown Plan Area.

In addition to Caltrans designated state scenic highways, the City designates certain corridors within City highways or byways for preservation of their scenic resources, including noteworthy medians, access to notable viewsheds, or dramatic passes. There are approximately 60 designated scenic highways and byways in the MP 2035. The list of local designated corridors are identified in Appendix C.

Mobility Plan 2035

The Arroyo Seco Parkway is a National Civil Engineering Landmark, a National Scenic Byway, and one of two California Historic Parkways, as shown in **Figure 4.1-29**. Additional information related to the Arroyo Seco Parkway is provided below under the Downtown Plan Area Resources subsection.

Downtown Plan Area Resources

Landforms and Geology

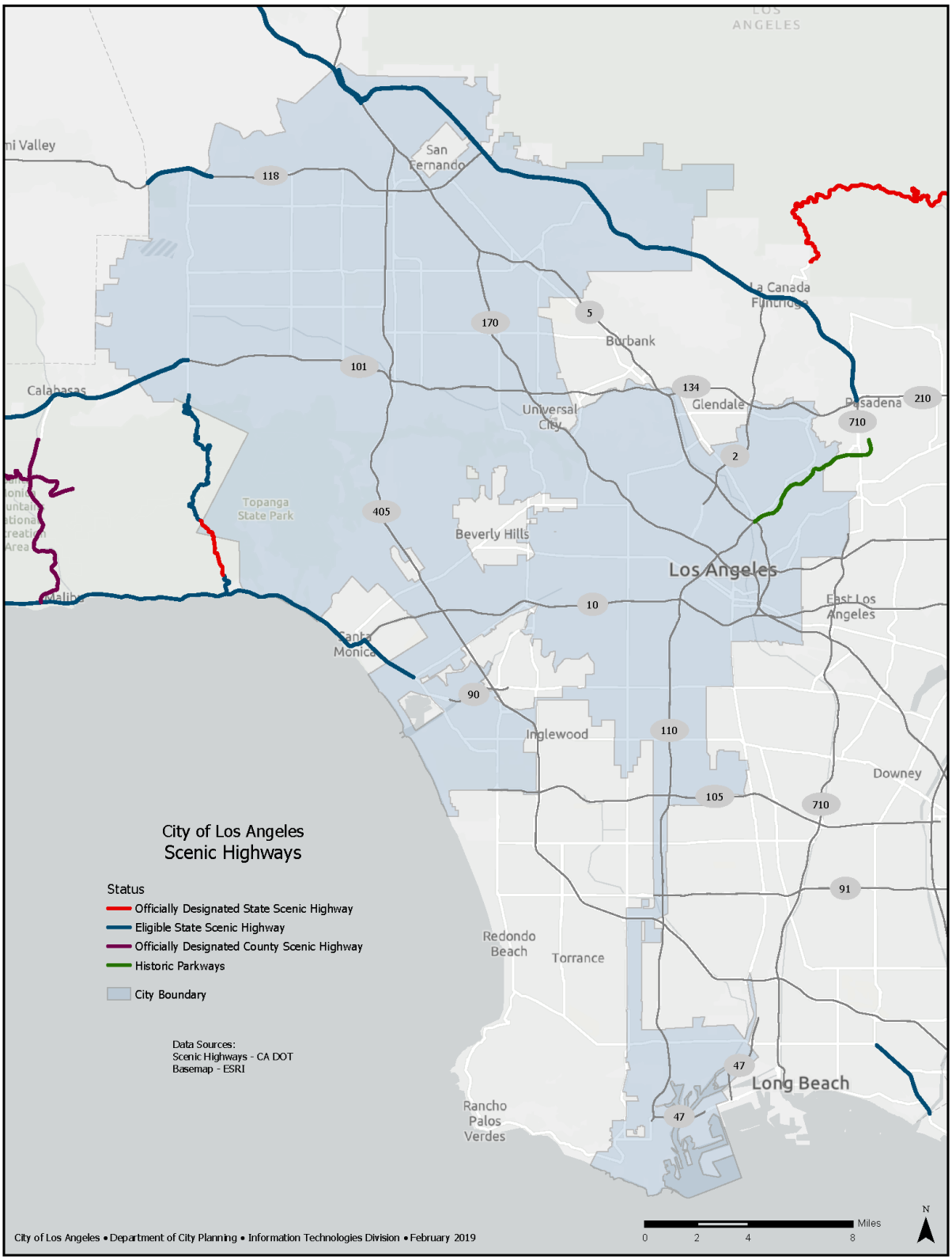
A majority of the Downtown Plan Area is flat and highly urbanized with few topographic features. An exception is Figueroa Terrace, located in the northern portion of the Downtown Plan Area, just south Dodger Stadium. Elevated above most of Downtown, this area affords panoramic view of Downtown and is visually prominent from portions of the Downtown Plan Area. The Los Angeles River runs along the eastern boundary of the Downtown Plan Area; however, the river is channelized and concrete-lined and is not considered a scenic resource.

Open Space and Parks

The Downtown Plan Area contains small scattered open space areas. Most are located within the northern portion, just south of the 101 Freeway, and primarily include Grand Park and Pershing Square, in addition to other smaller city parks scattered throughout the Plan Area. The following is a more comprehensive list of existing and planned parks in the Downtown Plan Area:

- Grand Park
- Pershing Square
- State Historic Park (the Cornfields)
- Spring Street Park
- Arts District Park
- Gladys Park
- San Julian Park
- Grand Hope Park
- Future Parks Under Construction
- 1st & Broadway Park
- Sixth Street Park, Arts, River, and Connectivity Improvements Project (Sixth Street PARC)

Figure 4.1-29 State and County Scenic Highways



The Los Angeles River and its associated tributaries and flood plains are also considered prominent topographic and open space features in the City. The River generally defines the eastern boundary of the Downtown Plan Area. However, as discussed, the portion of the Los Angeles River within the Downtown Plan Area is channelized, concrete-lined, and generally not used for public recreation. The areas of the river used for recreation zones are located in Elysian Valley and the Sepulveda Basin, approximately three miles north of the Downtown Plan Area, and are only open for limited periods of time during the year for specific activities.

Historical Resources

As discussed in Section 4.4, *Cultural Resources*, the SurveyLA historic resources survey program provides a comprehensive list of all historical resources within Downtown Los Angeles based on the findings of the *Historic Resources Survey Report for the Central City Community Plan Area* and the *Historic Resources Survey Report for the Central City North Community Plan Area.* According to the SurveyLA Report, the Central City Community Plan Area contains 190 individually eligible historical resources, four National Register Historic Districts, and 204 historic-cultural monuments and the Central City North Community Plan Area contains 13 historic districts, 144 individual historic resources, and 23 historic-cultural monuments.

The Downtown Plan Area contains the Center City/Historic Core district, which extends from First Street to approximately Eleventh Street between Los Angeles and Hill. This district includes two National Register Historic Districts, the Spring Street Financial District between 4th and 7th Streets and the Broadway Theater District between 3rd and 9th Streets. Other historic resources in the Historic Core are distributed throughout the three district subareas, and include Los Angeles City Hall, which is considered a historical-cultural monument located along Spring Street between First Street and Main Street. This building was constructed in 1928, has 32 stories (454 feet in height), and was added to the city historical-cultural monument list in 1976. The exterior façade is light colored with small-scale dark glass windows, characteristic of other government buildings in the area. Historic sites and structures within the districts and subareas contribute to the visual character in the Downtown Plan Area. **Table 4.1-2** provides additional examples of historical resources within the Central City Community Plan Area and their respective historical context as provided in the SurveyLA Report (SurveyLA 2016a):

TABLE 4.1-2 EXAMPLES OF CENTRAL CITY HISTORICAL RESOURCES

Context	Historical Resource
Commercial Development (1850-1980)	Hotel Rosslyn (1905) – 111 W. Fifth Street
	Ville De Paris (1917) – 420 W. Seventh Street
	King Eddy Saloon (1933) – 121 E. Fifth Street
Public and Private Institutional Development (1850-1980)	Air Raid Siren No. 8 (19400 – Spring Street and Temple Street
	North Spring Streetlights (1925) – Spring Street between First Street and Chavez Avenue.
Architecture and Engineering (1850-1980)	Los Angeles Railway Building (1922) – 1060 S. Broadway
	Western Pacific Building (1925) – 1031 S. Broadway
Entertainment Industry (1908-1980)	Pantages Theatre/Warner Bros. Theatre (1919) – 411 W. Seventh Street
	Olympic Theatre/ Bard's 8th Street Theatre (1927) – 313 W. Eighth Street

The Central City North Community Plan Area contains one of the highest concentrations of designated and listed historic properties in Los Angeles (SurveyLA 2016b). This area contains designated resources from the late 19th and early-20th centuries including bridges that span the Los Angeles River and adjacent railroad tracks and historic districts such as New Chinatown and Greater Chinatown. Most of the Central City North Community Plan Area is characterized by industrial uses zones in which many historical industrial buildings are distributed throughout, such as the Star Truck and Warehouse Company building. Built in

1924, this structure was initially constructed as a warehouse facility before being converted into residential lofts in 2002. The building's north façade is curved, following what was once a rail spur, and features a poured-in-place concrete foundation, which allowed it to serve as a civilian bomb shelter during World War II. Today the building is known as the Toy Factory Lofts, referring to its last industrial use as a stuffed animal assembly plant. **Table 4.1-3** provides additional examples of additional historical resources within the Central City North Community Plan Area and their respective historical context as provided in the SurveyLA Report (SurveyLA 2016b):

See Section 4.4, *Cultural Resources*, for a more detailed list of historical resources within the Downtown Plan Area. There are no Historic Preservation Overlay Zones (HPOZs) in the Downtown Plan Area.

TABLE 4.1-3 EXAMPLES OF CENTRAL CITY NORTH HISTORICAL RESOURCES

Context	Historical Resource
Commercial Development (1850-1980)	Phoenix Inn Chinese Restaurant (1906) – 301 W. Ord Street
	W. Gin Ling Way (1938) – New Chinatown Historic District
	Philippe the Original (1951) – 1001 N. Alameda Street
Public and Private Institutional Development (1850-1980)	Saint Anthony's Croatian Catholic Church (1910) – 700 W. Alpine Street
	Wong Family Benevolent Association (1951) – 744 N. Broadway
	Air Raid Siren No. 91 (circa 1940) – Figueroa Street near Bartlett
Architecture and Engineering (1850-1980)	949 N. Sun Mun Way (1940) – New Chinatown
	Soo Yuen Fraternal Association (1949) – 991 N. Broadway
Industrial Development (1850-1980)	Hills Bros. Coffee (1929) – 635 S. Mateo Street
	Coca-Cola Syrup Manufacturing Plant (remodeled 1939) – 947 E. 4th Street

Views of streetscapes within the historic districts and other historical resource areas throughout the Downtown Plan Area are shown in Photos 1 and 2 of **Figure 4.1-5** and Photo 1 of **Figure 4.1-6**. Public views of many of the historical resources are typically limited to close foreground views from adjacent streets and sidewalks. Most of these buildings were constructed in the early 1900s and have exposed brick exteriors with architectural designs characteristic of the era. Ground floor uses for these structures are primarily commercial with apartments located at the upper levels, some of which have been repurposed from old theater buildings.

Scenic Highways

No State-designated scenic highways or scenic parkways (or proposed scenic highways or parkways) are located in the Downtown Plan Area and no state-designated scenic highways provide views of the Downtown Plan Area (Caltrans 2011). The nearest state-designated historic scenic parkway is the portion of the 110 Freeway bounded by the Interstate 210 freeway to the north and the Interstate 5 Freeway to the south, approximately 1.2 miles north of the northern boundary of the Downtown Plan Area. Views of the Downtown Plan Area from the historic parkway are obstructed by the hills of Elysian Park near Dodger Stadium.

The current Central City and Central City North Community Plan list the 110 Freeway as a scenic freeway with a local designation in the Downtown Plan Area. The development standards associated with the scenic freeway designation have the potential to inhibit development opportunities and therefore would not be in

alignment with the Downtown Community plan goals and policies. The Downtown Community Plan includes zoning tools that protect areas of historical or aesthetic value within the plan area.[2]

According to the City's Mobility Plan 2035, City-designated scenic highways should be either: 1) arterial streets or state highways that traverse areas of natural scenic quality in undeveloped or sparsely developed areas of the City; or 2) arterial streets that traverse urban areas of cultural, historical or aesthetic value which merit protection and enhancement (City of Los Angeles 2016). Scenic highways have special controls for protection and enhancement of scenic resources. Scenic Highway Guidelines (for those designated scenic highways for which there is no adopted scenic corridor plan) are given in Appendix B of the Mobility Plan. The portion of Stadium Road between the Interstate 5 freeway and California State Route 110 at the northern boundary of the Downtown Plan Area is the only City-designated scenic highway that the Mobility Element identifies in the Downtown Plan Area. This roadruns along the eastern and southern boundary of Dodger Stadium near Elysian Park. Views from this road near Dodger Stadium are generally obstructed by adjacent residential development and tree-lined banked hillsides. Views from the road at the closest point to the Downtown Plan Area are primarily of urban development in the Chinatown subarea.

Landscaped Parkways and Roadway Medians

A majority of the streets in the Downtown Plan Area are heavily trafficked arterials, and generally do not contain significant landscaping or landscaped medians. The Arroyo Seco Parkway is the only official parkway that travels into or through the Downtown Plan Area. The Arroyo Seco Parkway (California State Route 110) runs northeasterly from the four-level interchange with the 101 Freeway just outside of downtown Los Angeles to East Glenarm Street in Pasadena. It is a National Civil Engineering Landmark, a National Scenic Byway, and one of two California Historic Parkways, the other being State Route 163 through Balboa Park in San Diego (Caltrans 2011). Since 2011 the Parkway and its associated features have been listed in the National Register of Historic Places as the Arroyo Seco Parkway Historic District. However, only the portion of the Parkway north of the Interstate 5 Freeway outside of the Downtown Plan area is designated as a state scenic and historic parkway. Only the southernmost portion of the parkway enters the Downtown Plan Area between the northernmost boundary of the Downtown Plan Area near Dodger Stadium and the 101 freeway/110 freeway interchange. This portion of the Parkway is not designated as scenic or historic. From the northern boundary of the Downtown Plan Area, views from the Parkway include intermittent partial views of historic buildings such as Los Angeles City Hall and other high-rise structures to the south, as trees, hills, and vegetation obstruct views to the east and west. Views from the Parkway are primarily of adjacent low- and mid-rise commercial and residential urban development.

Urban Visual Character

While scenic vistas encompass long-range views and often emphasize large-scale natural features, views are also affected by their more immediate visual surroundings. Local aesthetics, typically found on a neighborhood level, also contribute to the urban visual character of the Downtown Plan Area. Development densities and types, distinctive neighborhoods and commercial districts, recognizable architectural elements, prominent public institutions/landmarks, and other elements all contribute to the City's aesthetic quality.

As previously described, development in the Downtown Plan Area primarily consists of commercial and industrial buildings and land uses with small scattered pockets of open space parks and residential areas. Structures in the Downtown Plan Area range from low-rise, one- to two-story, structures in the industrial areas, to 73 stories (1,100 feet) in the commercial-zoned financial district. A majority of the high-rise

[2] The proposed Downtown Plan would remove the designation for this corridor in the Central City and Central City North Community Plan update.

skyscrapers are clustered in the financial district of the Downtown Plan Area, but taller multi-story structures are also dispersed throughout the Plan Area. Examples include Los Angeles City Hall and buildings within the Historic Core, ranging from four to 13 stories in height. Due to the relatively dense arrangement and considerable heights of existing commercial, industrial, and public facilities/governmental buildings in the Downtown Plan Area, many uses already experience substantial shading. This is typical of highly urbanized environments characterized by intense development and tall buildings. Shading provided by existing development in the Downtown Plan Area can restrict access to sunlight but can also provide welcome cooling in an area frequently characterized by high temperatures.

The visual character of different uses and neighborhoods in the Downtown Plan Area is discussed below.

Industrial

Industrial buildings characterize the North Industrial and South Industrial subareas of the Central City North Community Plan Area, occupying approximately 70 percent of the land in the Community Plan Area. They also constitute the south eastern half of the Downtown Plan Area, primarily the Industrial, Manufacturing and Wholesale District. Structures within these areas are primarily one to three stories in height and consist of large warehouses, and truck and railroad yards. Some structures in the Arts District subarea are slightly taller (up to five stories) and consist of older warehouses now converted into artists' lofts and studios. Industrial uses in the Industrial, Manufacturing and Wholesale District of the Downtown Plan Area are also primarily one- to three-story structures, but consist of small wholesale retail spaces that serve as the hub for garment sales, the produce industry, the flower wholesale industry, the toy industry, and as a major distribution point for the region. Overall, many of the industrial buildings have little to no setback from the streets and some of the properties have surface parking lots directly facing the streets. Buildings are typically made of exposed and/or painted brick and have widely varying architectural styles. There is little visual consistency among structures. A majority of the buildings were constructed between the 1920s and 1940s, but more recent buildings were built in the 1960s and 1970s, and have not undergone redevelopment (built:LA website 2017). A number of older warehouse buildings in the Fashion District have been replaced or renovated over the past several years. New and renovated buildings serve a variety of functions and contribute to an eclectic mix of older and more modern architectural styles in this portion of the Downtown Plan Area.

Residential

Pockets of residential development in the Downtown Plan Area, some of which involve the reuse of former commercial and industrial buildings, are located in the following districts (the locations of these districts are described in **Table 4.1-1**):

- Bunker Hill
- Central City East
- South Park
- Alpine Hill
- Figueroa Terrace
- Arts District
- Industrial, Manufacturing and Wholesale District Historic Core

Residential development in the Downtown Plan Area generally ranges from two to three stories in the Central City East district and Figueroa Terrace subarea, generally ranges from two to four stories and and up to 15 stories in the Industrial, Manufacturing and Wholesale District. Development density and overall visual character vary considerably across each subarea and district, partly due to the nature of surrounding

land uses. Residential development in the Central City East district is largely surrounded by industrial uses and generally high density and range from two to eight stories. Buildings have little to no setbacks from streets, properties are largely devoid of landscaping, and some have surface parking lots squeezed between apartment structures or have street parking. Street trees are scattered infrequently throughout the residential area. Building exteriors are comprised of exposed brick with varying architectural styles and bear little visual resemblance to one another. A variety of older (1920s era) housing in the area is currently used for single room occupancy hotels, homeless shelters, and housing for extremely low-income individuals. Homeless encampments commonly line the sidewalks near residential structures.

Residences in the Bunker Hill and South Park districts are also generally in high-density development areas but are surrounded by largely commercial uses and are in proximity to a major convention center. While these areas do contain several older apartment buildings, many have undergone remodeling and/or reconstruction, or are currently undergoing such efforts. New residential developments include high-rise condominiums, tower apartments, and other residential projects constructed with similar exterior façade designs. Buildings in the South Park district largely lack landscaping features, but are fronted by street trees, including parking structures, and have active, street-facing commercial uses on the ground floor. Residential apartments near the Bunker Hill district were built largely in the 70s and 90s, and have considerably more landscaping and share similar architectural styles.

Residential developments in the Alpine Hill and Figueroa Terrace subareas in the Central City North Community Plan Area, are located on opposite sides of Arroyo Seco Parkway, and are largely lower density multi-family areas and the massing of buildings is lower compared to the other residential areas in the Downtown Plan Area, but are visually similar in character and architectural style. Buildings consist of apartment complexes and condominiums primarily ranging from one to three stories in height, though there are a few five-story structures. Structures are set back from the curb, have wide public sidewalks, and have generally light-colored exteriors. Some residences have front lawn areas that achieve further setback. Streets are tree-lined with little, if any, other landscaping features, and overhead utility lines traverse a majority of the streets and properties. Photos 1 and 2 of **Figure 4.1-7** depict examples of visual character of some residential areas in the Downtown Plan Area.

Public Facilities

The Civic Center district in the Downtown Plan Area houses several governmental and public service structures that consist of federal, state, county and local government offices and other public facilities. Civic buildings are generally located along the Civic Center Mall north of First Street, and generally from the Harbor Freeway to Alameda Street and dominated by the historic City Hall. Newer buildings such as the California Transportation (CalTrans) District 7 headquarters and the U.S. Federal Courthouse also add architectural landmarks to downtown skyline. Buildings generally range from 6 to 20 stories in height, with the exception of Los Angeles City Hall, a 32-story structure. Structures have generally minimalist architectural styles with exteriors mainly comprised of alternating layers of plaster and glass windows and generally light-colored. Some structures have unique architectural elements. These include the Los Angeles City Hall building, the U.S. District Court, the Caltrans District 7 office, and the Los Angeles Police Department Headquarters. Most buildings are set back from the street, have landscaping on at least two sides, and are generally lined with street trees. Structures on the eastern boundary of the Civic Center District also include several museums and restaurants with a variety of building massing and generally range from one to three stories in height. As these buildings were constructed during several different decades, ranging from 1920 to 2010s, architectural styles vary widely with various unique design elements. The visual character of this diversity helps to distinguish the western boundary of the Little Tokyo district. Photo 2 of **Figure 4.1-6** provides examples of public service buildings in this district.

Commercial

Commercial areas generally constitute the western half of the Central City Community Plan Area as well as a small portion of the northern section of the Central City North Community Plan Area. Buildings vary widely in style and structure, largely influenced by the surrounding zoning and land uses. Development within the Bunker Hill and Financial District consists of mainly high-rise structures that provide a mix of commercial and office uses, as shown in Photos 1 and 2 of **Figure 4.1-15**. Building heights are generally greater than 30 stories, with the tallest being the Wilshire Grand tower at 73 stories. Building massing is generally consistent but structures have varying architectural styles different exterior facades. Some buildings, such as the Wells Fargo Building, have smaller-size windows and mostly plaster on their exterior facades while others are entirely made of glass, such as the AECOM building. Most buildings are square-shaped and occupy the entirety of their respective street blocks, but some include ground level plazas to establish street setbacks and maximize light, air and open space.

The Center City/Historic Core district also contains retail shopping development interspersed with historic structures in the central subarea of the district. Structures generally range from three to 13 stories in height and have varying architectural styles. A majority of the buildings were constructed in the early 1900s and have undergone remodeling under the city's Adaptive Reuse Program. Commercial uses are primarily on the ground floor of the buildings and consist mainly of assorted restaurant and retail spaces while the higher floors are used for apartments.

Commercial development in the Industrial, Manufacturing and Wholesale District and the Chinatown subarea contrasts greatly with that in the Bunker Hill and Financial District. This Industrial, Manufacturing and Wholesale District is in an industrial-zoned area and has industrial uses interspersed with commercial buildings. Most commercial developments are generally low rise, one to three stories in height, bear little architectural resemblance, and were constructed between the 1970s and early 2000s. Commercial uses mainly include various retail stores with colored awnings located at the ground level. Building exteriors in Industrial, Manufacturing and Wholesale District are primarily painted or exposed brick or concrete, as shown in Photo 1 of **Figure 4.1-26** and Photo 1 of **Figure 4.1-28**. Commercial structures in the Chinatown subarea are largely similar to those in the Industrial, Manufacturing and Wholesale District but are occupied primarily by restaurant uses and are surrounded by mostly institutional and residential uses. Photo 2 of **Figure 4.1-10** and Photos 1 and 2 of **Figure 4.1-11** and **Figure 4.1-12** provide examples of development in Chinatown.

LIGHT AND GLARE

Citywide

The character of the City is highly diverse and consists of various levels of urbanization. As discussed above, the northern portion of the City encompasses more open spaces and is generally less intensely developed and the central to southern portion of the City is highly urbanized. As such, the intensity of lighting depends on the location within the City and can vary from low intensity of nighttime illumination near suburban and equestrian areas to high intensity in high-density urban areas.

Throughout the City, there are currently more than 210,000 streetlights that provide illumination for City roadways and sidewalk areas. All lighting installed in the City is required to meet National Lighting levels that provide visibility and reduce sky glow and glare (City of Los Angeles 2018). Sources of light throughout the City also include floodlights at sports fields or arenas, residences, airports, electronic billboards, and vehicles traveling on roads and freeways.

Existing conditions information for glare cannot be summarized at the citywide level as they depend on site specific conditions and vary widely throughout the City.

Downtown Plan Area

Light

Given the nature of high-density urban development, most of the Downtown Plan Area is characterized by moderate to high intensities of nighttime illumination. Nighttime lighting is necessary to provide and maintain safe, secure, and attractive environments. However, lighting has the potential to produce spillover light and glare and, if designed incorrectly, could be considered unattractive or could be annoying or obtrusive to residents. Light that falls beyond the intended area is referred to as nighttime spillover light or light trespass. Nighttime spillover light can adversely affect light sensitive uses at nighttime, especially residences.

Throughout the Downtown Plan Area, a high level of ambient nighttime light exists as is characteristic of downtown urban environments. Nighttime artificial lighting sources include street, securing, and wayfinding outdoor lighting; vehicle headlights; animated and/or illuminated pole signs used for advertisements; interior building illumination; lighted buildings (such as Staples Center); and lighted graphic signs (such as at LA Live and the Reef building (2019 signage)). For example, nighttime wayfinding lighting at city parks, such as Grand Park in Photo 2 of **Figure 4.1-27**, is a common artificial light source. Near the Convention Center/Arena district, additional sources of nighttime lighting are provided by sky beam lights used for entertainment events. Photo 2 of **Figure 4.1-28** shows daytime views of structures in this area. These artificial lighting sources result in high ambient nighttime light levels near the western part of the Downtown Plan Area due to the close proximity of high- rise commercial development and night life amenities. Moderate levels of ambient nighttime lighting characterize the eastern portion of the Downtown Plan Area due to the more limited use of exterior lighting in low-rise manufacturing and commercial developments. Streetlights are located throughout the entirety of the Downtown Plan Area. Existing street lights are on approximately 40-foot-tall street light poles at street intersections and 25-to 30-foot-tall streetlights along sidewalks.

Nighttime lighting is more limited in the northern portion of the Downtown Plan Area near the Alpine Hill and Figueroa Terrace subareas. This is due to the low-rise, low-density residential structures that characterize a majority of this area. Nighttime artificial lighting sources are primarily limited to 40-foot-tall street lights, building front porch lights, decorative wall lighting at residential homes, vehicle headlights, and interior building illumination.

Ambient light levels or illumination is measured in foot-candles (fc). A fc is a unit of measure or the intensity of light falling in one square foot of surface area equal to one lumen per square foot. **Table 4.1-4** describes the foot-candle (fc) range of various types of light.

TABLE 4.1-4 FOOT-CANDLE VALUES OF COMMON LIGHT SOURCES

Illumination Source	Foot-Candles (LUX/FX)
Full Daylight	1,000
Full Moon	0.1
Office Lighting	70-150
Street Lighting	0.6-1.6

SOURCE: City of Los Angeles, Department of Public Works Bureau of Street Lighting Design Standards and Guidelines, 2007.

As viewed from surrounding locations, the nighttime lighting environment in the Downtown Plan Area varies. Bright luminaries and surfaces in the western portion of the Downtown Plan Area can be viewed from considerable distance by specific receptors, such as freeways and high-rise structures. Nighttime lighting is lowest in the residential areas in the northern portion of the Downtown Plan Area near Dodger Stadium and Elysian Park.

Glare

Glare is a common phenomenon in Southern California primarily due to the occurrence of a high number of days per year with direct sunlight and the highly urbanized nature of the region, resulting in a large concentration of reflective surfaces. Daytime glare can result from sunlight reflecting off glass, other structural fixtures of buildings, and windshields of parked and moving vehicles within the roadways in the Downtown Plan Area. Although a majority of existing structures throughout the Downtown Plan Area are composed of non-reflective materials, such as concrete, stucco, brick, and plaster, a few commercial buildings, particularly the high-rise skyscrapers within the Bunker Hill and Financial District, contain a substantial amount of glass on their exterior façade, as shown in Photo 1 of **Figure 4.1-27**. Nighttime glare can occur from a variety of light sources including street lights, lighting of sports and entertainment events, and lighting of commercial and residential structures.

SHADE AND SHADOWS

Shading refers to the effect of shadows cast upon adjacent areas. The consequences of shadows upon land uses may be positive, including cooling effects during warm weather, or negative such as the loss of natural light necessary for solar energy purposes or the loss of warming influences during cool weather. Shadows are cast in a clockwise direction from west/northwest to east/northeast from approximately 7:00 a.m. to 3 :00 p.m. or later depending on the time of the year: Summer Solstice (June 21), Spring/Fall Equinoxes (March 20 and September 22), and Winter Solstice (December 21). Generally, the shortest shadows are cast during the Summer Solstice and then grow increasingly longer until the Winter Solstice. During the Winter Solstice, the sun appears lower in the sky and shadows are at their maximum coverage lengths. Shadows cast during the Winter Solstice represent the greatest potential shade and shadow impacts.

Citywide

Shadow effects depend on several factors, including local topography, and the height and massing of buildings, and existing uses. However, existing conditions regarding shade and shadows cannot be summarized at the citywide level as they depend on site specific conditions and vary widely throughout the City.

Downtown Plan Area

Shadow effects depend on several factors, including local topography, the height and massing of buildings, and existing uses. Due to the relatively dense arrangement of existing commercial, industrial, and residential buildings within the developed portions of the Plan Area, shadow effects already exist in the Plan Area. Mid-rise and high-rise buildings cast longer shadows than low-rise buildings. Within the Downtown Plan Area, taller buildings are generally located in the Financial District, Bunker Hill and the Historic Core, and the effects of shadows cast in this area affecting public spaces where people gather for long periods are minimal.

REGULATORY FRAMEWORK

STATE

Senate Bill 743 (SB 743) (Environmental Quality)

On September 2013, Governor Brown signed into law SB 743, which instituted changes to California Environmental Quality Act (CEQA) when evaluating environmental impacts of projects in areas served by

transit. While the thrust of SB 743 addresses how transportation impacts are evaluated, it also limits the extent to which aesthetics impacts are evaluated under CEQA. SB 743 (Public Resources Code [PRC] Section 21099 (d)(1)) exempts development projects located in Transit Priority Areas (TPAs), from review of aesthetic impacts under CEQA. Specifically, this bill states that aesthetic impacts of a residential, mixed-use residential, or employment center project on an infill site within a TPA shall not be considered significant impacts on the environment.[3] Therefore, aesthetic impacts within a TPA are considered less than significant in environmental analyses. A TPA is defined as an area within one-half mile of a major transit stop that is existing or planned. Section 21064.3 of the PRC defines a "major transit stop" as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. PRC Section 21099 defines an infill site as a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

California Department of Transportation (Caltrans) State Scenic Highways

California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. Caltrans defines a State Scenic Highway as any freeway, highway, road, or other public right-of-way that traverses an area of exceptional scenic quality. Eligibility for designation as a State Scenic Highway is based on vividness, intactness, and unity of the roadway. The status of a proposed State Scenic Highway changes from eligible to officially-designated when the local governing body applies to Caltrans for scenic highway approval, adopts a Corridor Protection Program, and receives notification from Caltrans that the highway has been officially designated a State Scenic Highway. There are no designated state scenic highways in the City of Los Angeles, including the Downtown Plan Area.

California Energy Commission (CEC) Building Efficiency Standards Title 24

Subchapter 4 of the CEC's Building Efficiency Standards addresses mandatory requirements for lighting systems and equipment for nonresidential, high-rise residential and hotel/motel occupancies. Section 130.2 of Subchapter 4 consists of requirements for outdoor incandescent lighting and luminaire cutoff related to backlight, uplight, and glare and Section 130.3 of Subchapter 4 sets controls for indoor and outdoor sign lighting including standards for sign dimming during nighttime hours. Subchapter 7 Section 150.0(k) includes luminaire standards and requirements for indoor and outdoor residential lighting, which are also required to comply with lighting standards in Subchapter 4.

CalGreen Green Building Standards Code

Chapter 5 of the CalGreen Building Code includes nonresidential mandatory measures. Measure 5.106.8, Light Pollution Reduction, require outdoor lighting systems to comply with backlight, uplight, and glare standards included in Title 24 with the intent to reduce light pollution that could be disruptive to the environment, wildlife, and humans.

[3]Public Resources Code Section 21099(a)(1) defines "employment center project" as a project located on property zoned for commercial uses with a floor area ratio of no less than 0.75 and that is located within a TPA.

LOCAL

City of Los Angeles General Plan Framework, Conservation Element, and Mobility Plan 2035

The Framework Element planning policies regarding urban form, neighborhood design and the conservation of open space and other scenic resources, described in Section 1.1 of Chapter 1, *Introduction and Community Profile*, are intended to improve community and neighborhood livability in the City of Los Angeles. Framework Element Open Space and Conservation policies seek to conserve resources and use open space to enhance community and neighborhood character in the City.

The Conservation Element (adopted in 2001) includes a discussion of the existing landforms and scenic vistas in the City of Los Angeles. Objectives, policies, and programs included in this element are intended to ensure the protection of natural terrain and landforms, unique site features, scenic highways, and panoramic public views as City staff and decision-makers consider future land use development and infrastructure projects.

The Mobility Plan 2035 (adopted in 2016) provides an inventory of City-designated scenic highways. Scenic highways depicted in the City have special controls for protection and enhancement of scenic resources. The Mobility Plan 2035 includes Scenic Highway Guidelines for those designated scenic highways for which there is no adopted scenic corridor plan.

Objectives, policies, and programs included in the General Plan Framework, Conservation Element and Mobility Plan 2035 are intended to ensure the protection of natural terrain and landforms, unique site features, scenic highways, and panoramic public views as City staff and decision-makers consider future land use development and infrastructure projects. Applicable goals, objectives, and policies of these General Plan elements are shown in **Table 4.1-5**. See Section 4.8, *Land Use and Planning*, for a discussion of land use consistency with aesthetics goals and objectives.

TABLE 4.1-5 RELEVANT GENERAL PLAN AESTHETICS GOALS, OBJECTIVES, AND POLICIES

General Plan Framework	
Goal 5A	A livable City for existing and future residents and one that is attractive to future investment. A City of interconnected, diverse neighborhoods that builds on the strengths of those neighborhoods and functions at both the neighborhood and citywide scales.
Objective 5.1	Translate the Framework Element's intent with respect to citywide urban form and neighborhood design to the community and neighborhood levels through locally prepared plans that build on each neighborhood's attributes, emphasize quality of development, and provide or advocate "proactive" implementation programs.
Policy 5.1.1	Use the Community Plan Update process and related efforts to define the character of communities and neighborhoods at a finer grain than the Framework Element permits.
Policy 5.2.2	Encourage the development of centers, districts, and selected corridor/boulevard nodes such that the land uses, scale, and built form allowed and/or encouraged within these areas allow them to function as centers and support transit use, both in daytime and nighttime. Additionally, develop these areas so that they are compatible with surrounding neighborhoods, as defined generally by the following building characteristics: • Buildings in neighborhood districts generally should be low rise (one- to two-stories), compatible with adjacent housing, and incorporate the pedestrian-oriented design elements defined in Policies 5.8.1 and 3.16.1 - 3.16.3. They should also be located along sidewalks with appropriate continuous storefronts. • Buildings in community centers generally should be two to six stories in height, with the first several stories located along the sidewalk. They should also incorporate the

TABLE 4.1-5 RELEVANT GENERAL PLAN AESTHETICS GOALS, OBJECTIVES, AND POLICIES	
General Plan Framework	
	pedestrian-oriented elements defined in policy 5.8.1. Either housing or office space may be located above the ground floor storefronts. • The built form of regional centers will vary by location. In areas, such as Wilshire and Hollywood Boulevards, buildings will range from low- to mid-rise buildings, with storefronts situated along pedestrian-oriented streets. Regional centers should contain pedestrian-oriented areas and incorporate the pedestrian-oriented design elements defined in Policies 5.8.1 and 3.16.1 – 3.16.3. • Buildings located at activity nodes along mixed-use boulevards generally shall have the same characteristics as either neighborhood districts or community centers, depending on permitted land use intensities. Housing over ground floor storefronts or in place of commercial development shall be encouraged along mixed-use boulevards.
Objective 5.5	Enhance the livability of all neighborhoods by upgrading the quality of development and improving the quality of the public realm.
Policy 5.5.3	Formulate and adopt building and site design standards and guidelines to raise the quality of design citywide.
Policy 5.5.4	Determine the appropriate urban design elements at the neighborhood level, such as sidewalk width and materials, street lights and trees, bus shelters and benches, and other street furniture.
Policy 5.5.6	Identify building and site design elements for commercial or mixed-use streets in centers that may include: the height above which buildings must step back; the location of the building base horizontal articulation; and other design elements.
Policy 5.5.7	Promote the undergrounding of utilities throughout the City's neighborhoods, districts, and centers.
Objective 5.6	Conserve and reinforce the community character of neighborhoods and commercial districts not designated as growth areas.
Policy 5.6.1	Revise community plan designations as necessary to conserve the existing urban form and community character of areas not designated as centers, districts, or mixed-use boulevards.
Objective 5.7	Provide a transition between conservation neighborhoods and their centers.
Policy 5.7.1	Establish standards for transitions in building height and for on-site landscape buffers.
Objective 5.8	Reinforce or encourage the establishment of a strong pedestrian orientation in designated neighborhood districts, community centers, and pedestrian-oriented subareas within regional centers, so that these districts and centers can serve as a focus of activity for the surrounding community and a focus for investment in the community.
Policy 5.8.1	Buildings in pedestrian-oriented districts and centers should have the following general characteristics: • An exterior building wall high enough to define the street, create a sense of enclosure, and typically located along the sidewalk; • A building wall more-or-less continuous along the street frontage; • Ground floor building frontage designed to accommodate commercial uses, community facilities, or display cases; • Shops with entrances directly accessible from the sidewalk and located at frequent intervals; • Well-lit exteriors fronting on the sidewalk that provide safety and comfort commensurate with the intended nighttime use, when appropriate; • Ground floor building walls devoted to display windows or display cases; • Parking located behind the commercial frontage and screened from view and driveways located on side streets where feasible; • Inclusion of bicycle parking areas and facilities to reduce the need for vehicular use; and

TABLE 4.1-5 RELEVANT GENERAL PLAN AESTHETICS GOALS, OBJECTIVES, AND POLICIES	
General Plan Framework	
	• The area within 15 feet of the sidewalk may be an arcade that is substantially open to the sidewalk to accommodate outdoor dining or other activities.
Policy 5.8.2	The primary commercial streets within pedestrian-oriented districts and centers should have the following characteristics: • Sidewalks: 15-17 feet wide (see illustrative street cross-sections). • Mid-block medians (between intersections): landscaped where feasible. • Shade trees, pruned above business signs, to provide a continuous canopy along the sidewalk and/or palm trees to provide visibility from a distance. • Pedestrian amenities (e.g., benches, pedestrian-scale lighting, special paving, window boxes, and planters).
Policy 5.8.4	Encourage that signage be designed to be integrated with the architectural character of the buildings and convey a visually attractive character.
Conservation Element	
Land Form & Scenic Vista Objective	Protect and reinforce natural and scenic vistas as irreplaceable resources and for the aesthetic enjoyment of present and future generations.
Land Form & Scenic Vista Policy	Continue to encourage and/or require property owners to develop their properties in a manner that will, to the greatest extent practical, retain significant existing land forms (e.g., ridge lines, bluffs, unique geologic features) and unique scenic features (historic, ocean, mountains, unique natural features) and/or make possible public view or other access to unique features or scenic views.
Mobility Plan 2035	
Objective 11	Preserve and enhance access to scenic resources and regional open space.
Policy 11.1	Designate scenic highways and scenic byways which merit special consideration for protection and enhancement of scenic resources.
Policy 11.2	Provide for protection and enhancement of views of scenic resources along or visible from designated scenic highways through implementation of guidelines set forth in this 2035 Mobility Plan.
Policy 11.3	Consider aesthetics and scenic preservation in the design and maintenance of designated scenic highways and of those scenic byways designated in Community Plans.
Policy 11.4	Establish Scenic Corridor Plans, where appropriate, which set forth corridor boundaries and development controls in harmony with each corridor's specific scenic character.
Policy 2.16	Ensure that future modifications to any scenic highway do not impact the unique identity or characteristic of that scenic highway.

SOURCE: City of Los Angeles, *The Citywide General Plan Framework: An Element of the City of Los Angeles General Plan*, re-adopted 2001; City of Los Angeles, *Conservation Element of the City of Los Angeles General Plan*, adopted 2001; City of Los Angeles General Plan, *Mobility Plan 2035*: *An Element of the General Plan*, adopted 2015.

SPECIFIC PLANS AND OTHER OVERLAY PLANS WITHIN THE DOWNTOWN PLAN AREA

The following Specific Plans pertain to communities and neighborhoods in the Downtown Plan Area.

Alameda District Specific Plan (ADP)

The Alameda District Specific Plan (ADP) area is located in the Central City North Community Plan Area. The purpose of the ADP is to provide regulatory controls and general procedures for development to execute the goals of the General Plan. The regulations of the ADP supersede similar applicable provisions of the

LAMC and relevant ordinances. The ADP includes provisions regulating the allowable building height and massing within the three subareas and requires development to abide by the provisions of the Urban Design Guidelines provided in Appendix Q. These guidelines specify setbacks and separations as well as visual screening and landscaping between arena facilities and residential buildings to provide a buffer between the two land uses.

Bunker Hill Specific Plan (BHSP)

The Bunker Hill Specific Plan (BHSP) provides urban design regulations for development in the Bunker Hill area, which is located within the Central City Community Plan Area. Regarding aesthetics, the BHSP contains the following intended purposes: 1) to implement the Central City Community Plan, 2) to implement design regulations that maintain a high quality built form and encourage compatible infill development that enlivens the streets and public spaces, and 3) to support the improvement of the business environment by providing an attractive public realm. The BHSP also refers to the provisions of the City of Los Angeles' Downtown Design Guide: Urban Design Standards and Guidelines to regulate the visual character of projects. The City's Downtown Design Guide includes guidance for landscaping features, building massing, and architectural detail as it relates to overall visual character of development within the City of Los Angeles. As described in the *Projection Description*, Chapter 3, *Updates to Specific Plans and Planning Overlays*, the Bunker Hill Specific Plan will be repealed as part of the Proposed Downtown Plan. The purpose and provisions of the Bunker Hill Specific Plan will be implemented through the New Zoning Code provisions.

Los Angeles Sports and Entertainment District Specific Plan (LASED)

The Los Angeles Sports and Entertainment District Specific Plan (LASED), located in the Central City Community Plan Area, contains design regulations for development within this portion of Downtown, which mainly includes development within a 1,500-foot radius of the Figueroa Street/11th Street intersection in Downtown Los Angeles. Regarding aesthetics, the LASED is intended to: 1) execute the goals of the General Plan as it relates to the geographic area and to future development, and 2) enhance the existing Convention Center and Staples Center development through establishment of unique streetscape design guidelines. Like the ASP and BHSP, the LASED defers to the provisions in the Urban Design Guidelines to establish building design standards for development projects in this district. Further, the LASED establishes building height and massing regulations for the five subareas in this district that help achieve visual consistency. These regulations supersede those included in the district's Urban Design Guidelines provided in Appendix Q. The guidelines specify spacing, scale, and architectural requirements for commercial, residential, and sports arena projects.

Cornfield Arroyo Seco Specific Plan

The Cornfield Arroyo Seco Specific Plan (CASP) is intended to guide development within the plan area in a manner consistent with the Central City North, Northeast LA and Silverlake/Echo Park/Elysian Valley Community Plans. The purpose of the CASP is primarily to transform a vehicular-oriented industrial and public facility area into a cluster of mixed-use, pedestrian-oriented and aesthetically pleasing neighborhoods. The CASP also intends to increase access to open space, increase provision of a variety of housing types, shops, and services, maintain and enhance areas of job concentration, accommodate pedestrian mobility and use of public transit, preserve the character of historical structures, and develop more active public spaces through use of public art, parks, and courtyards combined with shops and services. In result, the CASP specifies regulations for development in the different zoning districts of the CASP area that detail permitted uses, allowable FAR, square footage limits, massing, and use of community benefit projects to allow greater floor area development (City of Los Angeles n.d.).

Downtown Design Guide (DDG)

The Downtown Design Guide: Urban Design Standards and Guidelines (Design Guide) is intended to provide guidance for development within the Downtown Los Angeles area including considerations of land use development, building massing, and materials choices. The policies within the Design Guide emphasize walkability and the making of great streets, districts, and neighborhoods through a targeted focus on the relationship of buildings to the street, including sidewalk treatment, the character of buildings as they adjoin the sidewalks, and connections to transit. The Design Guide supplements the provisions of the Los Angeles Municipal Code as well as the Urban Design and Neighborhood Character chapters of the General Plan Framework. As described in Chapter 3, *Projection,* some of the standards and guidelines in the existing Design Guide would now be regulated through the New Zoning Code. The Design Guide will be amended to remove content that is redundant to proposed New Zoning Code provisions, such as Form District, Frontage, or Development Standards. The Design Guide offers guidance to help establish key design characteristics of a project, such as building massing, tower design and on-site open space (City of Los Angeles (City of Los Angeles 2017a). The Design Guide will also include additional content that would provide best practices that are responsive to specific neighborhood character. These neighborhood best practices will serve as an informational resource for new infill development to reinforce the unique identity of these neighborhoods and complement existing built patterns.

Little Tokyo Community Design Overlay

The Little Tokyo Community Design Overlay (Little Tokyo CDO) establishes long-term goals and provides design principles that will be used to guide future development within the CDO area. The community of Little Tokyo has historically contained a range of significant Japanese religious and cultural institutions, consisting of a mix of residential, commercial, industrial, and institutional uses. Development patterns within the Little Tokyo CDO range between small-scale historic buildings on the north side of East First Street, to mid-higher multi-story structures along Third Street, and low- to mid-rise industrial and warehouse structures on the south side of Third Street. The intent of the Little Tokyo CDO is to give guidance and direction for the design of new buildings and public spaces, to promote a more pedestrian-oriented environment, enhance the visual quality of the area, and preserve the historical and cultural identity of Little Tokyo. As described in Chapter 3, *Projection Description,* some of the standards and guidelines in the existing Little Tokyo CDO would now be regulated through the New Zoning Code. The Little Tokyo CDO will be amended to remove content that is redundant to proposed New Zoning Code provisions, such as Form District, Frontage, or Development Standards. In result, the Little Tokyo CDO will help enhance and strengthen the character of the neighborhood community in the midst of larger regional trends of redevelopment of older neighborhoods and installation of new transit connections and facilities (City of Los Angeles 2014).

Broadway Theater and Entertainment District Guide Community Design Overlay

The Broadway Theater and Entertainment District Design Guide Community Design Overlay (Broadway CDO) provides guidelines and standards for development projects along Broadway between 2nd Street and Olympic Boulevard in Downtown Los Angeles. The intent of the guidelines within the Broadway CDO are to guide and direct the rehabilitation of existing structures and the design of new buildings to improve the appearance, enhance the identity, and promote the pedestrian environment of the Broadway corridor. The guidelines also seek to encourage the development of a regional entertainment district centered around its twelve historic theaters. The primary goal of the guidelines is to ensure that future development contributes to a cohesive, pedestrian-friendly and vibrant entertainment, commercial, and mixed-use district. By encouraging a variety of retail, services, office uses, entertainment uses, and housing, the guidelines also help facilitate centers of pedestrian activity to support local transit and foster an active street environment. This is accomplished through using consistent streetwalls at the property line, with appropriate recesses for entrances, adequate transparency, appropriate signage, increased landscape detailing, and protection of

historic structures (City of Los Angeles 2009). As described in Chapter 3, *Projection Description*, some of the standards and guidelines in the existing Broadway CDO would now be regulated through the New Zoning Code. The Broadway CDO will be amended to remove content that is redundant to proposed New Zoning Code provisions, such as Form District, Frontage, or Development Standards.

City of Los Angeles Planning and Zoning Code and Building Regulations

LAMC Chapter 1 contains the Planning and Zoning Code, and Chapter 9 contains Building Regulations. The purpose of the Planning and Zoning Code is to designate and regulate the location, use, height and size of buildings. The Planning and Zoning Code regulates the aesthetics and visual quality of development projects. It includes development regulations specific to each zone and also addresses parking, landscaping, land form protection, lighting, and a number of other topics that influence the aesthetics of a development project. The Planning and Zoning Code also includes design regulations that seek to affect the physical alteration of streets, intersections, alleys, pedestrian walkways, and landscaping.

The LAMC is currently undergoing a comprehensive revision under **re:code LA**. The existing Zoning Code is not being repealed as part of this Project. The existing Zoning Code would remain in place, and the New Zoning Code regulations resulting from the re:code LA process would only be adopted and operative when property is rezoned and community plans are amended. This is expected to occur through community plan updates and other discretionary review processes, such as with the proposed Downtown Plan update. For the Downtown Plan, the City intends to implement the **New Zoning Code** in the Downtown Plan Area. As discussed in Section 3.7.4, *New Zoning Code*, the revisions to the code will include new zone classifications for the Downtown Plan and elements of the New Zoning Code that would be required to utilize the new zones, such as definitions and development standards, including standards and Bonus Provisions that may be utilized citywide (i.e., Citywide Elements). With approval of the Downtown Plan, the aspects of the New Zoning Code would be adopted and applied throughout the Downtown Plan Area.

New zoning requirements would be adopted as part of the Downtown Plan, specifically zoning requirements currently in Chapter 1 Zoning and Planning Code and other new requirements that are described later in this chapter. The City is generally defined by the San Gabriel Mountains in the north, the Santa Susana Mountains, Santa Monica Mountains, and Pacific Ocean in the west, Pacific Ocean in the South, and Verdugo Mountains, San Rafael Hills, and Repetto Hills in the east. The Santa Monica Mountains bisect the City, separating the San Fernando Valley in the north from the Los Angeles metropolitan basin in the south. Nonetheless, the following LAMC Sections and Ordinances regulate issue areas pertaining to the aesthetics of development in the City of Los Angeles. Those sections from Chapter 1 of the LAMC referenced below will be carried over to Chapter 1A of the LAMC (the New Zoning Code) either as part of this Project or alongside a future Community Plan Update; although the regulations may be modified to meet the structure of the New Zoning Code, they would meet the intent of these existing regulations.

Lighting

Chapter 1, Article 2, Sec. 12.21 A5(k). All lights used to illuminate a parking area shall be designed, located and arranged so as to reflect the light away from any streets and any adjacent premises.

Chapter 1, Article 7, Sec. 17.08C. Plans for street lighting system shall be submitted to and approved by the Bureau of Street Lighting.

Chapter 9, Article 3, Sec. 93.0117. No exterior light source may cause more than two foot-candles (21.5 lux) of lighting intensity or generate direct glare onto exterior glazed windows or glass doors; elevated habitable porch, deck, or balcony; or any ground surface intended for uses such as recreation, barbecue or lawn areas or any other property containing a residential unit or units.

Chapter 9, Article 1, Section 91.6205 (K)4. Signs are prohibited if they contain flashing, mechanical and strobe lights in conflict with the provisions of Section 80.08.4 and 93.6215 of this code.

Chapter 9, Article 1, Section 91.6205M. No sign shall be arranged and illuminated in such a manner as to produce a light intensity of greater than three foot-candles above ambient lighting, as measured at the property line of the nearest residentially zoned property

Land Form Preservation

Chapter 1, Article 7, Section 17.50-E. Establishes slope-density regulations which restrict density on the basis of the calculated average of the ungraded slopes at selected contours within a parcel that is proposed for divisions of land

Chapter 1, Article 2, Section 12.21-A.17. Establishes the hillside overlay zone within which restricted densities and other requirements for neighborhood and environmental compatibility apply.

City of Los Angeles Tree Preservation Ordinance

Protected trees are considered aesthetic resources. The City of Los Angeles adopted an ordinance for the Preservation of Protected Trees (Ordinance No. 177,404; LAMC Chapter IV, Article 6) which became law on April 23, 2006. The ordinance protects the following tree species:

- All native Oak tree species (Quercus spp), but excluding the Scrub Oak (Quercus dumosa)
- Western Sycamore (Platanus racemosa)
- California Bay (Umbellularia californica)
- California Black Walnut (Juglans californica)

The ordinance applies to trees that are four inches or greater in diameter at 4.5 feet above ground, and on any lot size. Protected tree removal requires a removal permit by the City of Los Angeles Department of Public Works (LADPW). Ordinance-projected trees on private property and streets rights-of-way are protected by the City's Tree Preservation Ordinance; therefore, any act that may cause the failure or death of a protected tree requires inspection by the LADPW Urban Forestry Division. In the event that the LADPW approves a tree removal, replacement of the tree is required with at least two trees of a protected variety. See Section 4.4, Biological Resources, for a discussion of protected trees.

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant impact related to aesthetics if it would:

- Have a substantial adverse effect on a scenic vista (Threshold 4.1-1)
- Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway (Threshold 4.1-2)
- If the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality (Threshold 4.1-3)
- Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area (Threshold 4.1-4)

METHODOLOGY

This impact discussion considers impacts from inside and outside the Downtown Plan Area where the visual resources identified in the existing setting may be affected by the Proposed Project. This impact section analyzes impacts from reasonably anticipated development of the Proposed Project.

As shown in **Figure 4.1-1**, the majority of the Downtown Plan Area is located within TPAs. Only a small portion is located outside of the 0.5-mile transit buffer of the TPA boundary and lies in the industrially zoned area in proximity to the Mesquit Street/Jesse Street intersection. TPAs are defined as areas within 0.5-mile of a major transit stop. As discussed previously, under SB 743, residential, mixed-use, and employment center projects in a TPA are exempt from aesthetic impacts analysis. Most development that is reasonably foreseeable in the TPAs of the Downtown Plan would be residential, mixed use, or an employment center and would, therefore, as a matter of law, not have aesthetic impacts under CEQA. Notwithstanding, the relevant language of SB 743, codified at PRC Section 21099(d) does not expressly apply to planning projects and therefore as a conservative measure, this EIR will consider aesthetic impacts from the implementation of the Proposed Project in all of the Downtown Plan Area, including TPAs and including from development that would qualify for SB 743 exemption.

The evaluation of aesthetic impacts is a subjective exercise, both in identifying valued aesthetic resources and identifying impacts to valued aesthetic resources. Considerations for determining impacts under the various categories of aesthetic resources and impact thresholds are discussed below.

Scenic Vistas/Obstruction of Views

For the purposes of the CEQA analysis, impacts to views typically consist of the loss or obstruction of a valued public view (e.g., scenic vista, particularly a panoramic view of areas that have visual interest, or iconic structure), or changes in the character of the viewshed that detract from a valued public view, such as the elimination or obstruction of natural and/or man-made features that were formerly part of a valued viewshed. The assessment method identifies whether such viewpoints exist within the Downtown Plan Area and whether the content of the view would be adversely affected by the Downtown Plan. Diminishment of a scenic vista would occur if the Downtown Plan would introduce buildings or development that contrast enough with a visually interesting view, so that the content and quality of the view is permanently affected. The loss of a private view would not be an impact for purposes of this analysis. The City does not protect private views. The loss of private views from development is expected in an urban environment.

Visual Character

The concept of visual character is not explicitly defined in the CEQA Guidelines. In this aesthetics discussion, potential visual character impacts are assessed based on industry-accepted definitions of visual character. Visual character can be defined in terms of the overall impression formed by the relationship between perceived visual elements of the built, urban environment.

Elements contributing to the impression of the character of an area include the following:

- Height and mass of proposed buildings compared to existing development;
- The compatibility between uses and activities with the built environment;
- The quality of the public realm, including roadways, sidewalks, plazas, parks, and street furniture;
- The nature and quality of landscaping that is visible to the general public; and
- The relationship between built and unbuilt space, or building “coverage.”
- The presence of shade/shadows

Impacts to the visual character of an area generally relate to the removal of features with aesthetic value, the introduction of contrasting urban features into a local area, and the degree to which the elements of the Downtown Plan and the New Zoning Code detract from the visual character of an area.

Although the threshold of significance in Appendix G focuses on whether the Proposed Project conflicts with the applicable zoning in an urban environment, as the City is changing the applicable zoning with the Proposed Project, the analysis in this impact area will analyze whether the Proposed Project would be expected to degrade the existing visual character or quality of public views of the Downtown Plan area and its surrounding area for the Downtown Plan, and the City and its surrounding area for the New Zoning Code.

Light and Glare

Light and glare impacts are typically associated with outdoor artificial light during the evening and nighttime hours. Glare may also be a daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass and reflective building cladding materials, and may interfere with the safe operation of a motor vehicle on adjacent streets. In this aesthetics discussion, light and glare impacts are assessed qualitatively based on anticipated future development as well as applicable City regulations pertaining to acceptable levels and sources of light and glare.

PROJECT IMPACTS

Threshold 4.1-1	Have a substantial adverse effect on a scenic vista

Impact 4.1-1

Downtown Plan: The Downtown Plan would allow for greater development height and intensity throughout the Downtown Plan Area. However, the Downtown Plan Area is already highly-developed and lacks major identified scenic resources. In addition, future development would not block views of scenic resources from identified public view locations. Impacts to scenic vistas would be ***less than significant***.

New Zoning Code: The New Zoning Code would not have a substantial adverse effect on a scenic vista. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Community Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Community Plan Area would be speculative. Impacts to scenic vistas would be ***less than significant.***

Downtown Plan Impact

As identified in the Existing Setting section, Downtown Los Angeles is generally not an area from which views of scenic vistas are readily available. Scenic vistas in the Downtown Plan Area include limited views of the San Gabriel Mountains, Elysian Park, and the hills surrounding Dodger Stadium north of Downtown. However, these vistas are largely obstructed at the ground level due to the Downtown Plan Area's dense urban development, flat topography, and tall building heights. Most views are obstructed by intervening buildings, street bridges, freeway overpasses, and street trees. The western portion of the Downtown Plan Area contains high-rise structures up to 73 stories in height, and buildings within the eastern area are generally mid-rise to low-rise, ranging from one to four stories in the industrial zoned areas to four to twelve stories in the Center City/Historic Core district. Due to the close proximity of high-rise structures and the distance from the nearest mountains (approximately three miles), scenic views of natural resources are generally not available at the ground level.

Publicly accessible panoramic views of the Downtown Plan Area are available from surrounding areas, including the Hollywood Hills, freeways, and Griffith Park. These views include intense urban development that characterizes low-rise commercial and industrial structures and high-rise skyscrapers within the Financial District. As shown in Photo 1 of **Figure 4.1-4**, views of Downtown from Griffith Park are primarily of the skyscrapers and high-rise towers in the Financial District. Development further east of this area is obstructed or not visible due to smaller building heights.

The Downtown Plan would accommodate greater allowable building height and FAR (up to 13:1 FAR) in portions of the Downtown Plan Area. The new permitted FAR would generate greater development of high-rise structures within areas with Transit Core, Traditional Core, and Public Facilities general plan designations, comprising approximately 30 percent of the Downtown Plan Area. Developers would be able to achieve the maximum FAR in exchange for provision of public benefits including affordable housing, open space, historic preservation, or community facilities. A greater FAR would also be permitted for existing areas of mid- and low-rise development, which would generally allow for increased building heights across other general plan designations within the Downtown Plan Area such as in Hybrid Industrial and Community Center-designated areas. New high-rise developments would be visible from surrounding vistas outside of the Downtown Plan Area as well as from other areas generally within a 0.5-mile radius of the structures. However, in general, increases in building height would not obstruct public views of scenic resources or vistas because structures would not block existing views along public rights-of-way and views of urban streetscapes would not be substantially altered. Furthermore, the Downtown Plan would not alter existing street alignments such that existing views would become blocked. Areas with General Plan designations that permit increased building heights would be generally within the same areas as existing skyscrapers and other high-rise structures, and generally confined to the western portion of the Downtown Plan Area. Construction would largely involve infill development in already densely developed areas and preservation of open space areas and historical structures would be prioritized. Furthermore, each land use designation would contain specific form districts that regulate the permitted height of structures. Consequently, any change to the existing views of scenic vistas from the Downtown Plan Area due to taller development would be incremental since these views are already largely obstructed by existing development. Any changes to existing views of urban streetscapes would also be incremental since most existing streetscape views are limited to close-foreground views and are relatively unaffected by increased building height.

New high-rise structures reasonably expected from the Downtown Plan would be visible from publicly accessible vantage points outside of the Downtown Plan Area, including the Hollywood Hills, surrounding freeways, and Griffith Park. However, this development would only add to the existing urban skyline of Downtown Los Angeles. As discussed previously, the only Downtown Plan Area features that are visible from these vistas are the existing high-rise structures in the western portion of the Downtown Plan Area; other resources further to the east are not visible. Therefore, the addition of more high-rise structures would not block views of any identified scenic resources but, rather, would contribute to the existing urban skyline that characterizes downtown Los Angeles from other areas of the City.

Lastly, the Downtown Plan includes goals and policies consistent with the Conservation and Framework Elements' policies that are intended to protect scenic vistas, including LU 10.5 requiring pedestrian bridges to minimize visual impacts, LU 17.1 promoting a pedestrian environment that creates visual comfort, and LU 21.7 developing well-designed towers that include rooflines that enhance visual interest and add to the distinctive skyline. The Conservation Element includes objectives, policies, and programs related to land form and scenic vistas to protect and reinforce natural and scenic vistas through permit processing, enforcement, and environmental review of project designs to ensure that natural features and views are retained. Framework Policies 5.5.6, 5.5.7, and 5.7.1 aim to protect scenic vistas by encouraging the use of step-backs in heights for higher floors of buildings, promoting the use of underground utilities, and establishing standards for transitions in heights of buildings.

Overall, although the Downtown Plan would allow greater building heights and density than what currently exists in various portions of the Downtown Plan Area, the increased building heights and density would not result in the loss or obstruction of scenic vistas available from public vista points. Additionally, because there are no major scenic vistas in the Downtown Plan Area, the Downtown Plan would not conflict with Conservation and Framework Elements policies intended to protect scenic vistas. Impacts to scenic vistas would be ***less than significant***.

New Zoning Code Impact

As discussed in the Existing Conditions section, scenic views and vistas within the City include Pacoima Wash, San Gabriel Mountains, Santa Susana Mountains, San Pedro's coastal bluffs, Griffith Park, and Elysian Park.

The City Charter stipulates a maximum FAR of 13:1, which would remain unchanged with implementation of the New Zoning Code. The proposed development regulations under the New Zoning Code would allow for the same range of allowable FARs as are allowed today. These FARs would be achieved through minimum and maximum allowable building heights and FAR options. Maximum FAR may also be increased in exchange for provision of public benefits such as affordable housing, open space, historic preservation, or community facilities. As such, through future community plan updates and amendments, the New Zoning Code would provide these options for use in areas within the City that contain scenic vistas. Additionally, Development Standards Rules under the New Zoning Code also regulate elements such as landscaping, site lighting, wireless telecommunications facilities and parking that could affect development regulations in areas with scenic vistas. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative.

Although the New Zoning Code could allow for greater building heights and density than what currently exists in various portions of the City, no land in the City would be rezoned using the New Zoning Code until such time that a community plan is updated or amended to allow the new zoning classifications. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific impacts. Impacts to scenic vistas would be ***less than significant.***

Mitigation Measures

None required for either the Downtown Plan or the New Zoning Code.

Threshold 4.1-2	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway

Impact 4.1-2

Downtown Plan: There are no State scenic highways in the Downtown Plan area. The scenic highway closest to the Downtown Plan Area, Arroyo Seco Parkway, is 1.2 miles away and is not visible from any portion of the Downtown Plan. Therefore, the Downtown Plan would have ***no impact*** on scenic resources within a state scenic highway.

New Zoning Code: The New Zoning Code would not damage scenic resources within a state scenic highway. Further, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside

the Downtown Plan Area would be speculative. Impacts to scenic resources within a state scenic highway would be ***less than significant.***

Downtown Plan Impact

A portion of State Route 27 through the western portion of the City within the Palisades Highlands community outside of the Downtown Plan Area is the only State designated highway in the City. A portion of the Arroyo Seco Parkway through the northeastern portion of the City is a National Civil Engineering Landmark, a National Scenic Byway, and one of two California Historic Parkways. However, only the portion of the Parkway north of the Interstate 5 Freeway outside of the Downtown Plan area is designated as a state scenic and historic parkway. Only the southernmost portion of the parkway enters the Downtown Plan Area between the northernmost boundary of the Downtown Plan Area near Dodger Stadium and the 101 freeway/110 freeway interchange, and this portion of the Parkway is not designated as scenic or historic.

From the northern boundary of the Downtown Plan Area, views from the non-designated portions of Parkway include intermittent partial views of historic buildings such as Los Angeles City Hall and other high-rise structures to the south, as trees, hills, and vegetation obstruct views to the east and west. Views from the Parkway are primarily of adjacent low- and mid-rise commercial and residential urban development. The Downtown Plan would allow for higher maximum FARs than currently permitted in some areas, which could potentially accommodate increased building heights. However, this would not substantially degrade the overall views of the area. It is not expected that any impacts to the Parkway would occur from the Downtown Plan.

Stadium Way is the only City-designated scenic highway that enters the Downtown Plan Area at the northern boundaries of the Figueroa Terrace, Alpine Hill, and Chinatown subareas. However, views from this scenic highway are largely obstructed by adjacent residences, city fire department buildings and undeveloped, steep hillslopes that line a majority of the west side. Views from the highway at the closest point to the Downtown Plan Area are of surrounding urban development in the Chinatown subarea. There are no trees, rock outcroppings or historic buildings within the viewshed from this portion of the scenic highway. These views remain consistent continuing along the highway on the southeast side of Dodger Stadium. There are intermittent views of high-rise structures in the Financial District, but these are obstructed by street trees and overhead utility lines. Reasonably anticipated development from the Downtown Plan near the scenic highway would have General Plan designations of Villages and Medium Neighborhood Residential, which provide contextual use and form regulations that reinforce and complement existing development. Nonetheless, these designations would allow for higher density residential buildings and higher intensity commercial buildings to be constructed as infill development. A maximum of 6:1 FAR would be permitted in some areas, which could potentially accommodate increased building heights. However, this would not substantially change overall views of the area as no scenic resources are currently visible from the scenic highway. Because there are no state scenic highways in the Downtown Plan Area, the Downtown Plan would have ***no impact*** to scenic resources within a state scenic highway.

New Zoning Code Impact

A portion of State Route 27 through the western portion of the City within the Palisades Highlands community is the only State designated highway in the City. A portion of the Arroyo Seco Parkway through the northeastern portion of the City is a National Civil Engineering Landmark, a National Scenic Byway, and one of two California Historic Parkways. Neither would be expected to be impacted by the New Zoning Code. Application of the New Zoning Code would make available a range of FAR and building heights that could be applied through future community plan updates and amendments. The available Form Districts proposed by this project could allow greater FAR and allowable building heights than are currently applied

that could impede views of scenic resources within a state scenic highway if applied in or adjacent to this four-mile segment. However, this project does not propose to apply these Form Districts outside of the Downtown Plan Area and the Form Districts would not allow more than 13:1 FAR as mandated by the City Charter. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative.

Additionally, the Historic Preservation Overlay Zone (HPOZ) and Historic Cultural Monument (HCM) designations applicable to areas within a state scenic highway would remain unchanged with the Proposed Project.

Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific impacts to scenic resources. Therefore, impacts to scenic resources within a state scenic highway would be ***less than significant.***

Mitigation Measures

None required for either the Downtown Plan or the New Zoning Code.

Threshold 4.1.3	If the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality

Impact 4.1-3

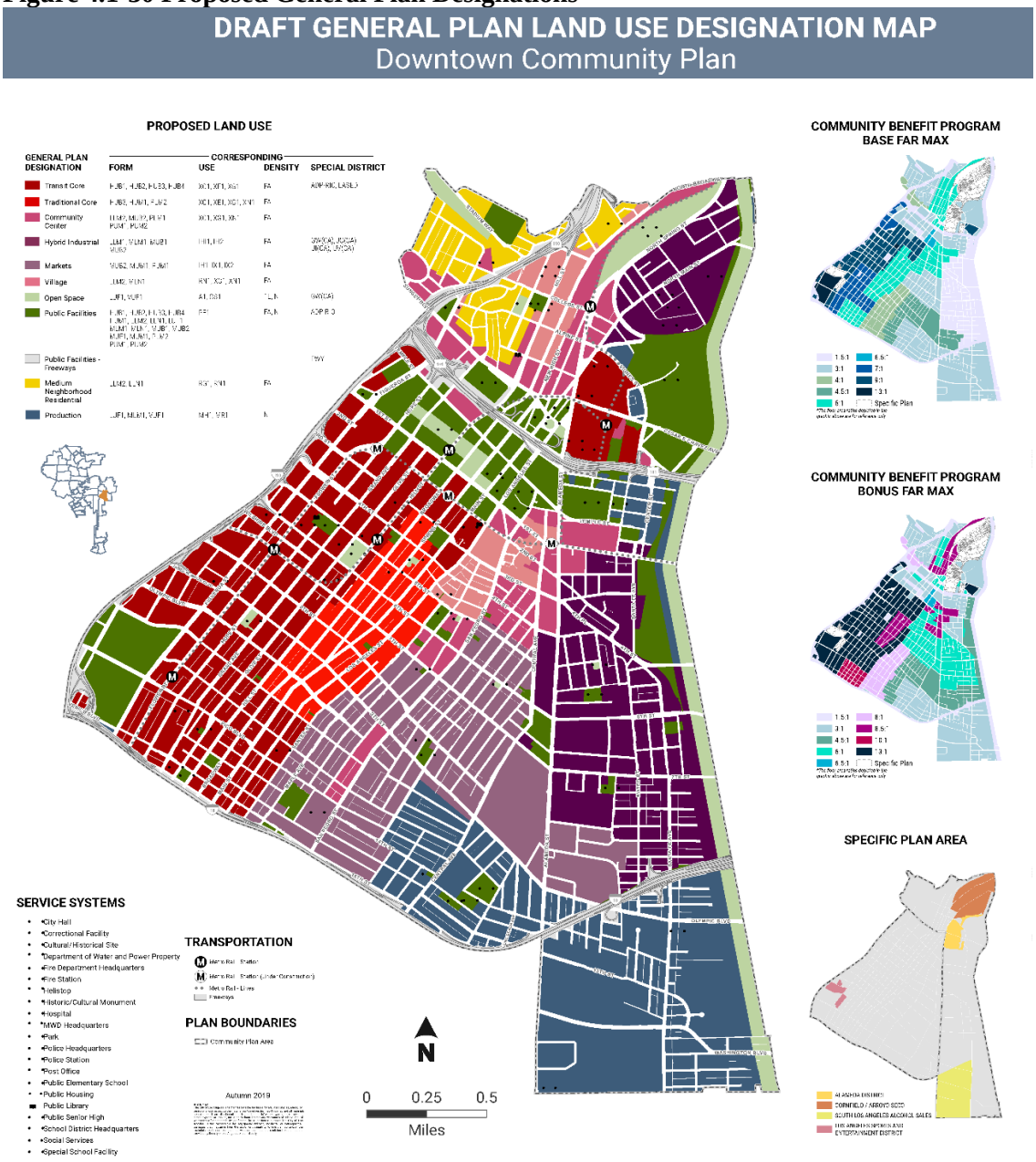
Downtown Plan: Reasonably anticipated development from the Downtown Plan would alter the visual character of portions of the Downtown Plan Area, including changes in building height and massing and associated increases in shadows/shading. However, development would be consistent with the goals and policies of the General Plan Framework and changes would likely benefit and generally enhance the visual character of the Downtown Plan Area. The overall impact to the visual character of the Downtown Plan Area would be ***less than significant.***

New Zoning Code: The New Zoning Code introduces many design standards which are intended to enhance the visual character of the City and would not degrade the existing visual character or quality. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This would be a ***less than significant*** impact**.**

Downtown Plan Impact

Reasonably anticipated development from the Downtown Plan would involve increased building heights and development intensities and would provide a greater mix of uses in the Downtown Plan Area through new General Plan designations that are intended to foster a greater mix of uses beyond that which already exist within Downtown. While the proposed General Plan designations may allow for a change in the existing visual character, development patterns would be consistent with the 2016-2040 RTP/SCS because the Downtown Plan would focus development and improvements around employment centers and transit-served areas. **Figure 4.1-30** shows the general layout of the proposed land use designations. Changes to visual character within the Downtown Plan Area would result primarily from increased building densities permitted by the Downtown Plan. As previously discussed, the Downtown Plan Area is currently

Figure 4.1-30 Proposed General Plan Designations



characterized by high-density urban development with a wide range in building heights across the various subareas and districts and a highly mixed-use environment.

Generally, buildings decrease in average height moving from west to east across the Downtown Plan Area, with the tallest buildings (up to 73 stories) located in the Financial District. Average building heights are between three and 13 stories in the Center City district, between three and five stories in the Industrial, Manufacturing and Wholesale District, and between one to three stories in the industrial use areas in the east. Taller structures such as office buildings and hotels are dispersed throughout the mid-rise and low-rise development areas.

Future reasonably anticipated development from the Downtown Plan elsewhere in the Downtown Plan area would be primarily industrial uses and, as a result, would be visually consistent with adjacent existing uses. Further, more broadly, the Downtown Plan would include building design regulations, as specified in the updates to the New Zoning Code, to address factors that influence the visual character in the Plan Area including building orientation, building scale, height and massing, parking, building façade/frontage, and landscaping. Specifically, form and frontage districts in the New Zoning Code would set limits for building height, step-backs, and massing, across the new proposed land use designations to help provide cohesive height and bulk transitions across future structures within the Downtown Plan Area. This would be particularly emphasized in historically sensitive areas to minimize potential adverse effects to existing character.

Generally, the form districts that would be applied and associated development guidelines would aim to minimize the effects of land use and zone changes on the existing character of neighborhoods and districts in the Downtown Plan Area and would also be intended to enhance overall visual character and quality. In addition, the City would continue to use the Downtown Design Guide for future development within the Plan Area. As a result, adherence to existing design guidelines and regulations would minimize potential adverse effects to visual character. **Figures 4.1-31** through **4.1-37** show resulting views from future development in the Downtown Plan Area in accordance with the building height and massing standards provided in the updated zoning regulations of the proposed New Zoning Code.

Transit Core

The Downtown Plan would re-designate Bunker Hill, Financial District, South Park, and Convention Center/Arena districts as well as the Government Support subarea as Transit Core. The largest permitted increases to development potential would occur in these areas as there would be no height limit. Future permitted development in these areas would include regional mixed use, multi-family residential, and entertainment uses. Buildings would generally have a maximum permitted 13:1 FAR with base minimum heights of six to ten stories. Lot sizes would be at least 2,500 square feet with up to 100 percent coverage and no stepback. High-quality exterior façade designs would help provide visual interest, along with active ground floor uses. Development would also include enhanced streetscapes, paseos, and alleys to increase pedestrian connectivity within the high-intensity built environment. As a result, implementation of the Downtown Plan is anticipated to increase overall building heights in these areas as a result of increased FAR when combined with minimum site setback, open space, and other requirements. Within the Transit Core areas on the eastern boundary of the Downtown Plan Area, the increased building heights and massing would simply add a greater amount of tall buildings within an area already characterized by skyscrapers and high-rises, and would not substantially change the visual character of the area.

Building heights in the current South Park district and in the Union Station and Public Facilities designation subarea in the northeast portion of the Downtown Plan area would experience the largest increase as a majority of existing development within this area is primarily characterized by low- to mid-rise structures. Given the range between the minimum and maximum allowable heights, it would be possible for a 10-story building and a 50-story high-rise to be located next to each other. Increased building heights and massing

Figure 4.1-31 Change in View from I-10 Freeway toward Convention Center

Photo 1: Current view from I-10 freeway looking north towards the Staple Center and Convention Center

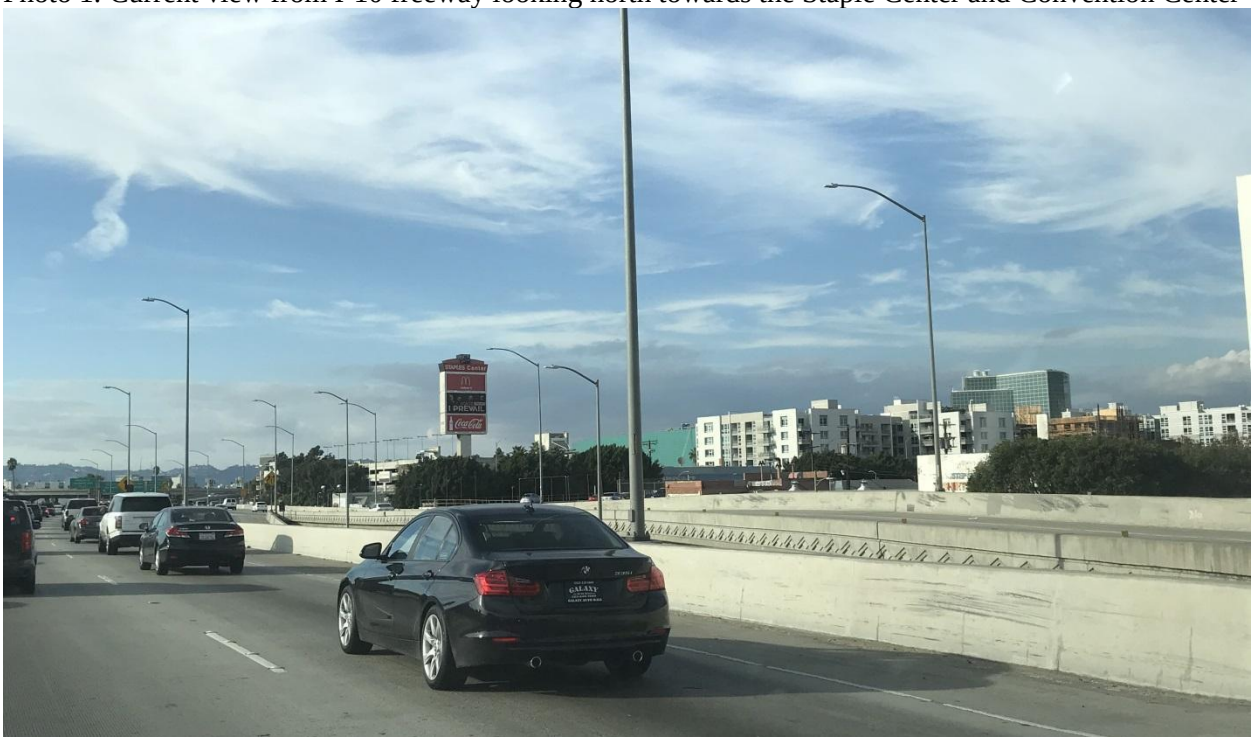


Photo 2: View with potential future development

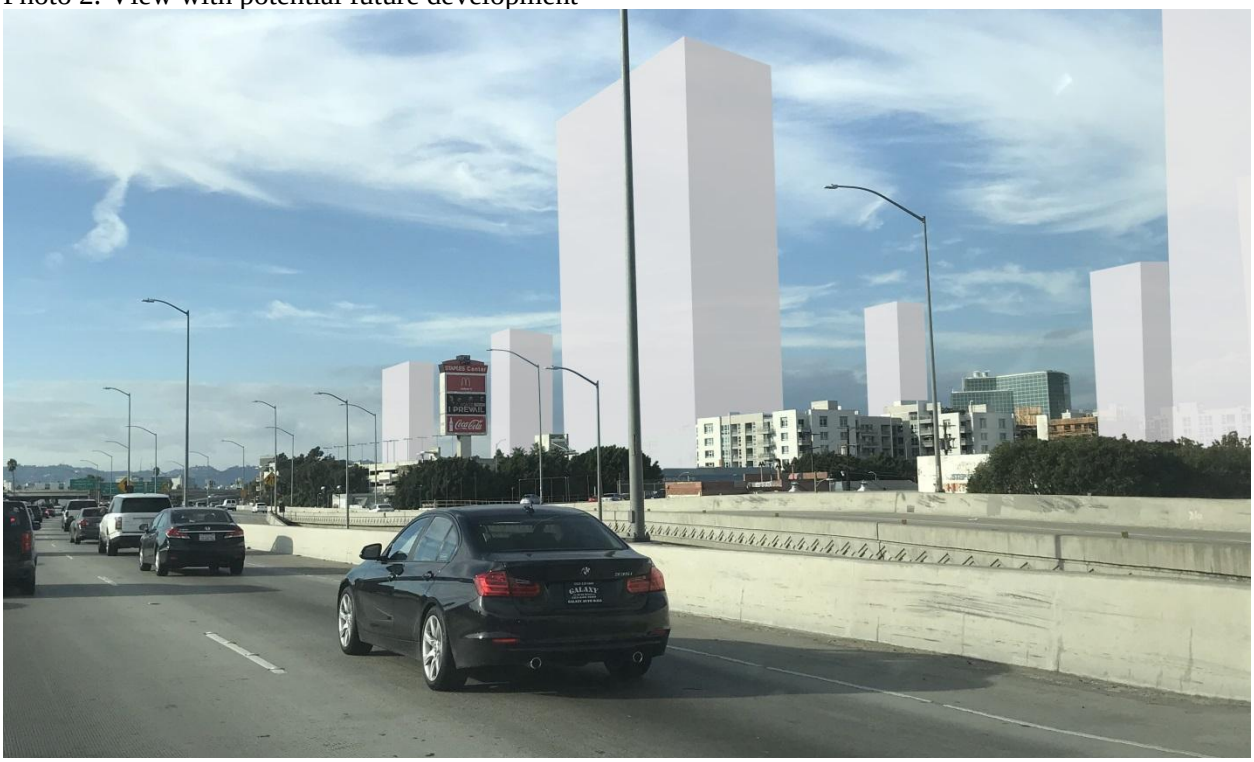


Figure 4.1-32 Change in View from I-10 Freeway toward South Park District

Photo 1: Current view from I-10 freeway looking north towards South Park District

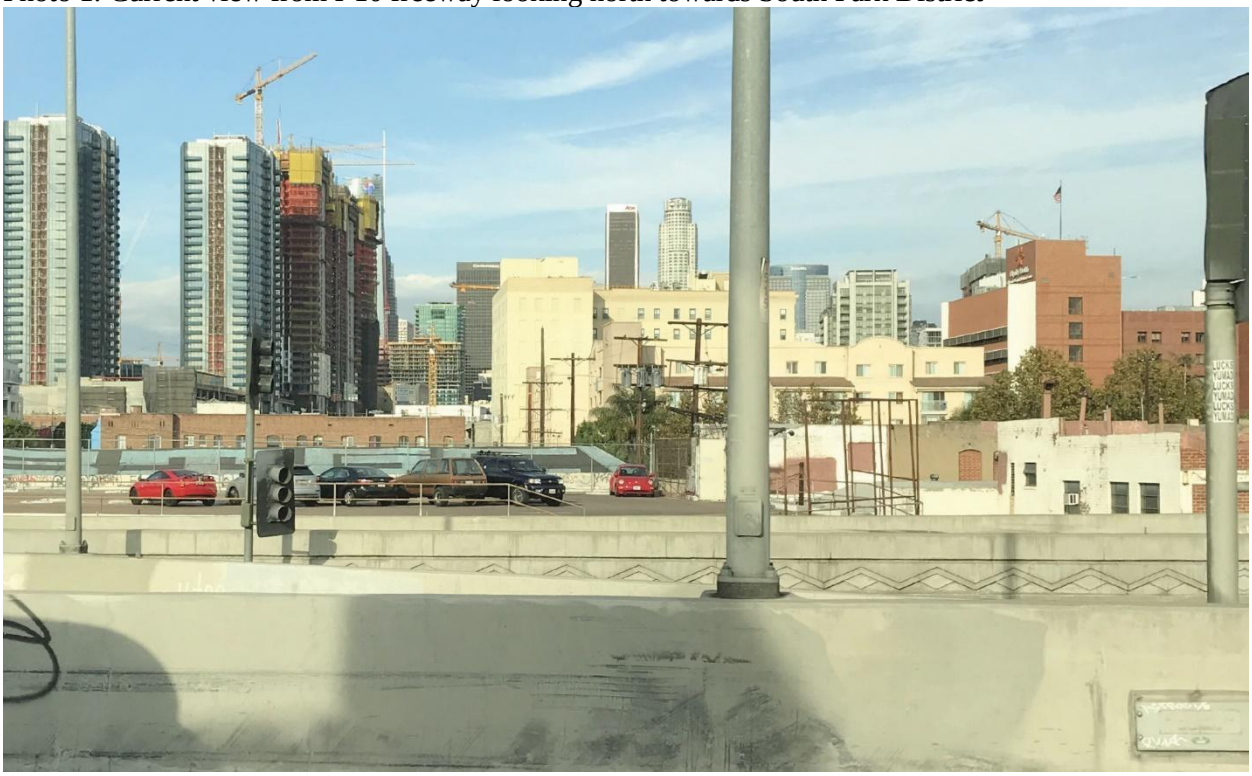


Photo 2: View with potential future development

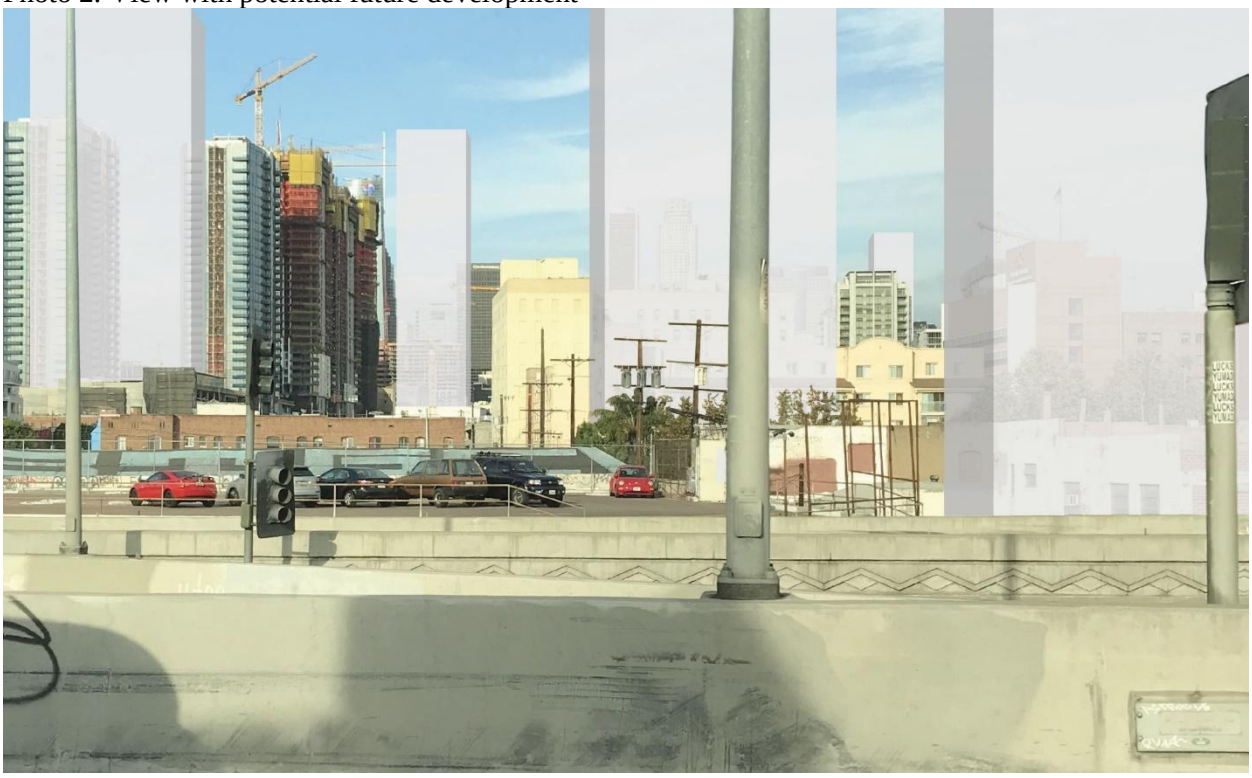


Figure 4.1-33 Current View of Downtown Area Skyline

Figure 4.1-34 View of Downtown Area Skyline with Potential Future Development

Figure 4.1-35 Change in View along Broadway

Photo 1: Current view looking south along Broadway Street

Photo 2: View with potential future development

Figure 4.1-36 Change in View at Naomi Avenue and 12th Street

Photo 1: Current view looking west at intersection of Naomi Avenue and East 12th Street

Photo 2: View with potential future development

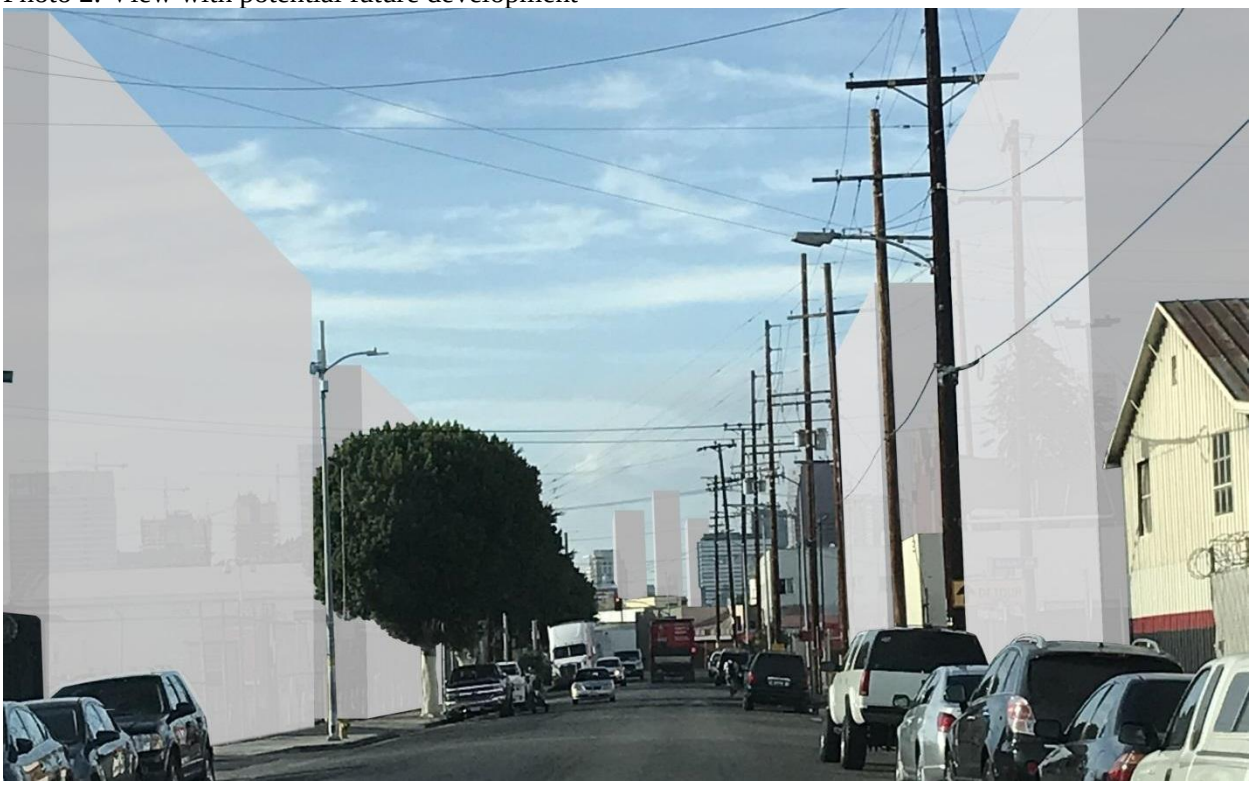


Figure 4.1-37 Change in View at San Pedro Street and 2nd Street

Photo 1: Current view looking northwest at intersection of San Pedro Street and 2nd Street in Little Tokyo

Photo 2: View with potential future development

in these areas would substantially alter the existing visual character of the area and increase the number and length of building-generated shadows. Such development would not occur immediately, but rather, would happen gradually over time, and development would be consistent with the new zoning regulations that would be established by the Downtown Plan. Further, the Downtown Plan CPIO would provide best practices regarding tower placement and spacing. Although these best practices are not mandatary, they would serve as a resource for contextual design of buildings in the Plan Area.

Overall, development of high-rise structures under the Downtown Plan would contribute to the urban skyline, improve urban streetscapes, and be consistent with zoning regulations. **Figures 4.1-31** through **4.1-34** show views of potential development in the Transit Core area, which would implement General Plan Framework policies related to locating growth in already developed centers that are served by transit and proximate to jobs.

Traditional Core

The Center City/Historic Core district would be re-designated as a Traditional Core Area and would experience the second largest permitted increase in building development capacity and potentially in building height. Future permitted development would include mixed use community and multi-family residential developments with an emphasis on entertainment land uses. Buildings would have a maximum permitted 8.5:1 to 13:1 FAR with similar lot coverage and building intensity and massing as in Transit Core designated areas. Implementation of the Downtown Plan would also increase the mix of uses and shopfronts and active alleys would contribute to the development of a more pedestrian-oriented environment. Although this development would change the visual appearance of some structures in the Traditional Core, the Downtown Plan would include provisions to protect, restore, and enhance the historically significant buildings in this area, and historic design features and blocks would be built out edge-to-edge to help define a distinctive visual character. As discussed in Section 4.4, *Cultural Resources*, it is possible that some historic structures, and other buildings over 50 years old, would undergo alteration or demolition during the redevelopment process to accommodate new uses. Though the Downtown Plan would promote reuse and preservation of existing structures that characterize unique urban development in historical areas, alteration or demolition of existing historic structures could constitute a considerable visual change. However, as also discussed in Section 4.4, *Cultural Resources*, the provisions in the Cultural Heritage Ordinance reduce impacts to historic properties in the City as a whole including throughout the Downtown Plan Area where a specific development site is located on designated historic properties. In addition, zoning strategies in the Downtown Plan would specify step-back, articulation, entrance, entry-feature and transparency requirements as well as allowable materials for future development to reinforce the historic character of the Traditional Core.

With the implementation of the Cultural Heritage Ordinance and the Downtown Plan zoning requirements for new development aimed at improving walkability and connectivity and reinforcing important historic features, it is anticipated that this area would experience an overall improvement in visual character. **Figure 4.1-34** shows views of potential development in the Traditional Core area without application of zoning design strategies that would be expected to enhance or complement existing visual character.

Medium Neighborhood Residential Villages

Future permitted development in the Medium Neighborhood Residential and Villages designated areas would focus on establishing traditional, walkable, and compact residential neighborhoods and provide a range of housing types. Pedestrian amenities and connectivity would be enhanced with connections to integrated commercial uses, such as restaurants, retail, and small offices, and historic and cultural structures would be preserved and utilized where present. Medium Neighborhood Residential designations would generally have a maximum permitted 3:1 FAR; Villages would be allowed a maximum of up to 6:1 FAR. The average building height and massing would remain similar to existing conditions under the Downtown

Plan, and overall visual character would likely benefit from planned development improvements. Future development within the Medium Neighborhood Residential and Villages designated areas would help contribute to an inviting public realm by integrating small, local-serving retail establishments and other commercial uses into the residential fabric of new walkable, compact neighborhoods.

Hybrid Industrial

Future permitted development in the Production designated areas would be focused on sustaining industrial activity and prioritize space for employment, including light and heavy industrial, new industry, manufacturing, and other related facilities. Areas with this new general plan designation are primarily located within TPAs.

Future development in Hybrid Industrial designated areas would be subject to zoning requirements regarding articulation, entrances, entry-features and transparencies as well as allowable materials that would reinforce the historic industrial character of this area. The zoning would require new development to be constructed of Type I, II, or IV (concrete, steel, or heavy timber) construction types, to sustain existing development patterns and support integration with the existing built form. Additionally, there are Downtown-wide incentives for adaptive reuse of historic structures to support maintenance of local character.

The average building heights and associated shadows would increase in this area due to the higher permitted FAR. This would result in a more intense urban visual character that some may perceive as an adverse change from existing conditions. However, it is anticipated that the general visual character of areas with these designations would generally be improved by reasonably anticipated development from the Downtown Plan due to the addition of active pedestrian amenities and resources, and the addition of points of visual interest with creative, flexible building structures in industrial areas.

Production

Future permitted development in the Production designated areas would be focused on sustaining industrial activity and prioritize space for employment, including light and heavy industrial, new industry, manufacturing, and other related facilities. Areas with the Production general plan designation are primarily located outside existing TPAs. Future development in Production designated areas would include large format structures with flexible lot configurations to accommodate industrial activity and goods movement. These areas would have a maximum permitted 3:1 FAR, which reflects the existing regulations. As a result, future development would help sustain the existing character of Production areas.

Public Facilities

These General Plan designations include the Civic Center district and Government Support subarea. Existing development in areas with these designations house governmental, institutional, and cultural functions for the City and contain architecturally unique buildings that range from six to 20 stories in height. The intended purpose of this designation is to encourage greater mix of uses within civic centers and create an active public realm by allowing for development of a variety of structures, site layouts and building designs. These would provide greater access to street life as well as active public use spaces for programming and public events. Implementation of the Downtown Plan would not alter existing architecturally unique structures, such as Los Angeles City Hall and the Caltrans District 7 office, but would integrate additional office and hotel structures and allow for up to 6.5:1 FAR. Such development would alter the existing visual character in the Civic Center and Public Facilities areas by adding more midrise and high-rise structures. This increased building height and intensity would increase the number and length of shadows generated by buildings, but would not adversely affect the existing visual character of this area

because shade effects are typical in an urban environment, and can also be desirable since they provide respite from heat and enhance pedestrian comfort..

Markets

The Industrial, Manufacturing and Wholesale District and surrounding areas would be generally included within the Markets general plan designation. Existing structures are generally one to three stories in height with few taller buildings (up to six stories) interspersed, and bear no visual relation to each other. Under the Downtown Plan, future development would add creative office space, limited multi-family residential uses, and active live/work areas in addition to the wholesale and commercial development uses. Buildings would have a maximum permitted 4.5:1 – 8:1 FAR with a high percentage of lot coverage and minimum required setbacks. Such changes would visually alter the existing character of the area by adding more midrise and high-rise structures, largely increasing building intensity and massing, increasing the mix of development uses, and increasing overall shading. However, such changes would likely improve the surrounding visual character since existing developments widely vary in architectural style and exterior façade and are not visually consistent, and various structures are in poor condition and have not been updated since originally constructed in the mid-1900s. Increased shading would be consistent with the character of the Downtown Plan Area and would provide cooling benefits in areas subject to intense sunlight and heat. The Downtown Plan would encourage adaptive-reuse and rehabilitation of these structures to maintain their unique character, and incorporation of active live/work and retail uses in taller buildings would help create a more visually cohesive urban character. **Figure 4.1-35** shows views of potential development in the Markets area.

Community Center

Existing development in the Community Center area consists mainly of commercial uses with some residential uses. Buildings are generally midrise but can range from three stories to 12 stories in height. Buildings vary in architectural style and massing with little visual relation between each other, and many have street-facing parking lots. Under the Downtown Plan, future development would establish midrise buildings with strong street walls and increased development density, providing a mix of multi-unit housing, office use, additional ground floor commercial development, and service uses. High quality streetscapes and public spaces would be added to provide amenities to residents and visitors, and pathways would be established between transit resources. The increased building height and massing, along with the addition of new uses, would alter the visual character of the area and produce more and potentially longer shadows in some locations. However, because existing development is largely visually inconsistent, reasonably anticipated development in accordance with Downtown Plan development standards would generally improve visual quality by promoting a cohesive development pattern and active ground floor uses that would improve views of urban streetscapes and unify the urban character of these areas. **Figure 4.1-36** shows views of potential development in the Community Center area.

Conclusion

Reasonably anticipated development from the Downtown Plan, as directed by the proposed General Plan designation and zoning changes, would increase the height, scale, and density of buildings and other structures in the Downtown Plan Area. Such changes would represent a change in the visual character of some areas, especially areas with Transit Core, Hybrid Industrial, and Community Center designations. However, future development would likely benefit and improve the visual character and quality in some of these areas, or would simply increase the amount of midrise and high-rise buildings in areas that already contain such structures. New development would be designed with contextual form and frontage regulations, to be compatible with existing visual character. The Downtown Plan would include zoning incentives to assist in protecting existing historic resources. The Downtown Plan would also include

standards to encourage location of parking underground and require screening or wrapping with active uses, when located above ground which would enhance the visual quality of the Plan Area.

As discussed in Existing Setting, shadow effects already exist in the Plan Area, especially in areas with taller buildings. With implementation of the Downtown Plan, new, taller buildings could be built in the Transit Core, Traditional Core, Hybrid Industrial, and Community Center designations. The taller buildings could potentially increase shade effects along public spaces, such as public rights-of-way (i.e., sidewalks and roadways) or parks. These shade effects are characteristics that are commonly found in an urban environment. The increased shade effects also can be considered beneficial, particularly during warmer seasons and sunny days, by providing cooling and cover from high heat days. Additionally, shade effects could make an urban environment more pedestrian friendly. Thus, the potential increase in shade and shadows are not expected to substantially degrade the existing visual character or quality of the CPA. Overall, implementation of the Downtown Plan is anticipated to enhance the visual character of the Downtown Plan Area. The Downtown Plan would not conflict with applicable zoning or other regulations governing visual quality or substantially degrade the existing visual character or of public views of the Downtown Plan Area or surrounding area and impacts would be ***less than significant***.

New Zoning Code Impact

The New Zoning Code standards would allow for a variety of new Form and Use districts that could be applied elsewhere in the City through future community plan updates and amendments. However, due to the modularity of the New Zoning Code, it is not known where or to what extent the standards will apply or where future development may occur. Projecting the location and type of standards and development would be speculative at this time; therefore, impacts related to visual character cannot be identified.

The New Zoning Code introduces Form Standards and Frontage Standards which are intended to enhance the visual character of the City. Form Standards regulate lot size, lot coverage, outdoor amenity space, floor area ratio and building height, upper-story bulk and building mass. Frontage Standards regulate the dimensions of frontages, parking setbacks, the design and spacing of building entrances, front yard landscaping, blank wall width, and ground story height. Character Frontages ensure that new construction is compatible with the existing built environment in districts that have a distinctive visual character. Development Standards which vary by district also enhance design.

Furthermore, Development Standards Districts under the New Zoning Code would include standards for parking structures to encourage parking, when provided, to be located underground or when located above grade, to be screened or wrapped with active uses. As part of the project, some of the standards addressing visual character in existing plans and overlays would be amended and integrated into the New Zoning Code. These components of the New Zoning Code are intended to protect and enhance visual character.

The proposed New Zoning Code would have a wide range of Form Districts. Through future community plan updates and amendment, it is possible that some parts of the City would be rezoned in a way that would apply Form Districts with greater allowable building height and FAR than is currently permitted in those areas; however, FAR would not be permitted above the maximum allowable FAR (13:1) set by the City Charter. Form Districts permit a base FAR and a bonus FAR. Bonus FAR could be permitted in exchange for provision of public benefits such as affordable housing, open space, historic preservation, or community facilities. As such, the New Zoning Code provides such options to be considered in areas within the City that are within a certain distance to public open spaces and parks, increasing the potential for shading impacts on public space.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze whether the

zoning applied would impact visual character and quality. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Impacts would be ***less than significant*.**

Mitigation Measures

Mitigation is not required for changes in visual character. See Section 4.4, *Cultural Resources*, for mitigation measures for historical resource impacts.

Threshold 4.1.4	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area

Impact 4.1-4

Downtown Plan: Reasonably anticipated development from the Downtown Plan could introduce new sources of light and glare in the Downtown Plan Area. However, development in a majority of the Downtown Plan Area already incurs high levels of nighttime lighting and glare, such that any additional effects would be incremental. In addition, future development would comply with applicable regulations regarding permitted lighting and glare. The impact from light and glare would be ***less than significant.***

New Zoning Code: The New Zoning Code would not create a new source of substantial light or glare. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Therefore, impacts related to light and glare would **be *less than significant*.**

Downtown Plan Impact

Lighting

A high level of ambient nighttime light is common to urbanized areas within the Downtown Plan Area due to the high development intensity throughout the Downtown Plan Area. A majority of the Downtown Plan Area experiences high levels of ambient nighttime lighting from sources including exterior mounted building lights, vehicle headlights, safety lights, streetlights and streetlamps, illuminated signs, and interior building lights. Nighttime lighting levels are lower in the residential areas at the north end of the Downtown Plan Area near Griffith Park.

Reasonably anticipated development from the Downtown Plan would allow for increased development density, intensity, and building heights throughout a majority of the Downtown Plan Area. With these increases, it could be reasonably anticipated that illumination from new development (security lighting, parking lot lighting, ornamental lighting, pedestrian scale lights, lighting from ground floor storefronts and signs) would increase illumination. Where reasonably anticipated development would occur as the result of implementation of the Downtown Plan, it could be anticipated that lighting would be increased at mid-block for pedestrian safety, security, and ornamental lighting. In addition, it could be anticipated that future development under the Downtown Plan, particularly development projects of substantial scale, would result in the introduction of lighting in areas where currently lighting levels are low or where lighting levels along sidewalks is interrupted by darkened or shadowed areas. It is also possible that additional sources of nighttime lighting associated with increased development capacity, crime prevention, and increased vehicle traffic would be implemented. However, as a majority of the Downtown Plan Area under the Downtown Plan would be characterized by industrial, commercial, and civic development uses that already incur high

ambient levels of nighttime lighting, any additional lighting from new development would be incremental. Residential uses in these areas, which are considered light-sensitive, would be exposed to high nighttime lighting levels, however as these areas currently incur high nighttime lighting from existing surrounding commercial development, light impacts would not substantially increase. For residential areas primarily in the northern portion of the Downtown Plan Area, while increased illumination is anticipated from sidewalk lighting, and from commercial and residential windows in mixed use and stand-alone projects, these effects would be incremental because these uses are already present in these areas and are anticipated to be less than significant.

All future Downtown Plan Area development would be required to adhere to the lighting provisions of the LAMC to reduce potential impacts from light as well as new lighting provisions proposed as part of the New Zoning Code. The LAMC contains specific regulations with respect to lighting. LAMC Section 12.21 A.5(k) (amended by Ordinance No. 171,858) (which will be carried through to the New Zoning Code) states that all lights used to illuminate parking areas shall be designed, located and arranged so as to reflect the light away from any street and any adjacent premises. The New Zoning Code includes this provision. Additionally, any new lighting would be designed to conform to applicable standards including LAMC Sections 93.0117 and the New Zoning Code, which pertains to outdoor lighting affecting residential property (no more than two foot-candles of lighting intensity from a light source is allowed on adjacent residential property). In addition, General Plan Framework Policies 5.5.3, 5.5.4, and 5.8.1 call for the formulation of building and site design standards, determination of appropriate urban design elements, and lighting commensurate with intended nighttime use. Finally, as discussed below, the New Zoning Code includes Development Standards Rules pertaining to site lighting that would regulate the the amount of illumination for different uses minimize light trespass and to ensure that the appropriate type and amount of lighting is used. Adherence to these standards on all new development in the Downtown Plan Area would reduce lighting impacts to a ***less than significant*** level.

Glare

Glare is a common phenomenon in the Downtown Plan Area primarily due to the occurrence of a high number of days per year with direct sunlight and the highly urbanized nature of the region. The majority of existing structures in the Downtown Plan Area are comprised of non-reflective materials such as concrete, wood, stucco and plaster. However, some structures, particularly within the commercial areas in the western portion of the Downtown Plan Area, consist of considerable amounts of reflective floor-to-ceiling glass windows. Reasonably anticipated development from the Downtown Plan would be generally consistent with the level of reflective surfaces on existing development and would comply with LAMC Chapter 9, Article 3, Section 93.0117 and Chapter 9, Article 1, Section 91.6205M, for light and glare affecting residential uses. These standards prohibit the use of highly reflective or deeply tinted glass. In addition, new standards contained in the New Zoning Code (discussed below) would further reduce glare potential by preventing new development from using materials that typically create high levels of glare. Adherence to applicable standards on all new development in the Downtown Plan Area would reduce glare impacts to a ***less than significant*** level.

New Zoning Code Impact

The New Zoning Code would not result in increased light and glare that could adversely affect views throughout the City. However, the New Zoning Code could be applied elsewhere throughout the City through future community plan updates and amendments. Due to the modularity of the New Zoning Code, it is not known where or to what extent the standards will apply or where future development may occur. Projecting the location and type of standards and development would be speculative at this time; therefore, impacts related to new sources of substantial light and glare cannot be identified.

The New Zoning Code includes Development Standards Rules (Article 4) that include light and glare regulations, which would function as performance standards. As discussed in Chapter 3, the Development Standards Rules pertaining to site lighting include regulations to minimize light trespass, and the amount of illumination required or allowed for different uses and certain zone districts. The glare standards prohibit the use of materials that typically create high levels of glare and generate excessive heat.

While the new zoning districts and Development Standards Rules would be codified through the New Zoning Code, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zoning classifications would analyze potential community- and site-specific impacts related to light and glare. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect light and glare impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Impacts would be ***less than significant***.

Mitigation Measures

None required for either the Downtown Plan or the New Zoning Code.

CUMULATIVE IMPACTS

The geographic area to analyze cumulatively considerable aesthetic impacts includes the entire City of Los Angeles and immediately surrounding areas.

Scenic Vistas

Cumulative impacts to scenic vistas would result if citywide development would block scenic views within the Los Angeles Basin, such as views of the San Gabriel Mountains or the Pacific Ocean or affect scenic resources in or near the city. Some prominent scenic views and vistas in the City include Pacoima Wash, San Gabriel Mountains, Santa Susana Mountains, San Pedro's coastal bluffs, Griffith Park, and Elysian Park. Scenic vistas that provide panoramic views of the Downtown urban skyline and other urban development outside of the Downtown Plan Area are provided from such locations as the Hollywood Hills, adjacent freeways, and Griffith Park. While implementation of the Downtown Plan and other citywide development would alter views of the City by allowing new development with building or greater mass and height than what currently exists, such development would not block views of scenic resources from these vistas. Cumulative development generally would not create additive effects to individual view locations since view changes would be location specific and because future development is not expected to directly alter scenic resources such as the mountains or ocean. Further, as discussed under Impact 4.1-1, future development in the Downtown Plan Area may enhance views of the Downtown urban skyline with the addition of more skyscrapers and high-rise structures. The New Zoning Code would apply only to the Downtown Plan Area at this time and any impacts of the New Zoning Code on other parts of the City would be speculative. As such, the incremental effects of the Downtown Plan and New Zoning Code on scenic vistas would not be cumulatively considerable. Cumulative impacts from the Proposed Project to Scenic Vistas would be ***less than significant***.

Scenic Resources

Future development in Los Angeles would incrementally alter visual conditions citywide, including within the viewsheds of state scenic highways in the City. These include State Route 27 from Pacific Coast Highway (PCH or State Route 1) to Mulholland Drive, Interstate 5 from Interstate 210 to the northern City

limit, U.S. Route 101 from Topanga Canyon Boulevard to the western City limit, State Route 118 from De Soto Avenue to the western City limit, Interstate 210 from Interstate 5 to the eastern City limit, State Route 1 from Venice Boulevard to the City boundary adjacent to Santa Monica, and State Route 1 north of Interstate 10. However, it is not anticipated that new development would fundamentally change views from these highways or block views of any identified visual resources. Moreover, as discussed under Impact 4.1-2, the scenic highway closest to the Downtown Plan Area, Arroyo Seco Parkway, is not visible from any portion of the Downtown Plan. Because the parkway is not in or within the viewshed of the Downtown Plan Area, the Downtown Plan would not contribute to any cumulative aesthetic impacts along that parkway or any other scenic highway. The New Zoning Code would apply only to the Downtown Plan Area at this time and any impacts of the New Zoning Code on other parts of the City would be speculative. As such, the incremental effects of the Downtown Plan and the New Zoning Code on scenic resources would not be cumulatively considerable. Cumulative impacts to scenic resources from the Proposed Project would be ***less than significant***.

Visual Character

Impacts to visual character are location-specific. Consequently, changes to the visual character of one area of the City would not alter the visual character of other neighborhoods or otherwise have additive effects on the visual character of another neighborhood. As such, although development across the City may collectively alter the visual character of many Los Angeles communities and neighborhoods, cumulative impacts to visual character would not occur. Shade and shadow impacts are also location-specific; therefore, although development across the City may increase shadows in specific locations, shadows would be limited to the immediate area of each new development and development in one community or neighborhood would not add to shadow impacts in another community or neighborhood. Cumulative shadow impacts would not occur.

As discussed under Impact 4.1-3, implementation of the Downtown Plan is expected to generally improve the visual character of the Downtown Plan Area by replacing underutilized and vacant parcels, such as parking lots, with new development that is consistent with Downtown Plan standards. This would remove lower-quality visual character features from the Downtown Plan Area. The New Zoning Code would apply only to the Downtown Plan Area at this time and any impacts of the New Zoning Code on other parts of the City would be speculative. Nevertheless, for the above reasons and because a specific purpose of both the Downtown Plan and the New Zoning Code is ensure that new development meets certain standards that would enhance visual character, the incremental effects of the Downtown Plan and New Zoning Code would not be cumulatively considerable. As such, there would be ***no significant cumulative impact*** to visual character from the Proposed Project.

Light and Glare

Light and glare levels vary considerably throughout Los Angeles, but light levels are generally consistent with that associated with urban and suburban environments. The incremental increase in light and glare associated with future development throughout the City would not be expected to substantially alter overall citywide light/glare conditions. In addition, impacts related to light and glare are location-specific. Consequently, incremental changes to light or glare conditions that may result from an individual development project in one area of the City would not alter light or glare conditions in other neighborhoods or otherwise have additive effects to citywide or regional light/glare levels.

A majority of the nearby communities are generally separated by distance, topography, the Los Angeles River, and/or major freeways. Consequently, although Downtown Plan Area wide development may incrementally increase lighting levels, the effects of the Downtown Plan light and glare conditions on adjacent areas and the city would be limited, due to a variety of barriers to light propagation, including buildings in the Plan Area.

The Downtown Plan Area is already urbanized and characterized by high levels of light and glare. Therefore, as discussed under Impact 4.1-4, the addition of new development would not dramatically change overall light or glare conditions in the Downtown Plan Area. Nearby communities are generally separated from the Downtown by distance and, in some cases, by topography, the Los Angeles River, and/or major freeways and buildings in the Plan Area. Consequently, although Downtown Plan Area wide development may incrementally increase lighting levels, the effects of the Downtown Plan on light and glare conditions on the adjacent communities and citywide would be limited, since, as noted above, a variety of barriers to light propagation (including buildings) are present in the area. Further, as discussed above, all future development in the Downtown Plan Area and throughout the City would continue to adhere to existing and proposed LAMC light and glare standards. The New Zoning Code would apply only to the Downtown Plan Area at this time and any impacts of the New Zoning Code on other parts of the City would be speculative. However, as with the Downtown Plan Area, future development in other areas of the City would be required to comply with City lighting standards. Based on the above information, the incremental effects of the Downtown Plan and New Zoning Code on light and glare conditions would not be cumulatively considerable**.** Cumulative impacts to light and glare would be ***less than significant*****.**

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4.2 AIR QUALITY

This section examines the degree to which the Proposed Project may result in significant adverse changes to air quality. Both short-term construction emissions occurring from activities, such as grading and haul truck trips, and long-term effects related to the ongoing operation of individual development projects are discussed in this section. The analysis focuses on air pollution from two perspectives: daily emissions and pollutant concentrations. "Emissions" refer to the actual quantity of pollutant measured in pounds per day (ppd). "Concentrations" refer to the amount of pollutant material per volumetric unit of air and are measured in parts per million (ppm), parts per billion (ppb), or micrograms per cubic meter ($\mu g/m^3$).f

The potential for the Proposed Project to conflict with or obstruct implementation of the applicable air quality plan, to violate an air quality standard or contribute substantially to an existing or projected air quality violation, to result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment, or to expose sensitive receptors to substantial pollutant concentrations are also discussed. Air quality data utilized in the preparation of this section is included as Appendix I to this Draft EIR.

ENVIRONMENTAL SETTING

AIR POLLUTANTS

Los Angeles is located in the South Coast Air Basin (SCAB), named so because it's geographical formation is that of a basin, with the surrounding mountains trapping the air and its pollutants in the valleys below. The SCAB includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. The regional climate within the SCAB is considered to be semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality in the SCAB is primarily influenced by a wide range of emissions sources – such as dense population centers, heavy vehicular traffic, and industry – and weather.

The general region lies in the semi-permanent high pressure zone of the eastern Pacific Ocean, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The SCAB experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The SCAB is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountains around the rest of its perimeter.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in mid to late afternoons on hot summer days. Winter inversions frequently break by midmorning.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino counties. In the winter, the greatest pollution problem is the accumulation of carbon monoxide (CO) and nitrogen oxides (NO_X) due to

low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and NO_X to form photochemical smog.

Air pollutant emissions in the SCAB are generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point sources and area sources. Point sources occur at an identified location and are usually associated with manufacturing and industry. Examples of point sources are boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and produce many small emissions. Examples of area sources include residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and consumer products, such as barbeque lighter fluid and hair spray. Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, race cars, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment, such as when fine dust particles are pulled off the ground surface and suspended in the air during high winds.

Both the federal and state governments have established ambient air quality standards for outdoor concentrations of various pollutants in order to protect public health and welfare. These pollutants are referred to as "criteria air pollutants" as a result of the specific standards or criteria that have been adopted for them. Federal and state ambient air quality standards (AAQS) have been set at levels considered safe to protect public health, including the health of "sensitive" populations, such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

Criteria Air Pollutants

The federal Clean Air Act (CAA) requires the United States Environmental Protection Agency (USEPA) to set National Ambient Air Quality Standards (NAAQS) for maximum allowable concentrations of six "criteria" pollutants in outdoor air. The six pollutants are carbon monoxide (CO), lead (Pb), ground-level ozone (O_3), nitrogen dioxide (NO_2), particulate matter (respirable particulate matter [PM_{10}] and fine particulate matter [$PM_{2.5}$]), and sulfur dioxide (SO_2). The standards are set at a level that protects public health with an adequate margin of safety for six common air pollutants (also known as "criteria air pollutants"). In addition, toxic air contaminants (TAC) are a concern in the SCAB. The characteristics of each of these pollutants are briefly described below.

O_3

Ozone is a highly reactive and unstable gas that is formed when reactive organic gases (ROG), sometimes referred to as volatile organic compounds (VOC), and nitrogen oxides (NO_X), byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant. Short-term exposure (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue and some immunological changes.

CO

Carbon monoxide is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. In urban areas, such as the Downtown Plan Area, automobile exhaust accounts for the majority of CO emissions. CO concentrations tend to be the highest during the winter

morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike O_3, motor vehicles operating at slow speeds are the primary source of CO in the SCAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

NO_2

Nitrogen dioxide is a nitrogen oxide compound that is produced by the combustion of fossil fuels, such as in internal combustion engines (both gasoline and diesel powered), as well as point sources, especially power plants. Of the seven types of NO_X compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic areas, such as urban areas like the Downtown Plan Area, may be exposed to higher concentrations of NO_2 than those indicated by regional monitors.

PM_{10} and $PM_{2.5}$

Respirable and fine particulate matter, PM_{10} and $PM_{2.5}$, consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter, respectively. Some sources of particulate matter, like pollen and windstorms, are naturally occurring. However, in populated areas like the Downtown Plan Area, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities.

SO_2

Sulfur dioxide is a colorless, pungent gas formed primarily by the combustion of high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms sulfates (SO_4). Collectively, these pollutants are referred to as sulfur oxides (SO_X). Generally, the highest levels of SO_2 are found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels.

Pb

Lead occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne Pb in the SCAB. The use of leaded gasoline is no longer permitted for on road motor vehicles, so the majority of such combustion emissions are associated with off-road vehicles. However, because leaded gasoline was emitted in large amounts from vehicles when leaded gasoline was used for onroad motor vehicles, Pb is present in many urban soils and can be re-suspended in the air. Other sources of Pb include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and the use of secondary lead smelters.

Pb is also found in lead-based paint, which is considered to be a health hazard for people, especially children. From the turn of the century through the 1940s, paint manufacturers used lead as a primary ingredient in many oil-based paints. Use of lead in paint decreased but was still used until 1978, when it was banned from residential use. Remodeling, renovations, or demolition activities in older buildings could disturb lead-based paint surfaces.

TACs

Toxic Air Contaminants refer to a diverse group of air pollutants that are capable of causing chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations,

and research and teaching facilities. TACs are different from criteria pollutants in that ambient air quality standards have not been established for them, largely because there are hundreds of TACs and their effects on health tend to be felt on a local scale rather than on a regional basis.

Health Effects of Criteria Pollutants

The health effects of criteria pollutants (i.e., O_3, CO, PM_{10} and $PM_{2.5}$, NO_2, SO_2, and Pb) are described below. The harmful effects of each criteria pollutant are summarized in **Table 4.2-1** and are further discussed in the *Public Health Effects and Sierra Club v. County of Fresno* White Paper included in Appendix I. As discussed above, NAAQS for criteria pollutants are set at a level that protects public health with an adequate margin of safety. The section, *Downtown Plan Area Air Quality*, summarizes how often criteria pollutant levels exceed NAAQS in the Downtown Plan Area in recent years.

TABLE 4.2-1 SUMMARY OF HEALTH EFFECTS OF CRITERIA POLLUTANTS

Pollutant	General Description
O_3	● Aggravation of respiratory and cardiovascular diseases ● Reduced lung function ● Increased cough and chest discomfort
CO	● Aggravation of some heart disease (angina) ● Reduced tolerance for exercise ● Impairment of mental function ● Impairment of fetal development ● Death at high levels of exposure
NO_2	● Aggravation of respiratory illness
PM_{10} and $PM_{2.5}$	● Reduced lung function ● Aggravation of respiratory and cardio-respiratory diseases ● Increases in mortality rate ● Reduced lung function growth in children
SO_2	● Aggravation of respiratory diseases (asthma, emphysema) ● Reduced lung function
Pb	● Behavioral and hearing disabilities in children ● Nervous system impairment

SOURCE: South Coast Air Quality Management District, Guidance Document for Air Quality Issues in General Plans and Local Planning, Appendix I, 2005.

Ozone

Individuals exercising outdoors, children and people with preexisting lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible sub-groups for ozone effects. Short-term exposures (lasting for a few hours) to ozone at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated ozone levels are associated with increased school absences. In recent years, a correlation between elevated ambient ozone levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple sports and live in high ozone communities.

Ozone exposure under exercising conditions is known to increase the severity of the observed responses mentioned above. Animal studies suggest that exposure to a combination of pollutants that include ozone may be more toxic than exposure to ozone alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.

Carbon Monoxide

Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of worsening oxygen supply to the heart.

Inhaled CO has no direct toxic effect on the lungs, but exerts its effect on tissues by interfering with oxygen transport by competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include patients with diseases involving heart and blood vessels, fetuses, and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes.

Reduction in birth weight and impaired neurobehavioral development has been observed in animals chronically exposed to CO resulting in COHb levels similar to those observed in smokers. Recent studies have found increased risks for adverse birth outcomes with exposure to elevated CO levels. These include pre-term births and heart abnormalities. Additional research is needed to confirm these results.

Nitrogen Dioxide

Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposures to NO_2 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 in healthy individuals. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups.

In animals, exposure to levels of NO_2 considerably higher than ambient concentrations results in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune response. The severity of lung tissue damage associated with high levels of ozone exposure increases when animals are exposed to a combination of O_3 and NO_2.

Particulate Matter

A consistent correlation between elevated ambient respirable and fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life span, and increased mortality from lung cancer.

Daily fluctuations in fine particulate matter concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children and to increased medication use in children and adults with asthma. Studies show that lung function growth in children is reduced with long-term exposure to particulate matter.

The elderly, people with pre-existing respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of PM_{10} and $PM_{2.5}$.

Sulfur Dioxide

A few minutes exposure to low levels of SO_2 can result in airway constriction in some asthmatics. Increased resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed in asthmatics after acute exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2.

Animal studies suggest that despite SO_2 being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract.

Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. In these studies, efforts to separate the effects of SO_2 from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.

Sulfates

Most health effects associated with fine particles and SO_2 at ambient levels are also associated with SO_4. Thus, both mortality and morbidity effects have been observed with an increase in ambient SO_4 concentrations. However, efforts to separate the effects of SO_4 from the effects of other pollutants have generally not been successful.

Clinical studies of asthmatics exposed to sulfuric acid suggest that adolescent asthmatics are possibly a subgroup susceptible to acid aerosol exposure. Animal studies suggest that acidic particles, such as sulfuric acid aerosol and ammonium bisulfate, are more toxic than non-acidic particles like ammonium sulfate. Whether the effects are attributable to acidity or to particles remains unresolved.

Lead

Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure. Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence levels. In adults, increased lead levels are associated with increased blood pressure.

Lead poisoning can cause anemia, lethargy, seizures and death. It appears that there are no direct effects of lead on the respiratory system. Lead can be stored in the bone from early-age environmental exposure, and elevated blood lead levels can occur due to the breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue).

Toxic Air Contaminants

TACs are a broad class of compounds known to cause or contribute to cancer or non-cancer health effects such as birth defects, genetic damage, and other adverse health effects. As discussed previously, effects from TACs may be both chronic and acute on human health. Acute health effects are attributable to sudden exposure to high quantities of air toxics. These effects include nausea, skin irritation, respiratory illness, and, in some cases, death. Chronic health effects result from low-dose, long-term exposure from routine releases of air toxics. The effect of major concern for this type of exposure is cancer, which requires a period of 10 to 30 years after exposure to develop.

TACs are found in ambient air, especially in urban areas, and are emitted by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., benzene near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs (based on the state-wide average). According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the federal Hazardous Air Pollutants programs. The USEPA has adopted Ultra Low Sulfur Diesel (ULSD) fuel standards that went into effect in June 2006 in an effort to reduce diesel particulate matter substantially. As of June 1, 2006, refiners and importers nation-wide have been required by the USEPA to ensure that at least 80 percent of the volume of the highway diesel fuel they produce or import would be ULSD-compliant. As of December 10, 2010, only ULSD fuel was available for highway use nation-wide. In California, which was an early adopter of ULSD fuel and engine technologies, 100 percent of the diesel fuel sold – downstream from refineries, up to and including fuel terminals that store diesel fuel – was ULSD fuel since July 15, 2006. Since September 1, 2006, all diesel fuel offered for sale at retail outlets in California has been ULSD fuel.

EXISTING CONDITIONS

Citywide (Regional) Air Quality

Ambient air quality is determined primarily by the type and amount of pollutants emitted into the atmosphere, as well as the size, topography, and meteorological conditions of a geographic area. The SCAB has low mixing heights and light winds, which help to accumulate air pollutants. Exhaust emissions from mobile sources generate the majority of ROG, CO, NO_X, and SO_X both in the SCAB generally and specifically the Los Angeles County portion of the SCAB. Area-wide sources generate the most airborne particulates (i.e., PM_{10} and $PM_{2.5}$) in both the SCAB and Los Angeles County. Measurements of ambient concentrations of criteria pollutants are used by the USEPA and the CARB to assess and classify the air quality of each air basin, county, or, in some cases, a specific urbanized area. The classification is determined by comparing actual monitoring data with national and state standards. If a pollutant concentration in an area is lower than the standard, the area is classified as being in "attainment." If the pollutant concentration exceeds the standard, the area is classified as a "non-attainment" area. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated "unclassified."

The USEPA and the CARB use different standards for determining whether the SCAB is in attainment. Under the CCAA the State has developed the California ambient air quality standards (CAAQS), which are generally more stringent than the national ambient air quality standards (NAAQS). In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride Federal and State standards are summarized in **Table 4.2-2**, *Ambient Air Quality Standards*. The attainment status for the Los Angeles County portion of the SCAB with regard to the NAAQS and CAAQS are shown in **Table 4.2-3**, *Attainment Status for the South Coast Air Basin*.

TABLE 4.2-2 AMBIENT AIR QUALITY STANDARDS

Air Pollutant	Average Time	State Standard	Federal Standard
Ozone (O_3)	1-Hour	0.09 ppm	-
	8-Hour	0.07 ppm	0.07 ppm
Carbon Monoxide (CO)	1-Hour	20.0 ppm	35.0 ppm
	8-Hour	9.0 ppm	9.0 ppm
Nitrogen Dioxide (NO_2)	1-Hour	180 ppb	100 ppb
Sulfur Dioxide (SO_2)	1-Hour	250 ppb	75 ppb
	24-Hour	40 ppb	140 ppb
Sulfates (SO_4)	24-Hour	25 µg/m^3	-
Fine Particulate Matter ($PM_{2.5}$)	24-Hour	-	35 µg/m^3
	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3 (Primary) 15 µg/m^3 (Secondary)
Respirable Particulate Matter (PM_{10})	24-Hour	50 µg/m^3	150 µg/m^3
Lead (Pb)	30-Day Average	1.5 µg/m^3	-
	Calendar Quarter	-	1.5 µg/m^3 (for certain areas)
	Rolling 3-Month Average	-	0.15 µg/m^3

NOTES:
ppm = parts per million;
ppb = parts per billion;
µg/m^3 = microgram per cubic meter.
SOURCE: CARB 2017a

TABLE 4.2-3 ATTAINMENT STATUS FOR THE SCAB

Pollutant	CAAQS	NAAQS
Ozone (1-Hour)	Nonattainment	Nonattainment (Extreme)
Ozone (8-Hour)	Nonattainment	Pending – Expect Nonattainment (Extreme)
Carbon Monoxide (1-Hour and 8-Hour)	Attainment	Attainment (Maintenance)
Nitrogen Dioxide (1-Hour)	Attainment	Unclassified/Attainment
Nitrogen Dioxide (8-Hour)	Attainment	Attainment (Maintenance)
Sulfur Dioxide (1-Hour)	Attainment	Pending – Expect Unclassified/Attainment
Sulfur Dioxide (24-Hour)	Attainment	Unclassified/Attainment
$PM_{2.5}$ (24-Hour)	Nonattainment	Attainment (Maintenance)
$PM_{2.5}$ (Annual)	Nonattainment	n/a
PM_{10} (24-Hour)	n/a	Nonattainment (Serious)
PM_{10} (Annual)	Nonattainment	Nonattainment (Moderate)
Lead	Attainment	Nonattainment (Partial)

SOURCE: Southern California Air Quality Management District (SCAQMD) 2017a

Citywide Sensitive Receptors

There is a strong connection between health risk and the proximity of the source of air pollution. Local jurisdictions have the responsibility for determining land use compatibility for sensitive receptors. A sensitive receptor is a person in the population who is particularly susceptible to health effects due to exposure to an air contaminant. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. CARB has identified the following population groups who are most likely affected by air pollution: children less than 14 years of age, adults over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. Land uses

where these population groups are likely to spend a substantial amount of time are considered sensitive receptors. According to AQMD, sensitive receptors include the following (SCAQMD 2005):

- Schools, playgrounds and childcare centers
- Long-term health care facilities
- Rehabilitation centers
- Convalescent centers
- Hospitals
- Retirement homes
- Residences

Downtown Plan Area Air Quality

The South Coast Air Quality Management District (SCAQMD) divides the SCAB into 38 source receptor areas (SRAs), wherein 38 monitoring stations operate to monitor the various concentrations of air pollutants in the region. The Downtown Plan includes areas located in SRA 1, which covers a portion of Central Los Angeles County. SCAQMD Station No. 087 collects ambient air quality data for SRA 1. This station monitors emission levels of O_3, NO_2, PM_{10}, and $PM_{2.5}$. **Table 4.2-4** identifies the federal and State ambient air quality standards for the relevant air pollutants, along with the ambient pollutant concentrations that were measured between 2015 and 2017, the most current data available.

According to air quality data from SCAQMD Station No. 087 shown in **Table 4.2-4**, ozone concentrations did not exceed the national 1-hour standard between 2015 and 2017; however, concentrations exceeded the state 1-hour standard for 10 days between 2015 and 2017. Ozone concentrations also exceeded the national and State 8-hour standards on 26 days between 2015 and 2017. PM_{10} concentrations did not exceed the national 24-hour standard between 2015 and 2017; however, concentrations exceeded the State 24-hour standard for 91 days during the same time period. $PM_{2.5}$ concentrations exceeded the national 24-hour standard for 15 days between 2015 and 2017. Concentrations of NO_2 did not exceed national or State standards between 2015 and 2017.

SCAQMD also operates and maintains an air monitoring network for toxic air contaminants (TACs). The MATES-IV program measured concentrations of more than 30 air pollutants, including both gases and particulates, at 10 fixed sites throughout the Basin (SCAQMD 2015b). The monitoring study was accompanied by a computer modeling exercise in which the SCAQMD estimated the risk of cancer from breathing toxic air pollution throughout the region based on emissions and weather data. MATES-IV found that the annual average carcinogenic risk in the Basin declined from 1,194 in a million in 2005 to 418 in a million in 2012. The highest carcinogenic risk of about 2,500 in a million was found near the Ports of Los Angeles and Long Beach. The existing ambient carcinogenic risk near central Los Angeles is slightly over 1,200 in a million. MATES V is currently under development

Downtown Plan Sensitive Receptors

The Downtown Plan Area currently contains a mix of uses, but there is a residential emphasis in South Park and the Arts District, while the Victor Heights and Figueroa Terrace areas are almost exclusively residential. The Convention Center Area and Little Tokyo are also experiencing substantial new residential development. These areas are described in detail in Section 4.10, *Land Use and Planning*, and illustrated on **Figure 4.10-1.** As described in Section 4.13, *Public Services*, there are also four LAUSD schools and 14 parks and recreational facilities in the Downtown Plan Area.

TABLE 4.2-4 SUMMARY OF AMBIENT AIR QUALITY IN THE DOWNTOWN PLAN AREA

Air Pollutants Monitored Within SRA 1 (Central Los Angeles Area)	Year		
	2015	2016	2017
Ozone (O_3)			
Maximum 1-hour concentration measured	0.104 ppm	0.103 ppm	0.116 ppm
Number of days exceeding previous National 0.124 ppm 1-hour standard	0	0	0
Number of days exceed State 0.09 ppm 1-hour standard	2	2	6
Maximum 8-hour concentration measured	0.074 ppm	0.078 ppm	0.086 ppm
Number of days exceeding National and State 0.07 ppm 8-hour standard	6	4	16
Nitrogen Dioxide (NO_2)			
Maximum 1-hour concentration measured	79.1 ppb	64.7 ppb	80.6 ppb
Number of days exceeding State 180 ppb 1-hour standard	0	0	0
Annual Average	22 ppb	22 ppb	21 ppb
Does measured annual average exceed National 100 ppb annual average standard?	No	No	No
Does measured annual average exceed State 30 ppb annual average standard?	No	No	No
Suspended Particulates (PM_{10})			
Maximum 24-hour concentration measured	88.5 µg/m^3	74.6 µg/m^3	96.2 µg/m^3
Number of days exceeding National 150 µg/m^3 24-hour standard	0	0	0
Number of days exceed State 50 µg/m^3 24-hour standard	30	21	40
Annual Arithmetic Mean (AAM)	27.0 µg/m^3	n/a	n/a
Does measured AAM exceed National 150 µg/m^3 AAM standard?	No	n/a	n/a
Does measured AAM exceed State 20 µg/m^3 AAM standard?	Yes	n/a	n/a
Fine Particulates ($PM_{2.5}$)			
Maximum 24-hour concentration measured	70.3 µg/m^3	49.4 µg/m^3	61.7 µg/m^3
Number of days exceeding National 35.0 µg/m^3 24-hour standard	7	2	6
Annual Arithmetic Mean (AAM)	12.6 µg/m^3	12.0 µg/m^3	16.3 µg/m^3
Does measured AAM exceed National 15 µg/m^3 AAM standard?	No	No	No
Does measured AAM exceed State 12 µg/m^3 AAM standard?	Yes	No	Yes

NOTES:
ppm = parts per million;
ppb = parts per billion;
µg/m^3 = micrograms per cubic meter;
n/a = data not available or not collected by the District.
SOURCE: CARB 2017b

The Downtown Plan Area also includes a variety of single- and multi-family residential uses; multiple hotels and motels; parks and outdoor recreational land uses such as Grand Park and Pershing Square; and hospitals/long-term care facilities such as the Dignity Health – California Hospital Medical Center.

REGULATORY FRAMEWORK

The Federal Clean Air Act (CAA) governs air quality in the United States. In addition to being subject to the requirements of the CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). At the federal level, the CAA is administered by the USEPA. In California, the CCAA is administered by the CARB at the state level and by air quality management districts (AQMDs) at the regional and local levels.

Air quality in the SCAB in which Los Angeles is located is addressed through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for improving air quality in the SCAB are discussed below.

FEDERAL

The USEPA is responsible for setting and enforcing the NAAQS for atmospheric pollutants. It regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. The USEPA also has jurisdiction over emissions sources outside state waters (outer continental shelf), and establishes various emissions standards for vehicles sold in states other than California.

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the SIP.

STATE

The CCAA requires all areas of the State to achieve and maintain the CAAQS by the earliest practicable date. CARB, as part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and State air pollution control programs within California. In this capacity, the CARB conducts research, sets the CAAQS, compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the SIP. The CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hair spray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

REGIONAL

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a council of governments for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. As a regional planning agency SCAG serves as a forum for regional issues relating to transportation, the economy, community development, and the environment.

Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality. SCAG's *Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS), adopted April 7, 2016, identifies growth forecasts that are used in the development of air quality-related land use and transportation control strategies developed by the SCAQMD. This RTP/SCS is discussed in greater detail in Section 4.7, *Greenhouse Gas Emissions*.

South Coast Air Quality Management District

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the SCAB. To that end, the SCAQMD, a regional agency, works directly with SCAG, county transportation commissions, and local governments, and cooperates actively with all State and federal government agencies. The SCAQMD develops rules and regulations, establishes permitting requirements, inspects

emissions sources, monitors air quality, and provides regulatory enforcement through such measures as educational programs, monitors or fines, when necessary.

The SCAQMD is responsible for developing programs to reduce emissions from stationary, mobile, and indirect sources to meet national and state AAQS. It has responded to this requirement by preparing a series of Air Quality Management Plans (AQMP). The most recent of these was adopted by the Governing Board of the SCAQMD on March 3, 2017. This AQMP, referred to as the 2016 AQMP, was prepared to comply with the federal and State Clean Air Acts and amendments, to accommodate growth, to reduce the high levels of pollutants in the SCAB, to meet national and state AAQS, and to minimize the fiscal impact that pollution control measures have on the local economy. The 2016 AQMP identifies the control measures that will be implemented over a 15-year horizon to reduce major sources of pollutants. Implementation of control measures established in the previous AQMPs has substantially decreased the population's exposure to unhealthful levels of pollutants, even while population growth has occurred in the SCAB.

The future air quality levels forecast in the 2016 AQMP are based on several assumptions. For example, the SCAQMD assumes that new development in the SCAB will occur in accordance with population growth and transportation projections identified by SCAG in its most current RTP/SCS. The 2016 AQMP also assumes that development projects will include strategies (mitigation measures) to reduce emissions generated during construction and operation in accordance with SCAQMD and local jurisdiction regulations, which are designed to address air quality impacts and pollution control measures. The 2016 AQMP acknowledges that the most significant air quality challenge in the Basin is to reduce NO_X emissions sufficiently to meet the upcoming ozone standard deadlines.

The SCAQMD has also developed programs to attain and maintain the NAAQS and CAAQS. These include air quality rules and regulations for stationary sources, area sources, point sources, and certain mobile source emissions. The SCAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases. All projects within SCAQMD jurisdiction are subject to SCAQMD rules and regulations, including, but not limited to the following:

- **Rule 401 Visible Emissions** – This rule prohibits an air discharge that results in a plume that is as dark as or darker than what is designated as No. 1 Ringelmann Chart by the United States Bureau of Mines for an aggregate of three minutes in any one hour.
- **Rule 402 Nuisance** – This rule prohibits the discharge of "such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of people or the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property."
- **Rule 403 Fugitive Dust** – This rule requires that future projects reduce the amount of particulate matter entrained in the ambient air as a result of fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions from any active operation, open storage piles, or disturbed surface area.
- **Rule 1113 Architectural Coatings** – This rule limits VOCs in architectural coatings used in the SCAQMD jurisdiction. These limits are application-specific and are updated as availability of low-VOC products expands.
- **Rule 1168 Adhesive and Sealant Applications** – This rule reduces emissions of VOCs and eliminates emissions of chloroform, ethylene dichloride, methylene chloride, perchlorethylene, and trichloroethylene from the application of adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, or any other primers.

- **Regulation XIII New Source Review** – This regulation contains Rules 1300 through 1325, which set forth pre-construction review requirements for new, modified, or relocated facilities, to ensure that the operation of such facilities does not interfere with progress in attainment of the NAAQS, and that future growth within SCAQMD is not unnecessarily restricted. The specific air quality goal of this regulation is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors.

Toxic Air Contaminant Regulations

CARB's statewide comprehensive air toxics program was established in the early 1980s. The Toxic Air Contaminant Identification and Control Act created California's program to reduce exposure to air toxics. Under the Toxic Air Contaminant Identification and Control Act, CARB is required to use certain criteria in the prioritization for the identification and control of air toxics. In selecting substances for review, CARB must consider criteria relating to "the risk of harm to public health, amount or potential amount of emissions, manner of, and exposure to, usage of the substance in California, persistence in the atmosphere, and ambient concentrations in the community" [Health and Safety Code Section 39666(f)]. The Toxic Air Contaminant Identification and Control Act also requires CARB to use available information gathered from the Air Toxics "Hot Spots" Information and Assessment Act program to include in the prioritization of compounds.

California has established a two-step process of risk identification and risk management to address the potential health effects from air toxic substances and protect the public health of Californians. In the first step (identification), CARB and the Office of Environmental Health Hazard Assessment (OEHHA) determine if a substance should be formally identified as a TAC in California. During this process, CARB and the OEHHA staff draft a report that serves as the basis for this determination. CARB staff assesses the potential for human exposure to a substance and the OEHHA staff evaluates the health effects. After CARB and the OEHHA staff hold several comment periods and workshops, the report is then submitted to an independent, nine-member Scientific Review Panel (SRP), who reviews the report for its scientific accuracy. If the SRP approves the report, they develop specific scientific findings, which are officially submitted to CARB. CARB staff then prepares a hearing notice and draft regulation to formally identify the substance as a TAC. Based on the input from the public and the information gathered from the report, CARB decides whether to identify a substance as a TAC. In 1993, the California Legislature amended the Toxic Air Contaminant Identification and Control Act by requiring CARB to identify 189 federal HAPs as state TACs.

In the second step (risk management), CARB reviews the emission sources of an identified TAC to determine if any regulatory action is necessary to reduce the risk. The analysis includes a review of controls already in place, the available technologies and associated costs for reducing emissions, and the associated risk.

The Air Toxics "Hot Spots" Information and Assessment Act (Health and Safety Code Section 44360) supplements the Toxic Air Contaminant Identification and Control Act by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks. The Hot Spots Act also requires facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

California's Diesel Risk Reduction Program

CARB identified particulate emissions from diesel-fueled engine TACs in August 1998. Following the identification process, CARB was required by law to determine if there is a need for further control, which led to the risk management phase of the program.

For the risk management phase, CARB formed the Diesel Advisory Committee to assist in the development of a risk management guidance document and a risk reduction plan. With the assistance of the Diesel Advisory Committee and its subcommittees, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles and the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines. The Diesel Advisory Committee approved these documents on September 28, 2000, paving the way for the next step in the regulatory process: the control measure phase.

During the control measure phase, specific statewide regulations designed to further reduce diesel particulate matter (DPM) emissions from diesel-fueled engines and vehicles have and continue to be evaluated and developed. The goal of each regulation is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce DPM emissions.

LOCAL

City of Los Angeles General Plan Air Quality Element

The *Air Quality Element of the City of Los Angeles General Plan* (City Air Quality Element), adopted on November 24, 1992, sets forth the goals, objectives and policies that guide the City in the implementation of its air quality improvement programs and strategies. The City Air Quality Element acknowledges that numerous efforts are underway at the regional, county and city levels addressing clean air concerns and that coordination of these various efforts and the involvement of the area's residents are crucial to the achievement of state and federal AAQS.

The City's Air Quality Element acknowledges the interrelationships among transportation and land use planning in meeting the City's mobility and clean air goals. Mutually reinforcing strategies need to be developed which work to reduce the use of single occupant vehicles and which work to reduce vehicle trips and vehicle miles traveled (VMT).

The City Air Quality Element establishes six goals:

- Good air quality in an environment of continued population growth and healthy economic structure;
- Less reliance on single-occupant vehicles with fewer commute and non-work trips;
- Efficient management of transportation facilities and system infrastructure using cost-effective system management and innovative demand-management techniques;
- Minimize impacts of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation and air quality;
- Energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels and the implementation of conservation measures including passive measures such as site orientation and tree planting; and
- Citizen awareness of the linkages between personal behavior and air pollution and participation in efforts to reduce air pollution.

Plan for a Healthy Los Angeles

The *Plan for a Healthy Los Angeles*, adopted by the City Council on March 31, 2015, lays the foundation to create healthier communities for all residents in the City. As an element of the General Plan, it provides high-level policy vision, along with measurable objectives and implementation programs, to elevate health as a priority for the City's future growth and development. With a focus on public health and safety, the *Plan for a Healthy Los Angeles* provides a roadmap for addressing the most basic and essential quality-of-

life issues: safe neighborhoods, a clean environment (i.e., improved ambient and indoor air quality), the opportunity to thrive, and access to health services, affordable housing, and healthy and sustainably produced food.

Los Angeles Green Plan

The City has begun to address the issue of global climate change by publishing *Green LA, An Action Plan to Lead the Nation in Fighting Global Warming* (LA Green Plan). This document outlines the goals and actions the City has established to reduce the generation and emission of GHGs from both public and private activities. According to the LA Green Plan, the City is committed to the goal of reducing emissions of CO_2 to 35 percent below 1990 levels. To achieve this, the City will:

- Increase the generation of renewable energy;
- Improve energy conservation and efficiency; and
- Change transportation and land use patterns to reduce dependence on automobiles.

The LA Green Plan is discussed in greater detail in Section 4.7, *Greenhouse Gas Emissions*.

City of Los Angeles Green Building Code

In December 2010, the Los Angeles City Council adopted various provisions of the CalGreen Code as part of Ordinance No. 181,480, thus codifying certain provisions of the CalGreen Code as the new Los Angeles Green Building Code (LA Green Building Code). As a result of continuing updates to the CalGreen Code, the City adopted the pertinent provisions of the 2016 CalGreen standards through Ordinance No. 184,691, approved December 19, 2016. The LA Green Building Code applies to the construction of every new building, every new building alteration with a permit valuation of over $200,000, and every building addition unless otherwise noted. Specific mandatory requirements and elective measures are provided for three categories: (1) low-rise residential buildings; (2) non-residential and high-rise residential buildings; and (3) additions and alterations to non-residential and high-rise residential buildings.

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the CEQA Guidelines, the Proposed Project's air quality impacts would be significant if either the Downtown Plan or the New Zoning Code would:

- Conflict with or obstruct implementation of the applicable air quality plan (Threshold 4.2-1)
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (Threshold 4.2-2)
- Expose sensitive receptors to substantial pollutant concentrations (Threshold 4.2-3)
- Result in other emissions (such as those leading to odor) adversely affecting a substantial number of people? (Threshold 4.2-4)

Specific quantitative thresholds used to define these general CEQA thresholds are discussed below.

SCAQMD Thresholds

The SCAQMD has developed specific CEQA regional and localized significant thresholds (LSTs) to assess air quality impacts associated with individual development projects. The regional and local construction significance thresholds for individual projects in the Downtown Plan Area are shown in **Table 4.2-5**. The regional thresholds apply throughout the City, while LSTs vary depending on the air monitoring areas, or source receptor areas, in which a development project is located.

The SCAQMD developed LSTs in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the *CEQA Air Quality Handbook* (1993). LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for NO_X, CO, PM_{10}, and $PM_{2.5}$. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), distance to the sensitive receptor, and project size. LSTs have been developed for emissions within construction areas up to five acres in size.

The Downtown Plan Area is located entirely within SRA 1, Central Los Angeles. Due to the density of development in the Downtown Plan Area, the LST values for SRA 1 are some of the most protective in the SCAB for regulating localized emissions and preventing exposure of sensitive receptors to substantial pollutant concentrations. The LST values for development projects with lot sizes from less than one acre up to five acres in SRA 1 are displayed in the table. As appropriate, analysis of individual projects in the Downtown Plan Area must address the appropriate threshold based on the size of the project site and the proximity of sensitive receptors. **Table 4.2-5** presents the LST values for development sites within 25 meters of sensitive receptors, the most conservative thresholds.

The regional operational significance thresholds for individual projects throughout Los Angeles, including the Downtown Plan Area, are shown in **Table 4.2-6**. These quantitative thresholds are considered when making a significance determination using the State CEQA Guidelines Appendix G thresholds, above, as appropriate. Localized analyses of on-site emissions associated with individual projects are typically limited to industrial and commercial land uses that involve considerable on-site heavy duty vehicle traffic or employ stationary sources of substantial air pollutant emissions.

The SCAQMD is also tasked with managing exposure of sensitive receptors to air toxics and health risk. According to SCAQMD methodology, health effects from carcinogenic air toxics are described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person continuously exposed to concentrations of TACs over a 70-year lifetime will contract cancer based on the use of standard risk assessment methodology. The SCAQMD has stated that the incremental cancer risk should not exceed 10 persons in one million, and the chronic and acute risks should not exceed a calculated Hazard Index value of 1.0. The SCAQMD quantitative thresholds are considered when making a significance determination based on the State CEQA Guidelines Appendix G thresholds, above, as appropriate.

TABLE 4.2-5 SCAQMD DAILY CONSTRUCTION EMISSIONS THRESHOLDS

Criteria Pollutant[1]	Regional Threshold (Pounds Per Day)	On-Site Localized Thresholds for SRA-1 (Pounds Per Day)[2]		
		1 Acre	2 Acres	5 Acres
Volatile Organic Compounds (VOC)	75	-	-	-
Nitrogen Oxides (NO_X)	100	74	108	161
Carbon Monoxide (CO)	550	680	1,048	1,861
Sulfur Oxides (SO_X)	150	-	-	-
Respirable Particulates (PM_{10})	150	5	8	16
Fine Particulates ($PM_{2.5}$)	55	3	5	8

NOTE: [1]The SCAQMD has adopted a significance threshold of three (3) pounds per day for lead (Pb). Reasonably expected construction projects from the Proposed Project would not include sources of lead emissions, and a discussion of air quality impacts from lead emissions is excluded from the air quality impact analyses.
[2]Localized significance thresholds are based on a 25-meter receptor distance because most of the Downtown Plan Area is densely developed.
SOURCE: SCAQMD 2009; 2015.

TABLE 4.2-6 SCAQMD DAILY OPERATIONAL EMISSIONS THRESHOLDS

Criteria Pollutant[1]	Regional Threshold (Pounds Per Day)	On-Site Localized Thresholds for SRA-1 (Pounds Per Day)[2]		
		1 Acre	2 Acres	5 Acres
Volatile Organic Compounds (VOC)	55	-	-	-
Nitrogen Oxides (NO_x)	55	74	108	161
Carbon Monoxide (CO)	550	680	1,048	1,861
Sulfur Oxides (SO_x)	150	-	-	-
Respirable Particulates (PM_{10})	150	2	2	4
Fine Particulates ($PM_{2.5}$)	55	1	2	2

NOTE: [1]SCAQMD has adopted a significance threshold of three (3) pounds per day for lead. The operation of reasonably anticipated development from the Proposed Project would not include sources of lead emissions, and a discussion of air quality impacts from lead emissions is excluded from the air quality impact analyses.
[2]Localized significance thresholds are based on a 25-meter receptor distance because most of the Downtown Plan Area is density developed.
SOURCE: SCAQMD 2009; 2015.

METHODOLOGY

The terminology and methodology used to evaluate the significance of potential impacts to air quality are described below. In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation. The City uses SCAQMD's *CEQA Air Quality Handbook* as the guidance document for the environmental review of plans and development proposals within its jurisdiction. The City does not, however, have the specific technical expertise to develop plans, programs, procedures, and methodologies to ensure that air quality within the county and region will meet federal and State standards. Instead, the City relies upon the expertise of the SCAQMD, uses the *CEQA Air Quality Handbook*, and SCAQMD recommended thresholds of significance as the guidance for the environmental review of plans and development proposals. For purposes of this analysis, the CEQA Guidelines Appendix G criteria are used, supplemented by the thresholds identified in current SCAQMD guidance.

Air quality impacts resulting from implementation of the Downtown Plan and adoption of the New Zoning Code are assessed at a programmatic level because information on specific development projects is not known for the Downtown Plan Area as a whole. The SCAQMD *CEQA Air Quality Handbook* states that

the air quality assessment should be as comprehensive as possible at a programmatic level. In the absence of SCAQMD programmatic thresholds, the EIR evaluates broad air quality impacts and examines the Proposed Project's consistency with the 2016 AQMP. Consistency with this plan would ensure compliance with regional and local air quality goals. The analysis also broadly examines temporary construction emissions, long-term operational emissions, localized pollutant concentrations, TACs, and odors. Common sources of construction emissions include heavy-duty off-road construction equipment exhaust, fugitive dust, and architectural coatings. Sources of operational emissions include the use of consumer products, motor vehicle trips attracted to or generated by a land use, and on-site combustion of natural gas. A best-effort approach to disclose all reasonably foreseeable impacts based on available information is used consistent with the requirements of CEQA. To this end, the analysis of construction impacts is based on estimated construction scenarios, as described below.

Construction emissions were estimated for equipment exhaust emissions and truck trips for a number of example individual construction projects using SCAQMD's California Emissions Estimator Model (CalEEMod), version 2016.3.2. Equipment emission factors in CalEEMod are based on CARB data. Equipment was assumed to operate for eight hours per day. Truck emission factors in CalEEMod are from EMFAC2014 and trucks were assumed to travel 40 miles per day, with a one-way distance of 20 miles to the disposal site. Fugitive dust and architectural coating emissions are qualitatively discussed because it would be speculative to quantify lot acreage and the size of buildings to be coated. These example projects account for four scales of intensity with respect to equipment usage and truck trips, as itemized below.

- Two (2) pieces of heavy-duty equipment and 25 truck trips per day
- Four (4) pieces of heavy-duty equipment and 50 truck trips per day
- Eight (8) pieces of heavy-duty equipment and 100 truck trips per day
- Ten (10) pieces of heavy-duty equipment and 150 truck trips per day

These equipment inventories and truck volumes are representative of a reasonable range of construction activity intensity for individual projects based on previous development in Los Angeles. Maximum daily regional and localized emissions were quantified for these construction scenarios and assessed in the context of the SCAQMD significance thresholds. The analysis of reasonably expected construction projects from the Downtown Plan and adoption of the New Zoning Code assumes a baseline of zero for daily criteria pollutant emissions, which is extremely conservative given that there are generally multiple large and small construction projects going on in the City and Downtown Plan Area at any given time.

Reasonably anticipated development from the Downtown Plan would generate mobile source emissions and area source emissions. Mobile source emissions were estimated using vehicle miles traveled (VMT) data provided in the transportation model prepared for the Downtown Plan and vehicle emission rates from the EMFAC2017 model. Emission modeling included speed assumptions, which allowed the analysis to account for changes in traffic flow under the build scenarios. Additional sources of air pollutant emissions associated with land use development include natural gas, electricity, and water use, and VOCs from consumer products and cleaning supplies. These emissions were estimated using CalEEMod.

The baseline for analysis used in this section and throughout this EIR is the existing condition. This is the same baseline that has been used in the City's most recent community plan EIRs, including the West Adams and South/Southeast Los Angeles Community Plan EIRs as well as the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Program EIR and the (latest 2020-2025 RTP/SCS EIR, which is currently in FEIR stage). The use of the existing conditions as the CEQA baseline is reasonable based on these precedents. It is also worth noting that Section 5.0, *Alternatives*, compares the impacts of growth under the Downtown Plan to those of the existing Central City and Central City North Community Plans as part of the "no project" alternative analysis. Thus, although this project analysis appropriately considers the existing condition as the baseline

for analysis, this EIR also analyzes the effects of the Proposed Project compared to a future baseline without the Proposed Project scenario.

Emissions have been calculated based on forecast growth in the Downtown Plan Area through the 2040 horizon year. Interim year calculations have not been conducted because the anticipated timing of land use changes and new development during interim years would be speculative. In general, economic activity tends to vary substantially over the short term with recessions and booms substantially affecting short-term growth. Over the long-term planning horizon of the Downtown Plan, such variations tend to balance out. The City cannot reasonably anticipate whether short-term growth would be linear or sporadic between 2020 and 2040. Given this uncertainty, interim year emissions analyses are unlikely to be a reasonably accurate portrayal of emissions prior to 2040. Furthermore, it is not anticipated that interim year calculations would produce substantially different emission estimates or conclusions regarding the significance of such emissions than presented herein. For these reasons, calculating emissions for interim year scenarios would not provide the public with any more valuable information than what is already presented in this Draft EIR.

PROJECT IMPACTS

Threshold 4.2-1	Conflict with or obstruct implementation of the applicable air quality plan

Impact 4.2-1

Downtown Plan: The Downtown Plan would not generate growth or per capita VMT that are inconsistent with the 2016-2040 RTP/SCS or 2016 AQMP forecasts. As a result, the Downtown Plan would not conflict with or obstruct implementation of the 2016-2040 RTP/SCS or the 2016 AQMP. This impact would be ***less than significant***.

New Zoning Code: The New Zoning Code does not include any standards that would conflict with the 2016-2040 RTP/SCS or 2016 AQMP forecasts. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area. Any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This impact would be ***less than significant***.

As discussed in the Regulatory Framework, the overall strategy for the 2016 AQMP is designed to meet applicable federal and state requirements, including attainment of ambient air quality standards (SCAQMD 2017a). The focus of the AQMP is to demonstrate attainment of the federal 2006 24-hour $PM_{2.5}$ ambient air quality standard by the 2019 attainment date, as well as an update to further define measures to meet the federal 8-hour O_3 standards. The AQMP provides base year emissions and future baseline emission projections that provide a snapshot of future air quality conditions, including the effects from already adopted rules and regulations. In doing so, the AQMP relies upon the most recent planning assumptions and the best available information, including CARB's mobile source emission factors for the on-road mobile source emissions inventory; CARB's in-use fleet inventory for the off-road mobile source emission inventory; the latest point source inventory; updated area source inventories; and SCAG's forecast growth assumptions based on the RTP/SCS.

The 2016 AQMP was adopted in March 2017 and represents the most updated regional blueprint for achieving federal air quality standards and clean air (SCAQMD 2017a). The 2016 AQMP adapts previously conducted regional air quality analyses to account for the recent unexpected drought conditions, and presents a revised approach to demonstrate attainment of the 2006 24-hour $PM_{2.5}$ NAAQS for the SCAB. Additionally, the 2016 AQMP relies upon a comprehensive analysis of emissions, meteorology, atmospheric chemistry, regional growth projections, and the impact of existing control measures to evaluate strategies for reducing NO_X emissions sufficiently to meet the upcoming ozone deadline standards. Directly applicable to reasonably anticipated development expected from the Downtown Plan, the 2016 AQMP

proposes robust NO_X reductions from residential and commercial appliances, commercial cooking, and commercial space heating. Individual development projects throughout Los Angeles will be required to comply with existing and new regulatory measures set forth by the SCAQMD.

Downtown Plan Impact

The air quality plans applicable to the Downtown Plan are the 2016-2040 RTP/SCS and the 2016 AQMP. As mentioned in the Regulatory Framework, the primary objectives of the RTP/SCS that are aimed at reducing air pollution consist of adding density in proximity to transit stations, and encouraging mixed-use development and active transportation. Detailed review of the Downtown Plan's consistency with the RTP/SCS is provided in sections 4.7, *Greenhouse Gas Emissions*, 4.10, *Land Use and Planning*, and 4.15, *Transportation and Traffic*. As discussed in these sections, the Downtown Plan is consistent with goals and policies of the RTP/SCS.

The 2016 AQMP was prepared to accommodate growth, to reduce the high levels of pollutants in areas under the jurisdiction of SCAQMD, to improve the region's air quality, and to minimize the impact on the economy. Consistency with the AQMP can be assessed by determining how a project accommodates increases in population or employment. The population and employment assumptions used by SCAQMD to estimate regional emissions in the AQMP are obtained from SCAG forecasts for cities and unincorporated areas within the SCAQMD's jurisdiction. As discussed in Section 3, *Project Description*, the Department of City Planning (DCP) uses SCAG forecasts as a benchmark when updating the community plans. Reasonably expected growth from the Downtown Plan would not exceed the SCAG 2040 population or employment projections for the City as a whole. Therefore, the Downtown Plan would not exceed the assumptions in the AQMP.

As discussed in Section 4.12, *Population and Housing*, the Downtown Plan would not induce significant population and employment growth, but rather would serve to accommodate predicted growth in appropriate locations near existing transportation infrastructure, as encouraged in the RTP/SCS (SCAG 2016). Because the Downtown Plan would not increase reasonably anticipated development in the Downtown Plan Area in a way that would be inconsistent with citywide growth forecasts, it would not exceed the assumptions in the AQMP.

As discussed in section 4.7, *Greenhouse Gas Emissions*, and 4.10, *Land Use and Planning*, the Downtown Plan would be consistent with applicable goals of the 2016-2040 RTP/SCS. Specifically, the Downtown Plan would incentivize new development opportunities around existing transit systems; direct growth to transit hubs and corridors; encourage mixed-use development; and encourage a variety of mobility options, such as making streets walkable to promote pedestrian-friendly environments. These objectives are consistent with the RTP/SCS and the AQMP, as well as the City's General Plan Framework Element and Air Quality Element. Therefore, impacts related to conflicting with or obstructing implementation of the applicable air quality plans under the Downtown Plan would be ***less than significant***.

New Zoning Code Impact

The New Zoning Code does not include any standards or provisions that would conflict with or obstruct implementation of the 2016-2040 RTP/SCS or 2016 AQMP forecasts. The New Zoning Code has a range of options within the zone districts, many of which prioritize transit, pedestrian, and bicycle orientation. As such, the New Zoning Code would provide for a variety of options for accommodating planned development along major corridors and transit nodes, consistent with community planning goals. Additionally, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development policies, such as those mandated by the USEPA and SCAQMD as discussed in Regulatory Setting, intended to avoid these effects. In fact, the New Zoning Code will strengthen existing protection of air quality by enabling the adoption of Environmental Protection

Measures to lessen air quality impacts associated with development, such as impacts caused by operating construction equipment and hauling earth.

The New Zoning Code would provide options for a range of densities and intensities that could be applied elsewhere in the City through future community plan updates or amendments. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential conflicts with or obstructions of implementation of the 2016-2040 RTP/SCS or 2016 AQMP. A ***less than significant impact*** would occur.

Mitigation Measures

No significant impact related to AQMP consistency has been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

Threshold 4.2-2	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard

Impact 4.2-2

Downtown Plan: reasonably anticipated development from the Downtown Plan would result in construction emissions of NO_X that exceed SCAQMD regional and local significance thresholds, and emissions of PM_{10} and $PM_{2.5}$ that exceed SCAQMD LSTs. Furthermore, reasonable anticipated development from the Downtown Plan would result in operational emissions of VOC, PM_{10}, and $PM_{2.5}$ that exceed SCAQMD regional thresholds. These exceedances would constitute a considerable net increase of PM_{10}, $PM_{2.5}$ and ozone precursor (NO_X and VOC) emissions in the SCAB. Downtown Plan features and proposed mitigation measures would reduce impacts to the maximum extent feasible, but emissions would remain above thresholds. Therefore, Downtown Plan impacts associated with construction emissions (NO_X, PM_{10} and $PM_{2.5}$) and operational emissions (VOC, PM_{10} and $PM_{2.5}$) would be ***significant and unavoidable.***

New Zoning Code: The New Zoning Code would not result in a cumulatively considerable net increase of a criteria pollutant. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area. Any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Impacts would be ***less than significant***.

Downtown Plan Impact

Regional Construction Emissions

The SCAQMD Air Quality Handbook advises that for both construction and operational activities, if a project exceeds the identified project-level significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Construction activity associated with reasonably anticipated development from the Downtown

Plan has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated by construction worker, vendor, and hauling trips to and from individual development sites. Fugitive dust (PM_{10}) emissions, a criteria pollutant for which the SCAB is in nonattainment, would primarily result from demolition and site preparation (e.g., grading) activities. NO_X emissions, a precursor emission to ozone for which the SCAB is also designated nonattainment, would primarily result from the use of construction equipment. During the finishing phase, paving operations and the application of architectural coatings (e.g., paints) and other building materials would release VOCs, the other precursor emission to ozone. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions.

As discussed in the Regulatory Framework, SCAQMD's Rule 403, Fugitive Dust, is a control requirement for preventing, mitigating and controlling the release of airborne particulate matter emissions from earth moving activities. It is mandatory for all construction projects in the SCAB to comply with Rule 403 or face violations that would incur fines. Specific Rule 403 control requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site, and maintaining effective cover over exposed areas. Compliance with Rule 403 would reduce $PM_{2.5}$ and PM_{10} emissions associated with construction activities by approximately 61 percent (SCAQMD 2007). New construction would also be subject to VOC emission limits for architectural coatings, adhesives and sealants in the City's 2017 Los Angeles Green Building Code. In addition, SCAQMD Rules 1113 and 1168 establish VOC limits to control emissions from the application of architectural coatings, adhesives, and sealants.

Table 4.2-7 shows the estimated average daily construction emissions associated with the four sample construction activity scenarios described under Methodology. These scenarios are representative of reasonable construction activity intensities for future development projects in the Downtown Plan Area. Results of the emissions modeling demonstrate that daily emissions of NO_X from heavy-duty diesel equipment and trucks during construction activities could exceed the SCAQMD regional thresholds under reasonably expected circumstances for large projects. Therefore, without mitigation, reasonably expected construction from the Downtown Plan would result in a ***significant*** impact related to regional construction emissions of NO_X.

TABLE 4.2-7 ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS

	Pounds Per Day					
Example Scenarios – Daily Activity[1]	**VOC**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
2 Heavy-Duty Equipment, 25 Truck Trips	2.5	30.7	10.1	<0.1	1.7	1.2
4 Heavy-Duty Equipment, 50 Truck Trips	4.9	61.4	20.1	0.1	3.3	2.5
8 Heavy-Duty Equipment, 100 Truck Trips	10	**122.9**	40.4	0.2	6.6	4.9
10 Heavy-Duty Equipment, 150 Truck Trips	12.6	**160.1**	51.9	0.2	8.7	6.3
Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceedance?	**No**	**Yes**	**No**	**No**	**No**	**No**

NOTE: [1]Equipment exhaust was estimated using CalEEMod and 8 hours of operation per day. Truck emissions were estimated using CalEEMod and a trip length of 20 miles.
SOURCE: See Appendix I for modeling results and assumptions.

The construction emissions identified above could result in degradation of air quality and adverse health effects to sensitive receptors. For example, high concentrations of NO_2, which has been assessed as NO_X, can cause breathing difficulties (USEPA 2016). As illustrated in **Table 4.2-1**, health effects of VOCs may include eye, nose, throat irritation, headaches, loss of coordination, nausea, damage to liver, kidney, and central nervous system. The City of Los Angeles Department of Building and Safety has established VOC content limits for architectural coatings as part of the 2017 Los Angeles Green Building Code. Compliance

with the Los Angeles Green Building Code is mandatory for new development projects within the City of Los Angeles that meet the thresholds specified in the Regulatory Framework section, and implementation of the VOC content limits for architectural coatings substantially reduces the likelihood that off-gassing emissions from painting, finishing, and paving activities would exceed applicable SCAQMD air quality significance thresholds. The SCAQMD has also published Rules 1113 and 1186 that limit VOC content in architectural coating applications. The use of architectural coatings with low VOC content would eliminate the potential for daily VOC emissions to exceed the applicable SCAQMD threshold.

Localized Construction Emissions

As discussed under Significance Thresholds, the SCAQMD has also developed specific LSTs to assess construction and operational air quality impacts associated with individual development projects. The LST values are specific to the SRA in which an individual project is located and based on proximity to the nearest sensitive receptor(s). A localized construction analysis would be speculative given the lack of a construction location and construction activities under the Downtown Plan. However, it is reasonable to assume that some individual projects in the Downtown Plan Area would involve construction activity adjacent to sensitive receptors (e.g., residences and schools).

As a conservative exercise, maximum daily emissions from on-site exhaust sources during construction activities were quantified and compared to LST values for individual construction projects in the Downtown Plan Area. **Table 4.2-8** compares emissions from these hypothetical construction scenarios to the applicable LSTs. Under certain circumstances, unmitigated equipment emissions combined with fugitive dust emissions associated with the construction of future development occurring under the Downtown Plan could potentially exceed the LSTs for NO_X, PM_{10} and $PM_{2.5}$. Fugitive dust emissions would be reduced through compliance with SCAQMD Rule 403 for activities requiring earthwork and material movement, such as demolition, grading, and excavation.

Based on construction survey data collected by SCAQMD to develop default equipment usage and construction phase lengths for CalEEMod, the following acreages and construction phases typically utilize more than eight pieces of heavy-duty equipment at one time, operating eight hours per day: (1) Grading on 15 or more acres and (2) building construction on five or more acres (SCAQMD 2017c). A review of the City's published list of draft and final EIRs indicates that only two of 15 projects in the Downtown Plan Area listed as requiring an EIR since 2016 included a project site greater than 5 acres in size (City of Los Angeles N.D.).[1] Few projects within the Downtown Plan Area would be expected to construct on a site five acres or greater and projects that would require this level of equipment use would be expected to be larger than the threshold for site plan review and would require discretionary review.

Although much of the Downtown Plan Area currently consists primarily of commercial and industrial land uses, several concentrations of sensitive land uses are located in portions of the Downtown Plan Area. These are mainly residential land uses of varying densities that would be particularly susceptible to high concentrations of air pollutants. Because earth-moving activities and heavy-duty truck use during construction generates diesel exhaust and diesel exhaust constitutes approximately 70 percent of the total cancer risk from air pollution (SCAQMD 2005), these sensitive receptors could be affected by construction emissions.

[1] Projects with draft and final EIRs greater than five acres in size, include: City Market Los Angeles Project (10-acre) and CoreSITE LA3 Project (70.5 acres).

TABLE 4.2-8 ESTIMATED MAXIMUM DAILY ON-SITE CONSTRUCTION EMISSIONS

Example Scenarios – Daily Activity[1]	Pounds Per Day[2]			
	NO_X	CO	PM_{10}	$PM_{2.5}$
2 Heavy-Duty Equipment	24.1	8.6	1.2	1.1
4 Heavy-Duty Equipment	48.3	17.1	2.4	2.2
8 Heavy-Duty Equipment	**96.6**	34.3	4.7	**4.3**
10 Heavy-Duty Equipment	**120.7**	42.8	**5.9**	**4.3**
SRA 1 Local Significance Threshold	*74*	*680*	*5*	*3*
Threshold Exceedance?	**Yes**	**No**	**Yes**	**Yes**

NOTE: [1]Equipment exhaust was estimated using CalEEMod and 8 hours of operation per day. Truck emissions were estimated using CalEEMod and a trip length of 20 miles.
[2] Emissions reported include on-site exhaust emissions only.
SOURCE: See Appendix I for modeling results and assumptions.

Based on the above, implementation of the Downtown Plan could result in a potentially significant impact related to localized construction emissions (NOX, PM_{10} and $PM_{2.5}$).

Operational Emissions

Reasonably expected future development from the Downtown Plan would generate long-term regional air pollutant emissions, which would result from mobile sources (motor vehicle exhaust) and area sources, such as consumer products and natural gas combustion. Emissions from motor vehicle exhaust were estimated using VMT data for Existing Conditions, the future without project conditions (i.e., Future [2040] without the Downtown Plan), and future with project conditions (i.e., Future [2040] with the Downtown Plan). **Table 4.2-9** shows the estimated regional daily VMT associated with all vehicle trips having origins or destinations in the Downtown Plan Area for the aforementioned conditions. While total daily VMT would increase from existing conditions to 2040 with Downtown Plan conditions, per service population VMT would decrease from 19.6 to 15.9 (see Section 4.15, *Transportation and Traffic*). The increase in VMT can be attributed to regional growth, as well as the increases in households and employment in the Downtown Plan Area resulting from implementation of the Downtown Plan, which are described in Section 4.12, *Population, Housing, and Employment*. The daily VMT estimates were utilized in conjunction with stationary source utility demand to assess regional operational air pollutant emissions generated under the Downtown Plan.

TABLE 4.2-9 2017-2040 DAILY VMT FOR THE DOWNTOWN PLAN AREA

	Total Daily VMT[1]
Existing Conditions (2017)	5,767,020
2040 Without Downtown Plan[2]	7,372,396
2040 With Downtown Plan	8,841,606

NOTES: [1] Total Daily VMT is the total VMT using the Origin-Destination method, which accounts for all VMT originating from or destined for the Downtown Plan Area.
[2] Note the 2040 Without Downtown Plan scenario is included for informational purposes, and not for impact analysis or conclusions.
SOURCE: Fehr & Peers 2018.

Additional sources of air pollutant emissions associated with land use development include natural gas, electricity, and water use, as well as VOCs from consumer products and cleaning supplies. Stationary source emissions in the Downtown Plan Area are generated by the use of consumer products and natural gas in both residential and non-residential land uses. Regional survey data was utilized to estimate operational emissions from stationary sources in the Downtown Plan Area under existing conditions (2018), the Future (2040) No Project/Existing Plan, and the Future (2040) with the Downtown Plan based on land uses. The No Project/Existing Plan was included for informational purposes and was not relied on for

impact analysis or conclusions. **Table 4.2-10** presents estimates of the residential units, existing square footage of non-residential development, and non-residential reasonably anticipated development located within the Downtown Plan Area. Estimates of daily regional operational emissions were calculated using the values presented in **Table 4.2-10** and emissions factors obtained from survey data contained in CalEEMod 2016.3.2 and the Los Angeles Department of Water and Power Urban Water Management Plan (2015).

TABLE 4.2-10 PROJECT AREA LAND USE SUMMARY

Scenario	Residential Units	Commercial Reasonably Anticipated Development (sf)	Industrial Use Reasonably Anticipated Development (sf)	Public Facilities Reasonably Anticipated Development (sf)
Existing Conditions	34,000	105,376,578	40,101,581	3,865,922
2040 Without Downtown Plan[1]	59,000	107,372,768	125,352,077	36,561,904
2040 With Downtown Plan	133,000	199,504,737	76,758,424	45,730,208

SOURCE: City of Los Angeles 2018.

[1] Note the 2040 Without Downtown Plan scenario is included for informational purposes, and not for impact analysis or conclusions.

sf = square feet

Mobile vehicle trip data and reasonably anticipated development estimates presented in **Table 4.2-9** and **Table 4.2-10** were used to generate estimates of daily regional emissions. **Table 4.2-11** shows regional emissions under Existing Conditions, in 2040 without the Downtown Plan, and in 2040 with the Downtown Plan.

With respect to mobile sources, as shown in **Table 4.2-11**, future daily regional emissions under implementation of the Downtown Plan are generally expected to decrease relative to existing emissions. This is largely a result of improvements in vehicular engine efficiency technologies and fuel pollutant concentrations that are projected to occur between existing conditions and 2040 resulting from more stringent statewide regulations. Future emissions are calculated based on implementation of known and approved regulations. For mobile emissions CARB's EMFAC models, which incorporate approved regulations affecting vehicle emissions, are included in CalEEMod. For energy, emission rates in CalEEMod are adjusted to reflect adopted requirements (e.g., required increases in use of renewable sources). Electrical demand is reduced to account for the most recent Title 24 as applicable (currently, energy demand is modified to account for Title 24 2019 since CalEEMod is based on Title 24 2016). A 20 percent reduction in water use is also assumed per CalGreen requirements since these are not currently incorporated into CalEEMod.

While emissions from mobile sources are generally expected to decrease over time as a result of statewide emissions reductions measures, the anticipated ambient growth in residential housing and non-residential reasonably anticipated development under the Downtown Plan would result in increased use of consumer products and natural gas. The Downtown Plan would increase area and energy source emissions when compared to existing conditions. However, area and energy-related increases in emissions of NO_X and CO would be offset by the decrease in mobile source emissions of NO_X and CO. Emissions of SO_X would generally remain the same as existing conditions. reasonably anticipated development in the Downtown Plan Area would increase the use of consumer products, which is the predominant contributor to operational VOC emissions. The use of consumer products varies by land use type and is typically analyzed on a

project-specific scale. When compared to existing conditions, future development in the Downtown Plan Area, as detailed in **Table 4.2-10**, could result in daily emissions of VOC that would exceed the SCAQMD regional significance thresholds due to heavily expanded use of consumer products. In addition, future development in the Downtown Plan Area could result in daily emissions of PM_{10} and $PM_{2.5}$ from area sources and mobile sources (brake and tire wear) that would exceed the SCAQMD regional significance thresholds. However, CARB continually applies increasingly stringent regulations on sources of ozone precursors and particulate matter statewide, and it is likely that the emissions presented in this document represent conservative estimates of emissions from reasonably anticipated development. Nevertheless, for purposes of this analysis, impacts related to regional operational emissions associated with the Downtown Plan for $PM_{2.5}$, PM_{10} and VOC are considered ***potentially significant***.

TABLE 4.2-11 ESTIMATED OPERATIONAL EMISSIONS BY SOURCE

	Daily Emissions (Pounds/Day)					
Scenario	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Existing Conditions						
Mobile Sources	2,743	5,646	25,981	53	719	337
Area Sources	4,205	35	3,007	0.2	16	16
Energy Sources	38	336	247	2	26	26
Total	6,986	6,017	29,235	55	761	379
2040 Without Downtown Plan[1]						
Mobile Sources	1,255	2,764	13,636	44	850	352
Area Sources	7,433	56	4,874	0.3	27	27
Energy Sources	100	896	696	5.4	69	69
Total	8,788	3,716	19,206	50	946	448
2040 With Downtown Plan						
Mobile Sources	1,505	3,315	16,353	52	1,019	422
Area Sources	10,384	126	10,957	0.6	61	61
Energy Sources	101	898	626	5.5	70	70
Total	11,990	4,339	27,936	58	1,150	553
Net Daily Emissions[2]						
Change from Existing Conditions	5,004	[1,678]	[1,299]	3	389	174
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**Yes**	**No**	**No**	**No**	**Yes**	**Yes**

1 Note the 2040 Without Downtown Plan scenario is included for informational purposes, and not for impact analysis or conclusions.
2 Net emissions refer to the difference between Downtown Plan and existing conditions; negative values expressed in parentheses.
SOURCE: See Appendix I for model results.

New Zoning Code Impact

The New Zoning Code would provide options for a range of densities and intensities that could be applied elsewhere in the City through future community plan updates or amendments. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, air quality impacts cannot be identified.

The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect air quality emissions impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone classification would analyze potential cumulatively considerable net increase

of criteria pollutants pursuant to the applicable regional and localized thresholds of significance and associated health effects.

As explained previously, the regional significance thresholds are designed to identify projects that would result in significant levels of air pollution and assist the region in attaining applicable state and federal ambient air quality standards. The standards themselves are established using health-based criteria to protect the public from adverse health impacts as a result of exposure to air pollution. In addition, the localized significance thresholds represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards. These thresholds are developed based on the ambient concentrations of that pollutant for each individual source receptor area. Because projecting the location and type of future growth would be speculative at this time, it would not be feasible to estimate the intensity of construction and operational emissions and the associated health effects. Thus, for purposes of this analysis, impacts related to regional and localized construction emissions and regional operational emissions associated with the New Zoning Code are considered ***less than significant***.

Mitigation Measures

Downtown Plan

4.2-2 Construction Emissions Reduction

The City shall require all discretionary projects that involve construction-related activity to comply with the following and require the developers to notify any contractors, and include in any agreements with contractors and subcontractors, the following, or equivalent, best management practices in construction specifications:

- All off-road diesel-powered construction equipment greater than 50 horsepower shall meet the USEPA Tier 4 emission standards, where available. In the event that Tier 4 engines are not available for any off-road equipment larger than 100 horsepower, that equipment shall be equipped with a Tier 3 engine or an engine that is equipped with retrofit controls to reduce exhaust emissions of NOx and DPM to no more than Tier 3 levels unless certified by engine manufacturers or the on-site air quality construction mitigation manager that the use of such devices is not practical for specific engine types.
- All construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
- Construction contractors shall use electricity from power poles rather than temporary gasoline or diesel powered generators, as feasible, or solar where available.
- Consistent with SCAQMD Rule 403, construction contractors shall implement best available dust control measures during active construction operations capable of generating dust.
- Construction contractors shall maintain construction equipment in good, properly tuned operating condition, as specified by the manufacturer, to minimize exhaust emissions. Documentation demonstrating that the equipment has been maintained in accordance with the manufacturer's specifications shall be kept on-site and made available to LADBS inspectors during inspection.
- Vehicle idling shall be limited to five minutes as set forth in the California Code of Regulations, Title 13. Signs shall be posted in areas where they will be seen by vehicle operators stating idling time limits.

- Construction contractors shall utilize construction equipment that uses low polluting fuels (i.e. compressed natural gas, liquid petroleum gas, and unleaded gasoline) to the extent that they are available and feasible to use.
- Heavy duty diesel-fueled equipment shall use low NOx diesel fuel to the extent that it is available and feasible to use.
- Construction haul truck operators for demolition debris and import/export of soil shall use trucks that meet the California Air Resources Board's (CARB) 2010 engine emissions standards at 0.01 g/bhp-hr of particulate matter (PM) and 0.20 g/bhp-hr of NOx emissions. Operators shall maintain records of all trucks associated with project construction to document that each truck used meets these emission standards and shall make these records available for inspection upon request by the City of Los Angeles or the South Coast Air Quality Management District (SCAQMD).
- Construction contractors shall reroute construction trucks away from congested streets or sensitive receptor areas, as feasible.

With respect to long-term operational impacts, the Downtown Plan's focus on mixed use and transit-oriented development would generally tend to minimize per capita emissions associated with vehicle trips, as described above. Adherence to the City's green building standards on all new development, as described in detail in Section 4.5, *Energy*, would minimize emissions associated with energy use. Additional feasible mitigation beyond these Downtown Plan features and citywide standards is not available.

New Zoning Code

None required.

Significance After Mitigation

Downtown Plan

Construction Emissions

As indicated above, construction projects with more than 8 heavy duty pieces of equipment on-site and operating 8 hours per day and over 100 daily truck trips would be expected to exceed SCAQMD regional thresholds of significance; projects with over 8 heavy duty pieces of equipment operating 8 hours per day would be expected to exceed SCAQMD LST. As noted above, projects that would require this level of equipment use/truck trips would be expected to be larger than the threshold for site plan review and would require discretionary review.

Mitigation Measure 4.2-2 would reduce regional and local emissions generated by various construction activities, including equipment operation, truck trips, and painting. For construction impacts, the use of Tier 4 equipment would result in a 50 to 90 percent reduction in NO_X and PM emissions from diesel-powered off-road construction equipment relative to Tier 3 engines, which are typically used as the industry standard. Requiring engines meeting Tier 4 emissions standards is becoming more common as the equipment is more widely available and would reduce emissions for some construction projects that would otherwise have significant impacts based on SCAQMD thresholds to a less than significant level. Los Angeles County Metropolitan Transportation Authority (LACMTA, or "LA Metro") already requires the use of Tier 4 engines in all their construction projects. However, on-road heavy-duty haul trucks are not regulated under the same off-road emissions standards and the City cannot feasibly require all construction-related on-road trucks operating within City limits to adhere to more stringent engine emissions standards.

Specific reduction in emissions below the SCAQMD significance thresholds cannot be demonstrated in the absence of specific project details to assess. It is reasonable to assume that construction activities for a development project in the Downtown Plan Area could generate emissions that would exceed the

significance thresholds despite Mitigation Measure 4.2-2. Therefore, the Downtown Plan is considered to result in a significant and unavoidable regional and localized construction impact related to violating an air quality standard and/or contributing substantially to an existing or projected air quality violation.

Therefore, after mitigation, construction related emissions for NOX, $PM_{2.5}$ and PM_{10} would be ***significant and unavoidable***.

Operational Emissions

No feasible mitigation measures are available to reduce long-term VOC, PM_{10}, and $PM_{2.5}$ emissions associated with implementation of the Downtown Plan to below SCAQMD thresholds. Impacts related to operational emissions under the Downtown Plan for VOC, PM_{10}, and $PM_{2.5}$ would remain ***significant and unavoidable.***

Associated Health Effects (Sierra Club v. County of Fresno)

As discussed in Methodology, the Court in Sierra Club v. County of Fresno held that projects with significant air quality impacts need to "relate the expected adverse air quality impacts to likely health consequences or explain why it is not feasible at the time of drafting to provide such an analysis, so that the public may make informed decisions regarding the costs and benefits of the project." Based on the above analysis and conclusions, the Proposed Project is expected to result in significant unavoidable impacts from construction emissions for VOX, $PM_{2.5}$, and PM_{10}, and from operational emissions for VOC, $PM_{2.5}$ and PM_{10}. As provided below, while additional information is provided about health effects of these pollutants, Appendix I explains why it is not feasible to provide analysis to relate these significant impacts to likely health consequences.

There is no established pathway to accurately quantify ozone-related health impacts caused by NOX or VOC emissions from relatively small projects. The SCAQMD does not explicitly define "relatively small project;" however, it is assumed that the Community Plan would be considered a relatively small project in the scheme of the overall Basin. SCAQMD acknowledges that it may be feasible to analyze air quality related health impacts for projects on a regional scale with very high emissions of NOX and VOCs, where impacts are regional. The example SCAQMD provided in its amicus brief in the *Sierra Club* decision was for proposed Rule 1315, which authorized various newly-permitted sources to use offsets from the District's "internal bank" of emission reductions. The CEQA analysis accounted for essentially all of the increases in emissions due to new or modified sources in the District between 2010 and 2030, or approximately 6,620 pounds per day of NOX and 89,947 pounds per day of VOC, to expected health outcomes from ozone and particulate matter (e.g., 20 premature deaths per year and 89,947 school absences in the year 2030 due to zone). Accordingly, in this case it would not be feasible to directly correlate project emissions of VOC or NOX with specific health impacts from ozone. Further, SCAQMD's amicus brief notes that ozone formation is not linearly related to emissions. Therefore, ozone impacts vary depending on the location of the emissions, the location of other precursor emissions, meteorology, and seasonal impacts, and because ozone is formed later and downwind from the actual emission. Lead agencies that use SCAQMD's thresholds of significance may determine that a project would have a significant air quality impact and must apply all feasible mitigation measures; however, it would not be able to precisely correlate the project to quantifiable health impacts, unless the emissions are sufficiently high to use a regional modeling program, which is not the case for the Downtown Plan.

With respect to PM2.5, although CARB has a methodology that can predict expected mortality for large amounts of PM2.5, this methodology is not suited for small projects and may provide unreliable results due to a variety of uncertainties, such as the representativeness of the population used in the methodology, as well as the specific source of PM and the corresponding health impacts. The use of this methodology for

small source could result in unreliable findings and would not provide meaningful information. As such, it is not appropriate for the Downtown Plan.

While a number of models and tools are available to quantify emissions, these models are limited by a number of factors in determining health impacts of individual development and infrastructure projects as well as local plan-level projects. The USEPA currently performs health impact assessments (HIAs) using the Community Multiscale Air Quality model for pollutant transport modeling and Environmental Benefits Mapping and Analysis Program - Community Edition (BENMAP-CE) for health impact calculations. However, these models are designed to estimate health impacts over a large scale (e.g. city-wide, state-wide). In addition, the CMAQ model requires inputs such as regional sources of pollutants and global meteorological data, which are not readily accessible. Other general limitations of the current suite of models include not being able to model concentrations or dispersion of pollutants, the unsuitability of regional models in providing accurate results for local-level plans or individual projects, and limitations on being able to correlate concentrations to related health effects.

As noted in the *Public Health Effects and Sierra Club v. County of Fresno* White Paper included in Appendix I, "For local plans or projects that exceed any identified SCAQMD air quality threshold, City EIR documents are able to identify and disclose generalized health effects of certain air pollutants, but are currently limited and are unable to establish an accurate connection between any local plan or project and a particular health effect. At this time, it is infeasible for City EIRs to directly link a plan's or project's significant air quality impacts with a specific health effect. A number of factors contribute to this uncertainty, including the regional scope of air quality monitoring and planning, technological limitations for accurate modeling at a local plan- or project-level, and the intrinsically complex nature between air pollutants and health effects in conjunction with local environmental variables."

Threshold 4.2-3	Expose sensitive receptors to substantial pollutant concentrations

Impact 4.2-3

Downtown Plan: Construction under the Downtown Plan may expose sensitive receptors to substantial pollutant concentrations. Implementation of Mitigation Measure 4.2-2 and adherence to existing regulations would minimize exposure to substantial pollutant concentrations, but construction-related emissions would potentially exceed SCAQMD thresholds. Truck trips associated with operation of distribution centers that could be accommodated in certain portions of the Downtown Plan Area could expose sensitive land uses within 1,000 feet of such facilities to substantial pollutant concentrations. This impact would be ***less than significant with mitigation*** for construction and ***significant and unavoidable*** for operation.

New Zoning Code: The New Zoning Code would not expose sensitive receptors to substantial pollutant concentrations. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Impacts would be ***less than significant.***

Downtown Plan Impact

Regarding health risks from existing emissions sources, the California Supreme Court ruling in *California Building Industry Association vs. Bay Area Air Quality Management District* (December 17, 2015) held that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents. But when a proposed project's risks exacerbate those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such

hazards on future residents or users. In those specific instances, it is the project's impact on the environment – and not the environment's impact on the project – that compels an evaluation of how future residents or users could be affected by exacerbated conditions."

Construction

The greatest potential for exposure to substantial pollutant concentrations and TAC emissions during construction would be diesel particulate emissions associated with heavy duty equipment operations and truck traffic. Diesel exhaust causes health effects from both short-term or acute exposures, and long-term chronic exposures. The type and severity of health effects depends upon several factors including the amount of chemical exposure and the duration of exposure. Acute exposure to diesel exhaust may cause irritation to eyes, nose, throat and lungs, and some neurological effects, such as lightheadedness. Acute exposure may also elicit a cough or nausea as well as exacerbated asthma. Chronic exposure to diesel exhaust in experimental animal inhalation studies has shown a range of dose-dependent lung inflammation and cellular changes in the lung and immunological effects. Based upon human and laboratory studies, there is considerable evidence that diesel exhaust is a carcinogen. Human epidemiological studies demonstrate an association between diesel exhaust exposure and increased lung cancer rates in occupational settings. As discussed under Impact 4.2-2, construction-related emissions of particulates (PM_{10} and $PM_{2.5}$) generated primarily by diesel fuel combustion would potentially exceed SCAQMD thresholds.

The California Office of Environmental Health Hazard Assessment (OEHHA) published a guidance manual in 2015 to assist the preparation of health risk assessments (HRA) for carcinogenic and non-carcinogenic exposures to air toxics in accordance with the Air Toxics Hot Spots Information and Assessment Act.20 The 2015 OEHHA HRA guidelines provide methodologies for assessing various types of environmental exposures to toxic contaminants, including inhalation exposures. The 2015 OEHHA HRA guidance relied upon a comprehensive review of the most up-to-date scientific literature to formulate the recommended exposure estimation methodologies. The OEHHA guidance acknowledges that children are especially susceptible to the effects of toxic air contaminant exposure, and incorporated age sensitivity factors (ASFs) and age-specific daily breathing rates (DBRs) to account for the differences in sensitivity to carcinogens during early life exposure. OEHHA recommends a default ASF of 10 for the age range between the third trimester of pregnancy through two years, and an ASF of three for ages two through 15 years.

As a conservative measure to characterize maximum potential exposures of sensitive receptors to carcinogenic risks, residential exposures are assumed to begin at birth and exposures of children at schools are anticipated to begin at the lowest educational grade level. The OEHHA guidance provides recommended DBR values that are specific to the age of the receptor and the type of activity in which the receptor would be engaged during exposure, which are evaluated on a case-by-case basis. SCAQMD has not adopted guidelines to implement the 2015 OEHHA HRA guidelines for construction and indicated it is currently considering how to implement the guidelines. The City has only found one Air District, the San Joaquin Valley Air Pollution Control District that has adopted guidelines to implement the 2015 OEHHA HRA guidelines. BAAQMD is undergoing a process to implement the guidelines as well.

The specific locations of future construction activity in the Downtown Plan Area are not currently known. The construction health risk analysis here and under Impact 4.2-2 is speculative given the lack of a construction location and construction activities.

However, a review of several published EIRs for the largest development projects recently analyzed in the City, including in the Downtown Plan Area did not show any significant impacts resulting from construction related to TACs. For example, none of the following recently reviewed projects had significant impacts from construction related TACs:

- Olympia Project: 1.84 million new square feet, occupying a whole city block, and 284,000 cubic yards of soil export (Los Angeles 2018a);
- 2134 Violet Street Project: 569,448 square feet, involving a whole City block, with 239,000 cubic yards of soil export (Los Angeles 2020a);
- Crossroads Project: 1.4 million square feet in Hollywood Plan Area, 647,753 cubic yards of soil export (Los Angeles 2017);
- Times Mirror: 1.5 million square feet on 3.6-acre city block, involving 37-story tower and a 53-story tower, and export of 364,000 cubic yards of soil (Los Angeles 2019); and
- 5th and Hill: 260,689 square feet on .38-acre site, involving 53-story building, with 25,092 cubic yards of soil export (Los Angeles 2018b).

The only City EIR that was identified that found a potential impact related to TACs under a conservative worst-case scenario was the 6220 Yucca Project, which involved demolition of an existing structure and construction of 210 multi-family residential units, 136 hotel rooms and approximately 12,570 square feet of commercial/restaurant uses on a 1.16-acre site, with export 120,000 cubic yards of soil. The EIR found that impacts would be less than significant with mitigation (Los Angeles 2020b). The mitigation is substantially similar to mitigation measure 4.2-2, as it relates to using Tier 4 equipment. Based on the above, it is not foreseeable that projects in the Downtown Plan Area would have significant impacts related to TACs. The only project identified with potential significant impacts relied on a conservative measurement, but found that application of standard mitigation reduced to less than significant. Any project that is as large as the 6220 Yucca Project would be subject to Site Plan review and would be required to undergo project level environmental review.

Notwithstanding the above, to be conservative, it is concluded that the Downtown Plan could potentially result in substantial pollutant concentrations during construction activities. As a result, this impact would be a ***potentially significant*** impact.

Operation

The primarily residential, commercial, and light industrial land uses reasonably expected from the Downtown Plan typically do not generate TAC emissions that would expose people to substantial pollutant concentrations. However, new heavy industrial development in the southern portion of the Downtown Plan Area is reasonably expected. The use of toxic compounds by an industrial facilities would be strictly regulated through the SCAQMD permitting process, which requires detailed health risk assessments, when applicable. New industrial sources of emissions are subject to SCAQMD Rule 1401, New Source Review of Toxic Air Contaminants. This rule specifies limits for maximum individual cancer risk (MICR), cancer burden, and noncancer acute and chronic hazard index (HI) from new permit units, relocations, or modifications to existing permit units that emit toxic air contaminants. Compliance with the SCAQMD permitting process and Regulation XIV would ensure that equipment associated with new industrial facilities would not generate TAC emissions exceeding the SCAQMD standards or adversely affect sensitive land uses.

Distribution Centers

The operation of distribution centers with large truck fleets could also generate TACs from diesel emissions (diesel particulates) that could impact sensitive receptors. Because there are existing historical residential uses (pre-1950) in some parts of the Downtown Plan area, including areas designated as Production, Markets and Hybrid Industrial, which allow for industrial uses, new distribution facilities could potentially be located adjacent to or near sensitive uses. Based on various health studies, air quality modeling, and monitoring studies, the CARB recommends avoiding the siting of new sensitive land uses (e.g., residences, schools, medical facilities) within 1,000 feet of a distribution center that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where

TRU operations exceed 300 hours per week (CARB 2005) in order to avoid substantial health risks from diesel particulates. The CARB also recommends avoiding locating residences and other new sensitive land uses near distribution center entry and exit points. Based on these recommendations, the location of a new distribution center that accommodates more than 100 trucks or 40 TRUs per day and is located within 1,000 feet of an existing residence or other sensitive land use could result in significant health risks. Health risks, particularly to children whose lungs are still developing and the elderly who may have other serious health problems, may include (1) aggravated asthma; (2) chronic bronchitis; (3) increased respiratory and cardiovascular hospitalizations; (4) decreased lung function in children; (5) lung cancer; and (6) premature deaths for people with heart or lung disease (see the Air Quality and Health Effects white paper in Appendix I). The actual level of risk would depend on a variety of factors that can only be determined once the specifics of a project (e.g., the type, location, and size of the facility and the number of truck trips) are known. In many cases, the preparation of a detailed health risk assessment (HRA) for a specific project may reveal that significant cancer risks would not occur or identify ways in which elevated cancer and other health risks can be avoided. However, absent project-level details, preparation of a meaningful HRA is not possible and it cannot be determined with certainty that significant health risks would not result from a distribution center. Therefore, TAC-related impacts associated new distribution facilities in the Downtown Plan Area with the potential to accommodate more than 100 trucks or 40 TRUs would be ***potentially significant.***

CO Hotspots

Another pollutant for which land development, and in particular increased traffic congestion, can potentially create impacts is CO. Elevated CO levels can occur at roadway intersections that experience high traffic volumes and high levels of engine idling. Historically, mobile source-related CO concentrations at high-volume (e.g., congested) intersections have been linked to health concerns according to USEPA and SCAQMD. According to the *2004 Revision to the California State Implementation Plan for Carbon Monoxide*, requirements for cleaner vehicles, equipment, and fuels have cut peak CO levels in half since 1980 despite growth (CARB 2004). However, with cleaner technologies, automobile emissions of CO have steadily declined over the years and in 2001, the SCAB met both the federal and state 8-hour CO standards at all monitoring stations for the first time. CO attainment was also demonstrated in the 2003 AQMP and the region has remained in attainment of CO standards ever since. The busiest intersection evaluated in 2003 was that at Wilshire Boulevard and Veteran Avenue (located outside the Downtown Plan Area), which has a daily traffic volume of approximately 100,000 vehicles per day. The 2003 1-hour concentration for this intersection was 4.6 ppm, which indicates that the most stringent 1-hour CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day (Los Angeles 2016). With implementation of the Downtown Plan, no intersection in the Downtown Plan Area would experience daily trip volumes exceeding 400,000 vehicles per day (Fehr & Peer 2018). Therefore, the Downtown Plan has no potential to generate localized CO concentrations at intersections that exceed state CO standards. Impacts related to CO standards would therefore be ***less than significant***.

In addition, new discretionary development in the Downtown Plan Area would be required to comply with PRC Section 21151.8, which requires assessment of hazardous pollutants within 0.25 miles of a new elementary or secondary school. This legal requirement within the PRC protects staff and students of new schools from significant health risks from exposure to TACs.

Based on the above, the Downtown Plan related to sensitive receptor exposure to substantial pollutant concentrations from operations would result in ***less than significant*** impacts for all operations except Distribution Facilities, which would be ***potentially significant***.

New Zoning Code Impact

The New Zoning Code would not expose sensitive receptors to substantial pollutant concentrations. The New Zoning Code would continue to allow for and encourage mixed uses which could lead to the potential siting of new sensitive land uses near existing emission sources. However, the New Zoning Code aims to avoid incompatible uses being sited near one another by including transitional buffers or other methods that could be applied to address sensitive receptors. Additionally, fueling stations and vehicle repair uses located adjacent to a Residential Use District or a sensitive use (residential, daycares, or schools, etc.) would trigger a landscaped transitional buffer along any common lot lines, which would buffer sensitive receptors from pollutant concentrations.

However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, air quality impacts cannot be identified.

The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze if the zoning applied would expose sensitive receptors to substantial pollutant concentrations. Impacts would be ***less than significant***.

Mitigation Measures

Downtown Plan

Construction

Refer to Mitigation Measure 4.2-2 described above.

Operation

4.2-3 Distribution Facility Health Risk Assessment

Applicants for distribution centers in the Downtown Plan Area within 1,000 feet of sensitive land uses that require discretionary permits and would accommodate more than 100 truck trips or 40 transport refrigeration units (TRUs) per day shall prepare health risk assessments (HRAs) per SCAQMD and OEHHA guidance to identify the potential for cancer and non-cancer health risks. If cancer risks exceeding SCAQMD standards are identified, the applicant shall identify ways to reduce risks. Methods may include, but are not limited to limiting the number of trucks/TRUs, locating distribution center entry and exit points as far as possible from sensitive land uses, and routing truck traffic away from sensitive land uses.

New Zoning Code

Mitigation is not required.

Significance After Mitigation

Construction

Mitigation Measure 4.2-2 would reduce TAC emissions generated by construction activities, including equipment operation. For example, Tier 4 engines with horsepower ratings between 175 and 750 generate 90 percent less exhaust emissions, including diesel particulate matter, than Tier 2 or 3 engines (Los Angeles 2020b). Imposition of Mitigation Measure 4.2-2 would reduce impacts to ***less than significant with mitigation***.

Operation

Mitigation Measure 4.2-3 would reduce impacts associated with distribution centers to the degree feasible. Nevertheless, although the health risk impact associated with possible future distribution centers is speculative and the recommendations from the CARB upon which the determination of a potentially significant impact are by their nature "conservative", it cannot be determined with certainty that distribution centers in the Downtown Plan Area would not result in health risks exceeding SCAQMD standards. Therefore, TAC-related impacts associated with distribution centers are conservatively identified as ***significant and unavoidable***.

As discussed above in the impact section it is not feasible to provide the associated health risk related to this significant and unavoidable impact with more particularity without project specific details.

Threshold 4.2-4	**Result in other emissions (such as those leading to odors) adversely affecting** a substantial number of people

Impact 4.2-4

Downtown Plan: The Downtown Plan would not emphasize new land uses that are typically associated with odor complaints, but would accommodate new heavy industrial development in the southern portion of the Downtown Plan Area. The Downtown Plan includes standards for new buildings that would insulate against odor issues. Therefore, this impact would be ***less than significant***.

New Zoning Code: The New Zoning Code would not create objectionable odors. **T**he Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Impacts would be ***less than significant.***

Downtown Plan Impact

Construction Odors

Potential sources that could emit odors during construction activities include equipment exhaust and paving and painting activities. Such odors are localized, generally confined to the immediate area surrounding a construction site and transitory in nature. In addition, odors associated with construction activities are not those typically associated with odor complaints. Construction activities in the Downtown Plan Area would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in duration. Construction activity would not cause a significant odor nuisance. reasonably anticipated development for the Downtown Plan would not result in any other emissions that could adversely affect a substantial number of people. Therefore, impacts related to construction odors under the Downtown Plan would be ***less than significant***.

Operational Odors

According to the SCAQMD *CEQA Air Quality Handbook*, land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding. As discussed in Section 4.10, *Land Use and Planning*, the Downtown Plan does not generally emphasize heavy industrial uses, but would allow such uses within the Light and Heavy Industrial designations in the southern portion of the Downtown Plan Area, which predominantly consists of industrial uses. Proposed use regulations include standard requirements for buildings to insulate against odorsthe Downtown Plan would not generally promote the development of land uses typically associated with odor complaints in the majority of the Plan Area

On-site trash receptacles would have the potential to create adverse odors. Consistent with the Mayor's Clean Streets LA Program, trash receptacles would be located and maintained in a manner that promotes odor control and would not result in substantially adverse odor impacts. Restaurant uses that may generate odors would be similar to existing uses within the Downtown Plan Area and would be subject to the provisions of SCAQMD Rule 402 related to the prevention of public nuisance odors affecting a substantial number of people. Therefore, impacts related to operational odors under the Downtown Plan would be ***less than significant***.

New Zoning Code Impact

The New Zoning Code would not create objectionable odors. The New Zoning Code would continue to allow for and encourage mixed uses which could lead to the potential siting of new sensitive land uses near existing odor sources. However, the New Zoning Code aims to avoid incompatible uses being sited near one another by including transitional buffers or other methods that could be applied to address sensitive receptors and would be triggered by impactful uses. For example, fueling stations and vehicle repair uses located adjacent to a Residential Use District or a sensitive use (residential, daycares, or schools, etc.) would trigger a landscaped transitional buffer along any common lot lines. Additionally, under the New Zoning Code, automotive uses within an Industrial Use District would not be allowed to be sited within 500 feet from residential uses without discretionary approval, creating the potential to avoid objectionable odors. However, due to the modular nature of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, objectionable odor impacts cannot be identified.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze whether the zoning applied would create objectionable odors. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect objectionable odor impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Impacts would be ***less than significant.***

Mitigation Measures

No significant impact related to odor has been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

CUMULATIVE IMPACTS

As discussed in subsection 4.2.2, *Environmental Setting*, the SCAB is named so because its geographical formation is that of a basin, with the surrounding mountains trapping the air and its pollutants in the valleys below. The SCAB includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. Cumulative projects would include any reasonably anticipated development in the Basin for regional air quality impacts, as well as reasonably anticipated development in the Downtown Plan Area for localized air quality impacts. Air pollutant emissions in the SCAB are primarily generated by stationary and mobile sources.

AQMP Consistency

As discussed in Section 4.2.3, *Regulatory Framework*, the SCAQMD is responsible for developing programs to reduce emissions from stationary, mobile, and indirect sources to meet national and state AAQS. The most recent of these programs is the 2016 AQMP. The 2016 AQMP represents a thorough analysis of existing and potential regulatory control options, includes available, proven, and cost-effective strategies, and seeks to achieve multiple goals in partnership with other entities promoting reductions in GHG emissions and toxic risk, as well as efficiencies in energy use, transportation, and goods movement.

AQMP consistency is discussed under Impact 4.2-1. As discussed therein, the Downtown Plan would not conflict with the 2016-2040 RTP/SCS. The AQMP was prepared to accommodate growth, to reduce the high levels of pollutants within areas under the jurisdiction of the SCAQMD, and to minimize the impact on the economy. Consistency with the AQMP is assessed by determining how a project accommodates increases in population or employment. The population and employment assumptions used by the SCAQMD to estimate regional emissions in the AQMP are obtained from SCAG projections for cities and unincorporated areas in the SCAQMD's jurisdiction. The Downtown Plan would not facilitate population or employment growth exceeding the SCAG population or employment forecasts for the City as a whole. Therefore, implementation of the Downtown Plan would not conflict with the AQMP. The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would conflict with the AQMP. Neither the Downtown Plan nor the New Zoning Code would make cumulatively considerable contribution to a significant cumulative impact related to AQMP consistency. There are ***no cumulative impacts*** related to AQMP Consistency.

Air Quality Standards

In order to assess cumulative impacts of emissions, the SCAQMD recommends that projects be evaluated to determine whether they would be consistent with AQMP performance standards and project-specific emissions thresholds. In the case of the Downtown Plan, air pollutant emissions would be considered to be cumulatively considerable if the new sources of emissions exceed SCAQMD project-specific emissions thresholds. The cumulative context for consideration of most air quality impacts is the SCAB. The context for localized significance thresholds is within 1,500 feet of the project site per SCAQMD LST guidance, as health risks generally decrease by about 90 percent at 1,500 feet from the emission source (SCAQMD 2017a).

As discussed under Impact 4.2-2, construction activities could result in significant impacts related to regional and localized emissions, along with TAC concentrations. Because construction activities are of limited duration and in a limited area, it is unlikely that construction currently underway would overlap with reasonably expected construction from the Downtown Plan. However, without a specific construction schedule, timing and emission levels cannot be accurately estimated. Therefore, reasonably expected construction from the Downtown Plan has the potential to be cumulatively considerable. Implementation of Mitigation Measure 4.2-2 would reduce regional and local emissions generated by various construction

activities, including equipment operation, truck trips, and painting. However, it is possible that construction activities associated with individual development projects citywide could generate emissions that would exceed the significance thresholds despite incorporation of Mitigation Measure 4.2-2. Because the SCAQMD indicates that projects that have significant impacts at a project level must also be determined to be significant at a cumulative level, this would result in a significant and unavoidable cumulative impact related to regional emissions of NO_X, PM_{10}, and $PM_{2.5}$, and localized emissions of PM_{10} and $PM_{2.5}$, along with TAC concentrations. In addition, operational emissions of VOCs, PM_{10}, and $PM_{2.5}$ would potentially exceed SCAQMD thresholds and substantially contribute to cumulative long-term air quality impacts. Thus, the incremental effect of the Downtown Plan related to construction activity and operation would be cumulatively considerable and cumulative impacts would be ***significant and unavoidable***.

Due to the modularity nature of the New Zoning Code, it is not known where or to what extent future development may occur, therefore no specific air quality impacts would occur. Further, projecting the location and type of future growth would be speculative at this time as future application of the New Zoning Code would be driven by the policy intent and vision of future community plan updates and amendments. Future community plan updates or amendments would be required in order to apply the New Zoning Code to other parts of the City, which would include environmental review and calculate emissions based on the density and intensity proposed. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Therefore, the New Zoning Code would not have a cumulatively considerable contribution to a significant cumulative impact. There are ***no cumulative impacts*** to Air Quality Standards from New Zoning Code.

Operational Toxic Air Contaminants and CO Hotspots

As indicated under Impact 4.2-2, the Downtown Plan would not result in localized CO concentrations that exceed SCAQMD CO significance thresholds. New industrial sources of emissions are subject to SCAQMD Regulation XIII (New Source Review). Under this rule, hazardous facilities are legally subject to provisions that require public notice and modeling analysis to determine and, if necessary, mitigate the downwind impact prior to permit issuance. Permit issuance for these hazardous facilities under the Downtown Plan would be handled on a case-by-case basis, and the emissions modeling analysis would be project-specific. Each individual future project would be responsible for demonstrating compliance with the air quality thresholds of significance devised by the SCAQMD that are designed to protect public health and prevent exposures to substantial pollutant concentrations. As discussed under Impact 4.2-3, the Downtown Plan related to sensitive receptor exposure to substantial TACs from operations would be less than significant for all operations except Distribution Facilities. Although Mitigation Measure 4.2-3 would reduce impacts associated with distribution centers to the degree feasible, it cannot be determined with certainty that distribution centers in the Downtown Plan Area would not result in health risks exceeding SCAQMD standards.

The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would increase the potential for CO hotspots or the exposure of sensitive receptors to substantial pollutant concentrations.

For these reasons, the Downtown Plan's cumulative impacts related to operational emissions of toxic air contaminants would be cumulatively considerable. Neither the Downtown Plan nor the New Zoning Code would have an impact that is cumulatively considerable to any significant cumulative impact related to CO hotspots. Cumulative Impacts from the Proposed Project related to Operational TACs is ***significant and unavoidable*** and ***less than significant for*** CO hotspots***.***

Odor

The Downtown Plan is not anticipated to facilitate the development of uses typically associated with odor complaints, including in new industrial areas. While construction activity can emit odors, construction activity has not been identified as a source of odor complaints. Accordingly, future development occurring under the Downtown Plan would not cause a construction-related odor nuisance. On -site trash receptacles would have the potential to create adverse odors. Consistent with the Mayors Clean Streets LA Program, trash receptacles would be located and maintained in a manner that promotes odor control.

The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would increase the potential for odor impacts. For these reasons, cumulative impacts related to objectionable odors would not be significant and neither the Downtown Plan nor the New Zoning Code would an impact that is cumulatively considerable to any significant cumulative impact. Cumulative impacts from Proposed Project related to odors is ***less than significant***.

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4.3 BIOLOGICAL RESOURCES

This section assesses potential impacts to biological resources. Topics addressed in this section include habitats and sensitive species; Significant Ecological Areas (SEAs); wetlands, streams, rivers, and riparian habitat; wildlife movement; Habitat Conservation Plans (HCPs); and other applicable plans, policies, and ordinances related to biological resources.

ENVIRONMENTAL SETTING

The City of Los Angeles encompasses approximately 478 square miles and is surrounded by the San Gabriel Mountains to the north, the Santa Susana Mountains, Santa Monica Mountains, and Pacific Ocean to the west, the Pacific Ocean to the South, and the Verdugo Mountains, San Rafael Hills, and San Gabriel Valley to the east. Approximately 214 of 478 square miles in the City are comprised of hills and mountains that provide habitat for wildlife. Generally, open space is located in the northern portion of the City and the central and southern portions are highly urbanized. The City is also bisected by the channelized LA River.

SIGNIFICANT ECOLOGICAL AREAS

Citywide Significant Ecological Areas

Significant Ecological Areas (SEAs) are ecologically important land and water systems that support valuable habitat for plants and animals, and are often integral to the preservation of rare, threatened, or endangered species and the conservation of biological diversity. There are a number of SEAs located within the City of Los Angeles boundaries, including Ballona Creek, Tujunga Valley-Hansen Dam, and Chatsworth Reservoir Simi Hills, Encino Reservoir, Temescal-Rustic-Sullivan Canyons, Griffith Park, Terminal Island, and Verdugo Mountains (City of Los Angeles 2015).

Downtown Plan Area Significant Ecological Areas

The Downtown Plan Area encompasses approximately 4,000 acres in downtown Los Angeles. The Downtown Plan Area is fully urbanized and, as noted above, generally lacks native biological habitat. The Los Angeles River, as well as small portions of parks and open space, trees and minor urban landscaping, are the only sources of biological habitat in and around the Downtown Plan Area. There are no designated SEAs in the Downtown Plan Area.

SENSITIVE SPECIES AND HABITATS

A sensitive natural community, including a sensitive plant community, is one that is considered rare within the region by regulatory agencies, supports sensitive species or serves as a wildlife corridor. A special status species is a plant or animal species listed as endangered, threatened, candidate, or as some other special status, by federal, state, or local agencies, or by one or more special interest groups, such as The California Native Plant Society (CNPS), The California Department of Fish and Wildlife (CDFW) and the California Natural Diversity Database (CNDDB). CDFW and CNDDB were consulted to determine whether any sensitive species could occur Citywide or in the Downtown Plan Area. CNDDB is a computerized database that identifies occurrences of plants, animals, and communities listed by CDFW and/or the U.S. Fish and Wildlife Service (USFWS) as rare, threatened, or endangered (i.e., "listed species"), or otherwise considered species of special concern.

Citywide Sensitive Species and Habitats

The California Department of Fish and Wildlife CNDDB Quad Species List for Los Angeles identifies a number of sensitive wildlife species within the City of Los Angeles. **Table 4.3-1** lists the federally- and state-designated threatened and endangered species.

TABLE 4.3-1 PLANT AND ANIMAL SPECIES OCCURRING IN LOS ANGELES

Scientific Name	Common Name	Federal Status[1]	State Status[2]	CDFW[3]	Rare Plant Rank[4]
Animals					
Rana draytonii	California red-legged frog	Threatened	None	SSC	n/a
Taricha torosa	Coast Range newt	None	None	SSC	n/a
Spea hammondii	western spadefoot	None	None	SSC	n/a
Piranga rubra	summer tanager	None	None	SSC	n/a
Spinus lawrencei	Lawrence's goldfinch	None	None	None	n/a
Riparia riparia	bank swallow	None	Threatened	None	n/a
Setophaga petechial	yellow warbler	None	None	SSC	n/a
Athene cunicularia	burrowing owl	None	None	SSC	n/a
Polioptila californica californica	coastal California gnatcatcher	Threatened	None	SSC	n/a
Calypte costae	Costa's hummingbird	None	None	None	n/a
Empidonax traillii extimus	southwestern willow flycatcher	Endangered	Endangered	None	n/a
Vireo bellii pusillus	least Bell's vireo	Endangered	Endangered	None	n/a
Eumops perotis californicus	western mastiff bat	None	None	SSC	n/a
Nyctinomops macrotis	big free-tailed bat	None	None	SSC	n/a
Taxidea taxus	American badger	None	None	SSC	n/a
Lasiurus cinereus	hoary bat	None	None	None	n/a
Anodonta californiensis	California floater	None	None	None	n/a
Gonidea angulate	western ridged mussel	None	None	None	n/a
Anniella stebbinsi	southern California legless lizard	None	None	SSC	n/a
Arizona elegans occidentalis	California glossy snake	None	None	SSC	n/a
Diadophis punctatus modestus	San Bernardino ringneck snake	None	None	None	n/a
Salvadora hexalepis virgultea	coast patch-nosed snake	None	None	SSC	n/a
Thamnophis hammondii	two-striped gartersnake	None	None	SSC	n/a
Phrynosoma blainvillii	coast horned lizard	None	None	SSC	n/a
Community					
Walnut Forest	Walnut Forest	None	None	None	n/a
Plants					
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	None	None	None	1A
Symphyotrichum greatae	Greata's aster	None	None	None	1B.3
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	None	None	None	4.3
Atriplex serenana var. davidsonii	Davidson's saltscale	None	None	None	1B.2
California macrophylla	round-leaved filaree	None	None	None	1B.2
Ribes divaricatum var. parishii	Parish's gooseberry	None	None	None	1A
Phacelia hubbyi	Hubby's phacelia	None	None	None	4.2
Juglans californica	southern California black walnut	None	None	None	4.2

TABLE 4.3-1 PLANT AND ANIMAL SPECIES OCCURRING IN LOS ANGELES

Scientific Name	Common Name	Federal Status[1]	State Status[2]	CDFW[3]	Rare Plant Rank[4]
Clinopodium mimuloides	monkey-flower savory	None	None	None	4.2
Calochortus catalinae	Catalina mariposa-lily	None	None	None	4.2
Calochortus plummerae	Plummer's mariposa-lily	None	None	None	4.2
Sidalcea neomexicana	salt spring checkerbloom	None	None	None	2B.2
Hordeum intercedens	vernal barley	None	None	None	3.2
Navarretia prostrata	prostrate vernal pool navarretia	None	None	None	1B.1
Horkelia cuneata var. puberula	mesa horkelia	None	None	None	1B.1
Atriplex serenana var. davidsonii	Davidson's saltscale	None	None	None	1B.2

NOTES
[1] United States legal status under the Federal Endangered Species Act.
[2] State of California legal status.
[3] California Department of Fish and Wildlife designation and applies to animals only.
SSC = species of special concern.
[4] California Native Plant Society rare plant rank status applies to plants only.
1B.1 = rare, threatened or endangered in California and elsewhere; seriously threatened in California.
1B.2 = rare, threatened or endangered in California and elsewhere; fairly threatened in California.
1B.3= rare, threatened or endangered in California and elsewhere; not very threatened in California.
2B.2 = rare, threatened or endangered in California but more common elsewhere; moderately threatened in California.
n/a is not applicable
SOURCE: California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB), https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data, January 2018.

Habitat types in the City include inland habitats, mountainous areas, wildlife corridors, coastal wetlands, and Significant Ecological Areas (SEAs). The largest collection of publicly owned natural habitats in the City are the parks and publicly owned open spaces in the San Gabriel, Santa Monica, Verdugo and Santa Susana Mountains (City of Los Angeles 2001). No Habitat Conservation Plans (HCPs) or Natural Community Conservation Plans (NCCPs) are applicable to the City (City of Los Angeles 2015).

Downtown Plan Area Sensitive Species and Habitats

Table 4.3-2 details special status animal and plant species listed on the CNDDB that have been identified in the Downtown Plan Area.

As shown in **Table 4.3-2**, nine special status animals have a historical presence to occur in the Downtown Plan Area over the last 130 years. Of the nine species identified as having historically occurred in the Downtown Plan Area, two species have a Federal and State listed status as Endangered [least Bell's vireo (*Vireo bellii pusillus)* and southwestern willow flycatcher *(Empidonax traillii extimus)*]. The bank swallow *(Riparia riparia*) has a state status of being threatened; however, it is not federally listed as threatened. None of the other species are Federal or State listed special status species. There are four animal species of special concern: the western mastiff bat (*Eumops perotis californicus*), burrowing owl (*Athene cunicularia*), big free tailed bat (*Nyctinomops macrotis*), and American badger (*Taxidea taxus*). However, none of these four species have been sited in the Downtown Plan Area in the last 25 years.

As shown in **Table 4.3-2**, four plant species have been historically identified in the Downtown Plan Area over the last 115 years. The plant species are listed as rare, threatened or endangered but have varying degrees of threatened severity in the state of California. Davidson saltscale (*Atriplex serenana var. davidsonii*) is fairly threatened, Greata's aster (*Symphoyotrichum greatae*) is not very threatened, Prostrate vernal pool navarretia (*Navarretia prostrata*) is seriously threatened, and Salt Spring checkerbloom (*Sidalcea neomexicana*) is moderately threatened. All four plant species are listed as possibly extirpated (i.e., no longer in existence in the area).

TABLE 4.3-2 PLANT AND ANIMAL SPECIES OCCURRING IN THE DOWNTOWN PLAN AREA

Scientific Name	Common Name	Habitat	Federal Status[1]	State Status[2]	CDFW[3]	Rare Plant Rank[4]
Animals						
Taxidea taxus	American badger	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	None	None	SSC	n/a
Riparia riparia	Bank swallow	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	None	Threatened	None	n/a
Nyctinomops macrotis	Big free tailed bat	Low-lying arid areas in Southern California. Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	None	None	SSC	n/a
Athene cunicularia	Burrowing owl	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	None	None	SSC	n/a
Lasiurus cinereus	Hoary bat	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	None	None	None	n/a
Vire bellii pusillus	Least Bell's vireo	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Endangered	Endangered	None	n/a
Empidonix traillii extimus	Southerwestern willow flycatcher	Riparian woodlands in Southern California.	Endangered	Endangered	None	n/a
Eumops perotis californicus	Western mastiff bat	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	None	None	SSC	n/a

TABLE 4.3-2 PLANT AND ANIMAL SPECIES OCCURRING IN THE DOWNTOWN PLAN AREA

Scientific Name	Common Name	Habitat	Federal Status[1]	State Status[2]	CDFW[3]	Rare Plant Rank[4]
Plants						
Atriplex serenana var. davidsonii	Davidson saltscale	Coastal bluff scrub, coastal scrub. Alkaline soil. 0-460 m.	None	None	n/a	1B.2
Symphoyotrichum greatae	Greata's aster	Chaparral, cismontane woodland, broadleafed upland forest, lower montane coniferous forest, riparian woodland. Mesic canyons. 335-2015 m.	None	None	n/a	1B.3
Navarretia prostrata	Prostrate vernal pool navarretia	Coastal scrub, valley and foothill grassland, vernal pools, meadows and seeps. Alkaline soils in grassland, or in vernal pools. Mesic, alkaline sites. 3-1235 m.	None	None	n/a	1B.1
Sidalcea neomexicana	Salt Spring checkerbloom	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Alkali springs and marshes. 0-1530 m.	None	None	n/a	2B.2

NOTES
[1] United States legal status under the Federal Endangered Species Act.
[2] State of California legal status.
[3] California Department of Fish and Wildlife designation and applies to animals only.
SSC = species of special concern.
[4] California Native Plant Society rare plant rank status applies to plants only.
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1B.3= rare, threatened or endangered in California and elsewhere; not very threatened in California.
2B.2 = rare, threatened or endangered in California but more common elsewhere; moderately threatened in California.
n/a is not applicable
SOURCE: California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB), https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data, September 2017.

WETLANDS, STREAMS, AND RIPARIAN HABITATS

Wetlands are transitional lands between water and land systems where the water table is usually at or near the surface or the land is covered by shallow water, e.g., marshes and bogs. Riparian areas are those plant communities adjacent to and affected by surface or ground water of perennial or ephemeral water bodies such as rivers, streams, lakes, ponds, or other drainages. Wetlands and riparian vegetation provide a range of functions, such as water quality maintenance, flood control, bank stabilization, groundwater replenishment, and food, cover, and water for a diversity of wildlife species. Riparian vegetation and wetlands may also serve as stopover points for migrating birds. During the 20th century an estimated 95% of the wetlands along the Los Angeles coast disappeared, largely due to water being diverted by flood control and drainage systems, development of wetlands, encroachment, water contamination and other impacts associated with urbanization.

Citywide Wetlands, Streams, and Riparian Habitat

Wetlands in the City are associated with springs, streams, rivers (e.g., Tujunga Wash) and lakes, as well as the ocean (City of Los Angeles 2001). The largest coastal wetland, Ballona wetlands, is in the Westchester-Playa del Rey community (City of Los Angeles 2001). The Ballona wetlands is an identified SEA that provides approximately 153 acres of wetland habitat and 83 acres of non-wetland waters (CDFW 2017).

While Ballona wetlands is among one of the most degraded wetlands in California, it provides a variety of habitat types and is home to a variety of wildlife and plant species (CDFW 2017). The Venice Canal System, in the Venice community, is also an important part of the wetlands system as its canals connect to the Pacific Ocean (City of Los Angeles 2001).

Other riparian habitats in the City include the LA River and its tributaries, including the Pacoima Wash, Tujunga Wash, and Verdugo Wash. Most of the LA River corridor is of extremely poor habitat quality, especially in areas where the river channel is completely lined with concrete. The only areas that presently support riparian habitat are Sepulveda Basin and the Glendale Narrows. The 225-acre Sepulveda Basin Wildlife Preserve is the only officially designated wildlife area along the River, within the City. Key indicator species found within these areas include a variety of mammals and birds, such as coyote, shrike, acorn woodpeckers, and California quail (City of Los Angeles 2017).

Downtown Plan Area Wetlands, Streams, and Riparian Habitat

According to the USFWS National Wetlands Inventory, the only wetland area in the Downtown Plan Area is the Los Angeles River (see **Figure 4.3-1**). The portion of the Los Angeles River in the Downtown Plan Area is classified as Low Perennial Riverine with stretches of the River containing artificial substrate (i.e., concrete) bottom that does not support riparian vegetation. There are no riparian habitats located in the Downtown Plan Area.

WILDLIFE CORRIDORS

As described above, wildlife corridors are land segments that connect two or more large habitat areas and provide a habitat for movement of animals between those areas. They encourage protection and health of animal populations by enabling access to food and broader animal interchange for healthy species propagation. Loss of corridors especially impacts large carnivores that need extensive territory for survival. As freeways and other barriers block corridors and as habitats shrink, large animals are forced from the city or are unable to survive.

Citywide Wildlife Corridors

Because much of Los Angeles is either urban or suburban in nature, wildlife corridors are not present in much of the City. Areas that may facilitate wildlife movement in the City are generally located in the mountainous and outer areas of the City, such as Santa Monica Mountains. Those wildlife corridors on the borders of the City link to regional corridors, including the Angeles National Forest to the north and Topanga State Park to the west (Los Angeles County 2009).

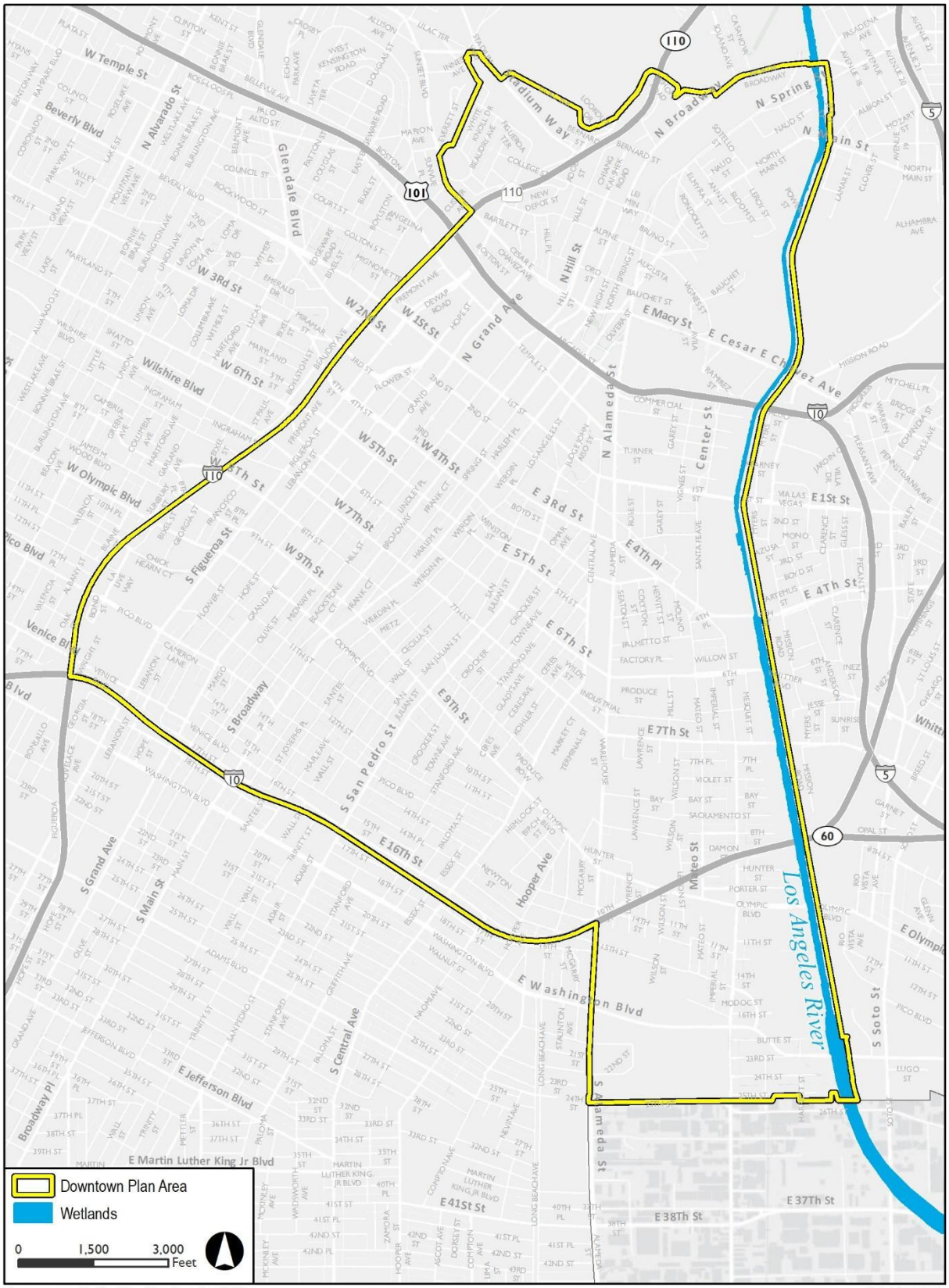
Downtown Plan Area Wildlife Corridors

The Downtown Plan Area is entirely urbanized and no wildlife corridors are present in the Downtown Plan Area. The Los Angeles River runs along the eastern edge of the Downtown Plan Area and could potentially facilitate wildlife movement, but the channelized nature of the river in this location and urbanized nature of its surroundings limits the potential for wildlife movement along this corridor.

HERITAGE TREES AND ORDINANCE-PROTECTED TREES

Heritage trees are individual trees of any size or species that are specially designated by the Los Angeles Department of Recreation and Parks (DRP) as “heritage” because of their historical, commemorative, or horticultural significance. The nomination and determination of heritage trees is an internal process within DRP. Nominations are generally made by DRP staff members or community members. The City of Los

Figure 4.3-1 Downtown Plan Area Wetlands



Basemap provided by City of Los Angeles, 2018.

Fig 4.3-2 Wetlands

Angeles online GIS mapper, NavigateLA, provides an inventory of all heritage trees on City parks and recreation center properties.

As discussed below under *Regulatory Framework*, native Oak, Western or California Sycamore, California Bay, and Southern California Black Walnut are protected by City Ordinance. Removal of these species requires a permit and replacement of lost trees.

Citywide Heritage Trees and Ordinance-Protected Trees

Heritage trees can be found on a number of City parks and protected tree species may be found on individual public or private properties throughout the City. As noted above, NavigateLA includes an inventory of citywide Heritage Trees. Protected trees could be located anywhere in the City and are too numerous to identify as part of this Program EIR.

Downtown Plan Area Heritage Trees and Ordinance-Protected Trees

Per the NavigateLA mapper discussed above, approximately 80 heritage trees are located in the Downtown Plan Area. Heritage trees in the Downtown Plan Area are primarily located in the City's parks and recreation center properties. Many of these trees are located in the vicinity of Alpine Park and Paseo de la Plaza Park. Protected trees could be present on individual properties throughout the Downtown Plan Area.

REGULATORY FRAMEWORK

FEDERAL

U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (USACE) has primary federal responsibility for administering regulations that concern waters and wetlands in the project area. In this regard, USACE acts under two statutory authorities, the Rivers and Harbors Act (33 U.S.C., Sections 9 and 10), which governs specified activities in navigable waters, and the Clean Water Act (Section 404), which governs specified activities in waters of the United States, including wetlands and special aquatic sites. Wetlands and non-wetland waters (e.g., rivers, streams, and natural ponds) are a subset of waters of the United States and receive protection under Section 404 of the Clean Water Act. USACE has primary federal responsibility for administering regulations that concern waters and wetlands in the project area under statutory authority of the Clean Water Act (Section 404). In addition, the regulations and policies of various federal agencies mandate that the filling of wetlands be avoided to the maximum extent feasible. USACE requires obtaining a permit if a project proposes placing structures within navigable waters and/or alteration of waters of the United States.

Federal Endangered Species Act (FESA)

The Federal Endangered Species Act of 1973 (FESA) and subsequent amendments provide for the conservation of endangered and threatened species, and the ecosystems upon which they depend. Section 7 of the FESA requires federal agencies to aid in the conservation of listed species, and to ensure that the activities of federal agencies will not jeopardize the continued existence of listed species or adversely modify designated critical habitat. The USFWS and the National Oceanic and Atmospheric Administration (NOAA) are responsible for administration of the FESA and have regulatory authority over federally listed species.

Migratory Bird Treaty Act (MBTA)

The MBTA makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds, and prohibits the removal of nests occupied by migratory birds. The CDFW has jurisdiction over actions that may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include Sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

STATE

California Endangered Species Act

The CDFW is responsible for administration of the California Endangered Species Act (CESA). For projects that affect both a state and federal listed species, compliance with the FESA will satisfy the California Endangered Species Act if the CDFW determines that the federal incidental take authorization is consistent with the California Endangered Species Act. Projects that result in a take of a California listed species require a take permit under the California Endangered Species Act. The federal and state acts lend protection to species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or den locations, communal roosts, and other essential habitat. Unlike the FESA, the CESA prohibits the take of not just listed endangered or threatened, but also candidate species (species petitioned for listing).

The CESA defines an endangered species as:

> *…a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.*

A threatened species is defined as:

> *…a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species.*

Candidate species are defined as:

> *…a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list.*

Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the FESA, CESA does not include listing provisions for invertebrate species. Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened or endangered species by stating:

> *…no person shall import into this State, export out of this State, or take, possess, purchase, or sell within this State, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided.*

Under the CESA, "take" is defined as, "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Additionally, some sensitive mammals and birds are protected by the state as Fully Protected Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively.

Migratory Bird Protection - California Fish and Game Code (CFGC)

According to CFGC Section 3503 it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird [except English sparrows (*Passer domesticus*) and European starlings (*Sturnus vulgaris*)]. Sections 3503 and 3513 prohibit the taking of specific birds, their nests, eggs, or any portion thereof during the nesting season. Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the MBTA, prohibiting the take or possession of any migratory nongame bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by CDFW.

California Native Plant Protection Act (NPPA)

The NPPA was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. Currently, 64 species, subspecies, and varieties of plants are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that the California Endangered Species Act's (CESA) permitting procedures (CFG Code Section 2081) would be applied to plants listed under the NPPA as "Rare." With this change, there is little practical difference for the regulated public between plants listed under CESA and those listed under the NPPA.

Natural Community Conservation Act (NCCA)

The Natural Community Conservation Act (NCCA) (CFGC Chapter 10, Division 3, Sections 2800 et seq.) was enacted in 1991. NCCA is administered by CDFW. The goal of this Act is to identify and secure habitat areas for protection of biodiversity. Habitat areas are identified by CDFW, and plans are prepared for habitat protection. When a development project is proposed, a determination is made concerning the potential impacts of the project on biodiversity and the best means of avoiding or mitigating them. NCCA allows local, state or federal agencies to enter into agreements with public and private entities to implement a "natural community conservation plan" (NCCP), e.g., habitat and species protection within a specified geographic area. Participation in an NCCP does not exempt a development project from CEQA. Mitigation measures pursuant to CEQA may, as an alternative, include participation in an NCCP in order to reduce the burden for on-site mitigation.

Habitat Conservation Plans (HCPS)

HCPs, designated under the Federal Endangered Species Act Section 10(a)(1)(B), are federal planning documents designed to conserve the ecosystems upon which listed species depend, ultimately contributing to their recovery. HCPs require a "take permit" when a project will affect a species identified as listed, non-listed or eligible under the act and detail how those impacts will be minimized, or mitigated; and how the HCP is to be funded (USFW 2016). No HCPs are located in the Downtown Plan Area.

LOCAL

Los Angeles Municipal Code (LAMC) Sec. 46 Tree Preservation Ordinance

The City of Los Angeles passed an ordinance for the preservation of protected trees (Ordinance No. 177,404), which became law in 2006. The Ordinance applies to protected trees that are located on public and private properties, and protects the following tree species:

- All native Oak tree species (*Quercus spp*)
- Western or California Sycamore (*Platanus racemosa*)
- California Bay (*Umbellularia californica*)
- Southern California Black Walnut (*Juglans californica*)

The Ordinance applies to trees that are four inches or greater in diameter at 4.5 feet above ground, and on any lot size. Protected tree removal requires a removal permit by the City of Los Angeles Department of Public Works (LADPW) and replacement of the removed tree(s). Any act that may cause the failure or death of a protected tree requires inspection by the LADPW's Urban Forestry Division.

The LAMC is currently undergoing a comprehensive update to all Zoning Code sections as part of the re:code LA effort. re:code LA, which started in 2013 and will continue through 2020, will update the Zoning Code to make the Code more streamlined, visual, and easy to use. The existing Zoning Code regulations are not being repealed as part of this Project. The existing Zoning Code will continue to be located in Chapter 1 of the Los Angeles Municipal Code, while the New Zoning Code will be located in a new Chapter 1A of the Los Angeles Municipal Code. Relevant components of re:code LA are described in detail in Chapter 3, *Project Description*.

LAMC Sec. 64.72 Stormwater Pollution Control Measures for Development Planning and Construction Activities Ordinance

Through LAMC Section 64.72, the City of Los Angeles has established Low Income Development (LID) practices and standards that aim to mitigate stormwater pollution and maximize open, green, and pervious areas on all new developments or redevelopments. The LID Ordinance requires developments of any kind to comply with the *Development Best Management Practices Handbook.* It also requires all development to be designed to manage and capture stormwater runoff to the maximum extent feasible. Suggested practices, in priority order, include infiltration, evapotranspiration, and capture and use, treated through high removal efficiency biofiltration/biotreatment systems.

Heritage Trees

The City of Los Angeles maintains an inventory of trees with historical, commemorative, or horticultural significance that the City intends to maintain and preserve on City properties, including parks. Heritage trees are not required to be one of the protected tree types covered by Ordinance 177,404. The list of heritage trees is maintained by the City of Los Angeles Department of Recreation and Parks (DRP) and can be viewed on NavigateLA on the City's DPR website. Because heritage trees are located on City parks and recreational facilities, as well as public rights-of-way, DRP is responsible for the maintenance and protection of these trees from injury. The list of heritage trees remains open for new designations and provides information to DRP staff regarding the importance of their actions while planning activities near heritage trees.

City of Los Angeles General Plan Framework and Conservation Elements

The Citywide General Plan Framework Element (Framework Element) is intended to guide the City's long-range growth and development. Chapter 6, Open Space and Conservation of the Framework Element, includes goals, objectives, and policies for the provision, management, and conservation of the City's open space resources, including Significant Ecological Areas (SEAs), wildlife corridors, and natural animal ranges.

The Conservation Element of the General Plan addresses endangered species, habitats, wildlife corridors, and wetlands occurring in the City and identifies policies intended to protect, restore, and enhance these biological resources. Relevant goals, objectives, and policies from the Framework and Conservation Elements related to biological resources are listed in **Table 4.3-3**.

TABLE 4.3-3 RELEVANT GENERAL PLAN FRAMEWORK ELEMENT BIOLOGICAL RESOURCES GOALS, OBJECTIVES, AND POLICIES

Goal/Objective/Policy	Goal/Objective/Policy Description
Framework Element	
Goal 6A	An integrated Citywide/regional public and private open space system that serves and is accessible by the City's population and is unthreatened by encroachment from other land uses
Objective 6.1	Protect the City's natural settings from the encroachment of urban development, allowing for the development, use, management, and maintenance of each component of the City's natural resources to contribute to the sustainability of the region.
Policy 6.1.1	Consider appropriate methodologies to protect significant remaining open spaces for resource protection and mitigation of environmental hazards, such as flooding, in and on the periphery of the City, such as the use of tax incentives for landowners to preserve their lands, development rights exchanges in the local area, participation in land banking, public acquisition, land exchanges and Williamson Act contracts.
Policy 6.1.2	Coordinate City operations and development policies for the protection and conservation of open space resources, by: ● Encouraging City departments to take the lead in utilizing water re-use technology, including graywater and reclaimed water for public landscape maintenance purposes and such other purposes as may be feasible; ● Preserving habitat linkages, where feasible, to provide wildlife corridors and to protect natural animal ranges; and ● Preserving natural viewsheds, whenever possible, in hillside and coastal areas.
Policy 6.1.3	Reassess the environmental importance of the County of Los Angeles designated Significant Ecological Areas (SEAs) that occur within the City of Los Angeles and evaluate the appropriateness of the inclusion of other areas that may exhibit equivalent environmental value.
Policy 6.1.4	Conserve, and manage the undeveloped portions of the City's watersheds, where feasible, as open spaces which protect, conserve and enhance natural resources.
Policy 6.1.5	Provide for an on-site evaluation of sites located outside of the targeted growth areas, as specified in amendments to the community plans, for the identification of sensitive habitats, sensitive species, and an analysis of wildlife movement, with specific emphasis on the Framework Element's Technical Background Report and Environmental Impact Report.
Policy 6.1.6	Consider preservation of private land open space to the maximum extent feasible. In areas where open space value determine the character of the community, development should occur with special consideration of these characteristics.
Policy 6.1.7	Encourage an increase of open space where opportunities exist throughout the City to protect wild areas such as the Sepulveda Basin and Chatsworth Reservoir.

TABLE 4.3-3 RELEVANT GENERAL PLAN FRAMEWORK ELEMENT BIOLOGICAL RESOURCES GOALS, OBJECTIVES, AND POLICIES

Goal/Objective/Policy	Goal/Objective/Policy Description
Conservation Element – Endangered Species	
Policy 1	Continue to require evaluation, avoidance, and minimization of potential significant impacts, as well as mitigation of unavoidable significant impacts of sensitive animal and plant species and their habitats and habitat corridors relative to land development activities.
Policy 2	Continue to administer city-owned and managed properties so as to protect and/or enhance the survival of sensitive plant and animal species to the greatest practical extent.
Policy 3	Continue to support legislation that encourages and facilitates protection of endangered, threatened, sensitive and rare species and their habitats and habitat corridors.
Conservation Element – Habitat	
Policy 1	Continue to identify significant habitat areas, corridors and buffers and to take measures to protect, enhance and/or restore them.
Policy 2	Continue to protect, restore, and/or enhance habitat areas, linkages and corridor segments, to the greatest extent practical, within City owned or managed sites.
Policy 3	Continue to work cooperatively with other agencies and entities in protecting local habitats and endangered, threatened, sensitive, and rare species.
Policy 4	Continue to support legislation that encourages and facilitates protection of local native plant and animal habitats.

SOURCE: City of Los Angeles, The Citywide General Plan Framework, An Element of the City of Los Angeles General Plan, originally adopted 1996, re-adopted 2001; City of Los Angeles, City of Los Angeles General Plan Conservation Element, adopted 2001.

Los Angeles River Revitalization Master Plan

The City of Los Angeles adopted the Los Angeles River Revitalization Master Plan (LARRMP) in 2007 with the goal of restoring the ecological and hydrological functioning of the river, through the recreation of a riparian habitat corridor in the channel, and through the removal of concrete walls where feasible. This would help restore a continuous, functioning riparian ecosystem that supports vegetation as well as birds and mammals, and developing fish passages, fish ladders, and riffle pools (City of Los Angeles 2007).

Development and implementation of the Revitalization Master Plan would maintain the river as a resource that provides flood protection and opportunities for recreational and environmental enhancement, as well as intend to improve the aesthetics of the region, enrich the quality of life for residents, and help sustain the economy of the region. Goals of the plan include:

- Establishing environmentally sensitive urban design guidelines, land use guidelines, and development guidelines for the River zone that would create economic development opportunities to enhance and improve River-adjacent communities by providing open space, housing, retail spaces such as restaurants and cafes, educational facilities, and places for other public institutions.
- Improving the environment, enhancing water quality, improving water resources, and improving the ecological functioning of the River.
- Providing public access to the River.
- Providing significant recreation space and open space, new trails, and improve natural habitats to support wildlife.
- Preserving and enhancing the flood control features of the River.
- Fostering growth in community awareness of the Los Angeles River, and pride in the Los Angeles River.

River Implementation Overlay

The River Implementation Overlay (RIO) is a citywide zoning ordinance (No. 183145) that applies to properties in close proximity to the Los Angeles River. Per Section 13.17(a), the purposes of the ordinance include but are not limited to: supporting the goals of the LARRMP, contributing to the environmental and ecological health of the City's watersheds, and providing a native habitat and supporting local species. Specific references are made in the ordinance to the LARRMP's native landscaping guidelines. As described in *Chapter 3, Project Description*, applicable development regulations and measures to protect sensitive biological resources in the existing RIO will be incorporated into Frontage Districts and development standard rules of the New Zoning Code. In addition, the RIO will be amended to remove portions that are currently in the Downtown Plan Area to avoid redundancy with the New Zoning Code.

Local Coastal Programs

Venice Coastal Zone Specific Plan

The City of Los Angeles does not have a certified Local Coastal Program for the Venice community, but the City has adopted the Venice Coastal Zone Specific Plan. This Specific Plan consists of land use plans, zoning ordinances, zoning district maps, and other implementing actions intended to implement the provisions and policies of the California Coastal Act at the local level. The Specific Plan is predominantly a land use plan, but it also addresses water and marine resource issues relating to regulation of storm water runoff, tidal circulation, and protection and enhancement of environmentally sensitive habitat areas within the Venice Coastal Zone (City of Los Angeles 1999).

San Pedro Local Coastal Program

The City of Los Angeles does not have a certified Local Coastal Program for the San Pedro community, but the City has adopted the San Pedro Coastal Land Use Plan and the San Pedro Specific Plan. The San Pedro Specific Plan and the San Pedro Coastal Land Use Plan contain land use and development regulations to protect, maintain, enhance, and restore the overall quality of the San Pedro Coastal Zone while meeting provisions of the California Coastal Act (City of Los Angeles 2013).

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on the questions in Appendix G of the CEQA Guidelines. Biological resource impacts that may result from implementation of the Downtown Plan would be significant if the Project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service (Threshold 4.3-1)
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service (Threshold 4.3-2)
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (Threshold 4.3-3)

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites (Threshold 4.3-4)
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (Threshold 4.3-5)
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (Threshold 4.3-6)

METHODOLOGY

This section outlines the methodology for evaluating impacts to biological resources, including sensitive natural communities and special status species. For purposes of this analysis, "special status species" include:

- Plants and wildlife species listed as rare, threatened, or endangered under the FESA or the CESA
- Species that are candidates for listing under federal or state law
- Species designated by the USFWS as Proposed or Candidates for listing and/or species designated as Species of Special Concern by CDFW
- Species protected by the Federal Migratory Bird Treaty Act
- Species identified as rare, threatened, or endangered by the California Native Plant Society (CNPS)
- Any other species that may be considered endangered or rare pursuant to CEQA Guidelines Section 15380(b)

The analysis of biological resource impacts was based on review of applicable biological resource databases, plans and policies, as described in the Setting, as well as review of aerial photography such as Google Earth and aforementioned online database mappers. Impacts to biological resources could include the direct take of a species or the removal or disturbance of habitats from future development or more indirect delayed or secondary effects from future development, such as fragmentation, pollination interruption, plant and wildlife dispersal interruption, increased risk of fire, and increased invasion of non-native animals and plants that out-compete natives.

PROJECT IMPACTS

Threshold 4.3-1	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service

Impact 4.3-1

Downtown Plan: The Downtown Plan Area is urbanized and lacks native habitat that would support special status plant or animal species; therefore, the potential to adversely affect endangered and special status plant and animal species would be low. Impacts to special status species would be ***no impact***. Although most of the Downtown Plan Area is highly urbanized and unlikely to have active bird nests, future development in the northern portion of the Downtown Plan Area near Elysian Park could potentially disturb active bird nests. Such impacts would be ***less than significant with mitigation***.

New Zoning Code: The City contains designated Significant Ecological Areas,

rivers and tributaries, and hillside and coastal areas that contain biological resources. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This impact would be a ***less than significant***.

Downtown Plan Impact

As shown in **Table 4.3-2**, nine special status animals and four special status plants with historical presence to occur have been observed in the Downtown Plan Area and its vicinity. Of the identified species, none have been sited in over 25 years. Two animal species are identified as endangered by the CDFW and/or USFWS. Four animal species are identified as species of special concern. The Downtown Plan's impact on these sensitive species is discussed below.

The Downtown Plan would not foreseeably result in modification of the portions of the Los Angeles River because the Plan does not include components that would affect the existing use, zoning, or land use designation of the Los Angeles River. The segment of the Los Angeles River located in the Downtown Plan Area does not contain riparian or other habitat for plant or animal species, as it is channelized and located in an urban environment. The introduction of riparian habitat into the Downtown Plan Area is discussed in Impact 4.3-2.

Endangered Animal Species

According to the CNDDB, the endangered species southwestern willow flycatcher (*Empidonax traillii extimus*) and least Bell's vireo (*Vireo bellii pusillus*) has been historically sited in the Downtown Plan Area. The southwestern willow flycatcher was last observed in the Downtown Plan Area in 1894 and is presumed no longer present in the Downtown Plan Area. The habitat for this species is riparian woodlands, which the Downtown Plan Area does not contain. Impacts to the southwestern willow flycatcher are not likely to occur as a result of Downtown Plan. Least Bell's vireo was last observed in the Downtown Plan Area in 1913and is listed as possibly extirpated in the Downtown Plan Area. The habitat for this species is generally low riparian in vicinity of water or in dry river bottoms. The Downtown Plan Area does not contain riparian habitat. As such, impacts to the least Bell's vireo would not occur as a result of Downtown Plan implementation.

Species of Special Concern

The species of special concern which have been historically sited in the Downtown Plan Area include the burrowing owl (*Athene cunicularia*), American badger (*Taxidea taxus*), big free tailed bat (*Nyctinomops macrotis),* and western mastiff bat (*Eumops perotis californicus*). According to CNDDB, the western mastiff bat, burrowing owl, big free tailed bat, and American badger are presumed to be extant in the Downtown Plan Area. The burrowing owl was last observed in the Downtown Plan Area in 1921, and the habitat includes open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. American badgers habitat include drier open stages of most shrub, forest, and herbaceous habitats with friable soils. The CNDDB ranking of quality of the habitat in the Downtown Plan Area is Unknown, which is likely due to the lack of shrub, forest and herbaceous habitats within the Downtown Plan Area. The western mastiff bat was last observed in the Downtown Plan Area in 1990, and this species' habitat is defined as open and semi-arid to arid, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. The big free tailed bat was last observed in in the Downtown Plan Area 1985, and habitat includes high cliffs and rocky outcroppings, which are used for roosting sites. The areas in which these four species were historically found are developed today with urban uses. The Downtown Plan Area does not provide habitat for these species.

Threatened Plant and Animal Species

The bank swallow (*Riparia riparia)* is listed threatened at the California state level. The species was last observed in the Downtown Plan Area in 1894, and listed as extirpated.

Threatened plant species that have been historically sited to occur in the Downtown Plan Area include the Davidson's saltscale (*Atriplex serenana var. davidsonii*), the prostrate vernal pool navarretia (*Navarretia prostrata*), the Salt Spring checkerbloom (*Sidalcea neomexicana*) and the Greata's aster (*Symphyotrichum greatae*). All four plant species are possibly extirpated in the Downtown Plan Area. The habitat for Davidson's saltscale includes coastal bluff scrub and coastal scrub, and the species was last observed in the Downtown Plan Area in 1902. The habitat for the prostrate vernal pool navarretia includes coastal scrub, grasslands, vernal pools, and meadows, and the species was last observed in the Downtown Plan Area in 1907. The habitats for Salt Spring checkerbloom and Greata's aster include chaparral and coniferous forest, and the species was last observed in the Downtown Plan Area in 1902 and 1932, respectively. Based on the type of habitat and quality of habitat for these species, all four plant species have a CNDDB Occurrence Rank of None within the Downtown Plan Area.

Based on the above, threatened plant and animal species are not expected to occur in the Downtown Plan Area. There is ***no impact.***

Migratory Birds

Downtown Plan Area development could involve construction activity during the bird nesting season, which is generally from March 1 through August 31 and begins as early as February 1 for raptors. Most of Downtown is highly urbanized and lacking trees likely to contain active bird nests. However, Elysian Park, located adjacent to the northern edge of the Downtown Plan Area, includes open lands with stands of mature trees with higher likelihood of containing active bird nests. As such, tree trimming or removal in the northern portion of the Downtown Plan Area abutting Elysian Park would have the potential to disturb active nests, which could constitute a violation of the federal MBTA and/or the CFGC. Therefore, impacts to active bird nests would be ***potentially significant***.

New Zoning Code Impact

As shown in **Table 4.3-1**, 41 federally- and state-designated threatened and endangered wildlife and plant species have the potential to occur in the City of Los Angeles. Additionally, the CNDDB Quad Species List contains a number of other sensitive species that have the potential to occur in the City. There are also several SEAs, as well as the LA River and its tributaries, including the Pacoima Wash, Tujunga Wash, and Verdugo Wash, located within the City of Los Angeles boundaries.

The New Zoning Code would allow for a variety of new Form and Use Districts that could be applied elsewhere in the City through future community plan updates or amendments. Future application of the New Zoning Code could occur in or adjacent to areas including a SEA, rivers and tributaries, hillside, and coastal areas that contain biological resources, or occur in or adjacent to areas with special status species. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts related to biological resources from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This impact would be ***less than significant***.

Mitigation Measures

Downtown Plan

Mitigation Measures 4.3-1(a) and **4.3-1(b)** below would address impacts related to the potential disturbance of active bird nests.

4.3-1(a) Pre-Construction Bird Nest Surveys and Avoidance

For discretionary projects in the Downtown Plan Area that are within 200 feet of Elysian Park, a pre-construction nesting bird survey shall be conducted no more than ten days prior to initiation of ground disturbance and vegetation removal activities for any grading or construction activity initiated during the bird nesting season (February 1 – August 31).

The nesting bird pre-construction survey shall be conducted on foot by a qualified biologist and shall include a 100-foot buffer around the construction site. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities or vegetation removal shall occur within this buffer until the biologist has confirmed that breeding/ nesting is completed and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist on the basis that the encroachment will not be detrimental to an active nest. A Statement of Compliance signed by the Applicant and Owner is required to be submitted to LADBS at plan check and prior to the issuance of any permit. Any survey, report, construction monitoring, and implementation of protective measures conducted shall be documented by a qualified biologist, and shall be provided to the City upon request.

4.3-1(b) Notification

All project applicants will be notified of and shall include on their plans an acknowledgement of the requirement to comply with the federal MBTA and CFGC to not destroy active bird nests and of best practices recommended by qualified biologist to avoid impacts to active nests, including checking for nests prior to construction activities during February 1-August 31 and what to do if an active nest is found, including inadvertently during grading or construction activities. Such best practices shall include giving an adequate construction and grading buffer to avoid the active nest during construction.

New Zoning Code

None required.

Significance After Mitigation

Downtown Plan

Implementation of Measure 4.3-1(a) and 4.3-1(b) would reduce potential impacts to active bird nests to a ***less than significant*** level by ensuring that active nests are identified and as, necessary, avoided.

New Zoning Code

This impact would be ***less than significant*** without mitigation.

Threshold 4.3-2	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service

Impact 4.3-2

Downtown Plan: No riparian or sensitive natural communities are located in or adjacent to the Downtown Plan Area. As such, Plan implementation would have ***no impact*** Downtown with respect to natural communities.

New Zoning Code: Riparian and sensitive natural communities are located in the City. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect biological resources impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This would be a ***less than significant*** impact.

Downtown Plan Impact

There are no riparian habitats or sensitive natural communities located in the Downtown Plan Area. In addition, there are no Significant Ecological Area's (SEAs) located in the Downtown Plan Area. Although the Los Angeles River contains portions of riparian habitat located along the banks in some portions throughout the City, there are no riparian habitats in the Downtown Plan Area.

The Los Angeles River Revitalization Master Plan proposes to enhance and create riparian habitat along the sides of the LA River, which could occur in the Downtown Plan Area. A long-term goal of the River Master Plan is to restore the ecological and hydrological functioning of the river, through the recreation of a riparian habitat corridor within the channel, and through the removal of concrete walls where feasible. This would help restore a continuous, functioning riparian ecosystem that supports vegetation as well as birds and mammals, and developing fish passages, fish ladders, and riffle pools (City of Los Angeles 2007).

The Downtown Plan does not include any development on or adjacent to the Los Angeles River. Therefore, the Downtown Plan would not interfere with implementation of the Los Angeles River Revitalization Master Plan. Since no riparian or sensitive communities currently exist, there would be ***no impact.***

New Zoning Code Impact

As discussed under Existing Conditions, riparian habitats in the City are associated with streams, rivers, lakes, and the Pacific Ocean. In addition, there are several SEAs in the City which have the potential for riparian habitat or sensitive natural communities to occur. As discussed above in the Downtown Plan Impact subsection, the Los Angeles River Revitalization Master Plan proposes to enhance and create riparian habitat along the LA River.

The existing Los Angeles River Improvement Overlay District (RIO) sets forth procedures and standards for the development of areas that are located in close proximity to the LA River. These standards were established to accommodate and protect sensitive biological resources, such as native plants. The New Zoning Code would implement the protection of sensitive biological resources by incorporating parts of the existing RIO standards into Frontage Districts and Development Standard Rules. These Frontage Districts and Development Standard Rules are available to be applied, as appropriate, within future community plan updates and amendments.

As discussed above, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code

outside the Downtown Plan Area would be speculative. Therefore, no indirect impacts are foreseeable that could directly or through habitat modification affect these biological resources.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific impacts to riparian habitat or other sensitive natural community. A ***less than significant*** impact to riparian habitat or other sensitive natural community would occur.

Mitigation Measures

No significant impacts have been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

Threshold 4.3-3	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means

Impact 4.3-3

Downtown Plan: Implementation of the Downtown Plan would not result in an adverse effect to the Los Angeles River and no other wetlands are located in or adjacent to the Downtown Plan Area. There would be ***no impact*** Downtown.

New Zoning Code: Wetlands are located in the City. Through future community plan updates or amendments, application of zoning from the New Zoning Code could occur in and adjacent to wetlands. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This would be a ***less than significant*** impact.

Downtown Plan Impact

According to the USFWS National Wetlands Inventory, the only wetland in the Downtown Plan Area is the Los Angeles River, which runs along the eastern Downtown Plan Area boundary (see Error! Reference source not found.). The portion of the Los Angeles River in the Downtown Plan Area is classified as Low Perennial Riverine, with stretches of the River containing artificial substrate bottom.

Reasonably anticipated development from the Downtown Plan would not directly or indirectly affect the Los Angeles River. As part of the Los Angeles River Revitalization Master Plan, goals in the plan intend to improve water quality, create and restore habitat within and adjacent to the river. These restoration goals intend to ensure that any growth directly adjacent to the river would improve and not degrade existing conditions. Any Downtown Plan Area development that would occur in areas adjacent to the river would be required to adhere to the new Frontage regulations and Development Standard Rules set forth in the New Zoning Code in order to not disturb the river or otherwise conflict with the goals of the River Revitalization Master Plan. As described in Section 4.9, *Hydrology and Water Quality* of this Draft EIR, City's Stormwater and Urban Runoff Pollution Control Ordinance would require future development in the Plan Area to comply with the SUSMP requirements, which require the inclusion of BMPs in a project's design to prevent, control and reduce stormwater pollutants, if applicable; integrate LID practices and standards for stormwater pollution mitigation; and maximize open, green, and pervious space on all development consistent with the City's landscape ordinance and other related requirements to ensure that construction does not violate any water quality standards or discharge requirements or otherwise substantially degrade

water quality. Implementation of the Downtown Plan would not have an adverse effect on federally-protected wetlands. ***No impact*** would occur.

New Zoning Code Impact

As discussed under Existing Conditions, wetlands in the City are associated with streams, rivers, lakes, and the Pacific Ocean. The Ballona wetlands provide approximately 153 acres of wetland habitat and 83 acres of non-wetland waters. The Venice Canal System is also an important part of the wetlands system as its canals connect to the Pacific Ocean. Through future community plan updates or amendments, application of zoning from the New Zoning Code could occur in or adjacent to wetlands. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Therefore, indirect impacts are not foreseeable that could directly or indirectly affect wetland resources.

The New Zoning Code would incorporate parts of the existing RIO design standards into new Frontage Districts that could be applied to development along the LA River. Translation of these existing regulations into the New Zoning Code would not impact wetlands associated with the LA River. The New Zoning Code would also include references to the City's Low Impact Development (LID) requirements, when appropriate, to ensure future development would incorporate stormwater management strategies. Implementation of the City's LID requirements would require best management practices that promote the use of natural systems for infiltration, evapotranspiration, and use of stormwater. These LID practices can effectively remove nutrients, bacteria, and metals from stormwater while reducing the volume and intensity of stormwater flows (City of Los Angeles 2016).

The New Zoning only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zoning classifications would analyze potential community- and site-specific impacts to wetlands. A ***less than significant impact*** to wetlands would occur.

Mitigation Measures

No significant impacts have been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

Threshold 4.3-4	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites

Impact 4.3-4

Downtown Plan: There are no wildlife corridors in or adjacent to the Downtown Plan Area. There would be ***no impact*** Downtown.

New Zoning Code: The City contains areas that may facilitate wildlife movement. Through future community plan updates or amendments, application of zoning from the New Zoning Code could occur in or adjacent to wildlife corridors. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This would be a ***less than significant*** impact Citywide.

Downtown Plan Impact

As discussed in the Setting, the Downtown Plan Area is completely developed, and no current wildlife corridors are present in the Downtown Plan Area. Nesting birds are discussed under Impact 4.3-1. Based on the above, the Downtown Plan would not interfere with the movement of any native resident or migratory fish or wildlife species or impede the use of native wildlife nursery sites. There would be ***no impact.***

New Zoning Code Impact

As discussed under Existing Conditions, much of the City is either urban or suburban in nature; therefore, prominent wildlife corridors do not exist. Areas that may facilitate wildlife movement within the City are generally located in the mountainous and outer areas of the City, such as Santa Monica Mountains, which provide connections to regional corridors such as the Angeles National Forest and Topanga State Park. Through future community plan updates or amendments, application of zoning from the New Zoning Code could occur in or adjacent to wildlife corridors. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Therefore, indirect impacts are not foreseeable that could directly or indirectly affect native or migratory species.

Additionally, adjacency buffers, light and glare standards, and river setbacks standards would be available for application in areas adjacent to the LA River and other areas that contain biological resources. The New Zoning Code will include a range of zone districts that can be applied through future community plan updates or amendments to protect resources associated with wildlife corridors by limiting the allowable development.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific impacts related to the movement of any native resident or migratory species. A ***less than significant*** impact would occur.

Mitigation Measures

No significant impacts have been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

Threshold 4.3-5	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

Impact 4.3-5

Downtown Plan: The Downtown Plan Area contains protected tree species, including an estimated 80 Heritage trees in public parks. The Downtown Plan and future Downtown Plan Area development would comply with the City Tree Preservation Ordinance and the City would comply with the goals, policies and programs of the Conservation Element and the Los Angeles River Revitalization Master Plan in all of its discretionary actions and approvals; therefore, the Downtown Plan would not conflict any local policies or ordinances. Impacts would be ***less than significant***.

New Zoning Code: The New Zoning Code would not conflict with applicable goals or policies of the City's General Plan Framework or Conservation Element, the City's Tree Preservation Ordinance, or the Los Angeles River Revitalization Master Plan. The Proposed Project does not intend to implement the New Zoning

Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Impacts would be ***less than significant***.

Downtown Plan Impact

As discussed in **Table 4.3-4**, the Downtown Plan would not conflict with goals, policies, and programs of the General Plan Framework or the City Conservation Element. Reasonably anticipated development from the Downtown Plan would include infill development in an urban area and, therefore, would not interfere with natural resources or degrade the sustainability of natural resources in the region. The Downtown Plan would not disrupt existing open space or encroach upon any natural settings. As discussed under Impact 4.3-2, any Downtown Plan Area development that would occur in areas adjacent to the river would be required to adhere to the Frontage regulations and Development Standard Rules set forth in new the New Zoning Code in order to not disturb the river or otherwise conflict with the goals of the Los Angeles River Revitalization Master Plan.

TABLE 4.3-4 DOWNTOWN PLAN CONSISTENCY WITH RELEVANT GENERAL PLAN FRAMEWORK ELEMENT BIOLOGICAL RESOURCES GOALS, OBJECTIVES, AND POLICIES

Goal/Objective/Policy	Consistency
Framework Element	
Goal 6A An integrated Citywide/regional public and private open space system that serves and is accessible by the City's population and is unthreatened by encroachment from other land uses	**Consistent** The Downtown Plan Area encompasses downtown Los Angeles, an urban area that lacks substantial open spaces. Reasonably anticipated development from the Downtown Plan would not adversely affect planned private or public open spaces. To the contrary, the Plan encourages the preservation and enhancement of existing parks as well as the revitalization of adjacent segments of the Los Angeles River in accordance with the River Revitalization Master Plan.
Objective 6.1 Protect the City's natural settings from the encroachment of urban development, allowing for the development, use, management, and maintenance of each component of the City's natural resources to contribute to the sustainability of the region.	**Consistent** The Downtown Plan Area encompasses downtown Los Angeles, an urban area that generally lacks natural settings. By facilitating infill development in the Downtown Plan Area and focusing new development in an already urban portion of Los Angeles, the Downtown Plan would help relieve pressure for encroachment of urban development into areas containing natural resources to accommodate projected growth.
Conservation Element – Habitat	
Policy 1 Continue to identify significant habitat areas, corridors and buffers and to take measures to protect, enhance and/or restore them.	**Consistent** The Downtown Plan Area encompasses downtown Los Angeles, an urban area that generally lacks native biological habitat. By facilitating development in an already urbanized area, the Downtown Plan would avoid potential impacts to habitat areas and corridors. In addition, any Downtown Plan Area development that would occur in areas adjacent to the river would be required to adhere to the new Frontage regulations and Development Standard Rules set forth in the New Zoning Code in order to not disturb the Los Angeles river or otherwise conflict with the goals of the River Revitalization Master Plan, which seeks to improve water quality, create and restore habitat within and adjacent to the river.
Policy 2 Continue to protect, restore, and/or enhance habitat areas, linkages and corridor segments, to the greatest extent practical, within City owned or managed sites.	**Consistent** The Downtown Plan Area encompasses downtown Los Angeles, an urban area that generally lacks native biological habitat. By facilitating development in an already urbanized area, the Downtown Plan would avoid potential impacts to habitat areas and corridors.
Policy 3	**Not Applicable**

TABLE 4.3-4 DOWNTOWN PLAN CONSISTENCY WITH RELEVANT GENERAL PLAN FRAMEWORK ELEMENT BIOLOGICAL RESOURCES GOALS, OBJECTIVES, AND POLICIES

Goal/Objective/Policy	Consistency
Continue to work cooperatively with other agencies and entities in protecting local habitats and endangered, threatened, sensitive, and rare species.	This policy is aimed at working with other entities to protect habitats, which is not the specific purpose of the Downtown Plan. Nevertheless, as noted above, Reasonably anticipated development from the Downtown Plan would include infill development, thus relieving pressure for encroachment of urban development into areas containing natural resources.
Policy 4 Continue to support legislation that encourages and facilitates protection of local native plant and animal habitats.	**Not Applicable** This policy is aimed at support for legislation that would protect native plant and animal habitats, which is not the specific purpose of the Downtown Plan. Nevertheless, as noted above, Reasonably anticipated development from the Downtown Plan would include infill development, thus relieving pressure for encroachment of urban development into areas containing natural resources.

SOURCE: City of Los Angeles, The Citywide General Plan Framework, An Element of the City of Los Angeles General Plan, originally adopted 1996, re-adopted 2001; City of Los Angeles, City of Los Angeles General Plan Conservation Element, adopted 2001.

As discussed in the Local Setting, approximately 80 heritage trees are located in the Downtown Plan Area. Future development occurring in the Downtown Plan Area is not expected to affect heritage trees since these trees are located on public property and DRP is responsible for the maintenance and protection of heritage trees from injury.

Some ordinance-protected trees may be located on private property and in street rights-of-way. These protected trees are protected by the City of Los Angeles Tree Preservation Ordinance, which makes it illegal to relocate, remove, or fatally harm the trees without the issuance of a permit by the LADPW. Per the Protected Tree Regulations (4a) listed in Ordinance 177,404, in the event that the LADPW approves a tree removal, replacement of the tree would be required with at least two trees of a protected variety (Ordinance No. 177,404). The Downtown Plan does not include any components that would preclude implementation of or alter these policies or procedures. Thus, implementation of the Downtown Plan would not conflict with any local policies or ordinances protecting biological resources, including protected trees. Therefore, impacts related to local policies or ordinances protecting biological resources would be ***less than significant***.

New Zoning Code Impact

The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Therefore, the New Zoning Code would not result in the removal of trees in conflict with the City's Tree Preservation Ordinance. Additionally, the intent of the Plants standards in Article 4 of the New Zoning Code is to preserve existing trees and vegetation. The content of the New Zoning Code would not result in conflicts with the Tree Preservation Ordinance.

The New Zoning Code would not conflict with applicable goals and policies within the City's General Plan Framework and Conservation Element. The New Zoning Code would allow for a range of Frontage districts that would allow the application of adjacency buffers in areas of sensitive species and habitat, as appropriate. The New Zoning Code would also incorporate parts of the existing RIO design standards into new Frontage standards, which could be applied to development along the LA River. Therefore, the New Zoning Code would not conflict with the goals of the Los Angeles River Revitalization Master Plan. The new zoning code does not conflict with any local policies or ordinances protecting biological resources.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific impacts related to consistency with local policies and ordinances protecting biological resources. A ***less than significant*** impact would occur.

Mitigation Measures

No significant impacts have been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

Threshold 4.3-6	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Impact 4.3-6

Downtown Plan: The Downtown Plan would not conflict with any adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state plans because no such plans apply to the Downtown Plan Area. There would be ***no impact***.

New Zoning Code: The New Zoning Code would not conflict with any adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state plans because no such plans apply to the City. There would be ***no impact***.

Downtown Plan Impact

There are no Habitat Conservation Plans (HCPs) located in or near the Downtown Plan Area. There are no Community Conservation Plans (NCCPs) or other local, regional, or state HCPs within or near the Downtown Plan Area. Implementation of the Downtown Plan does not have the potential to conflict with adopted HCPs, NCCPs, or other approved local, regional, or state HCPs because the Downtown Plan Area is not subject to any such plans. There would be ***no impact***.

New Zoning Code Impact

No portion of the City is subject to an adopted habitat conservation plan or natural community conservation plan. Additionally, as discussed above, the New Zoning Code would not conflict with the goals of the City's General Plan Framework, Conservation Element, Tree Preservation Ordinance, or Los Angeles River Revitalization Master Plan. ***No impact*** would occur.

Mitigation Measures

No significant impacts have been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

CUMULATIVE IMPACTS

The geographic area to analyze cumulatively considerable biological resource impacts includes the City and immediately adjacent areas that could be indirectly affected.

Sensitive Species and Habitats, including Riparian Habitats

Citywide development through 2040 generally would not affect sensitive plant or animal species since Los Angeles is largely urbanized and the General Plan Framework and other policy documents primarily emphasize infill development in already urbanized areas that lack native biological habitats. Isolated individual projects may adversely affect sensitive species and habitats, including wetlands, but such impacts would be addressed on a case-by-case basis as part of project-level environmental reviews. Cumulative impacts would not be significant. Moreover, as discussed under Impacts 4.3-1 through 4.3-3, because the Downtown Plan Area encompasses downtown Los Angeles, which is completely urbanized, implementation of the Downtown Plan would make no contribution to any cumulative impacts to sensitive species or habitats. The New Zoning Code would apply only to the Downtown Plan Area at this time so analysis of potential impacts in other areas of the City would be speculative. Nevertheless, it is not anticipated that any component of the New Zoning Code would increase the potential for impacts, including cumulatively considerable impacts, to sensitive species or habitats.

Trees located throughout the City, including the Downtown Plan Area, could potentially support migratory birds. As discussed previously, the MBTA protects migratory avian species, including sensitive species. Compliance with the MBTA throughout the City would ensure that cumulative impacts to migratory birds would not be significant. Mitigation Measures 4.3-1(a) 4.3-1(b) would ensure that Downtown Plan Area development would not contribute to cumulatively considerable impacts related to bird nest disturbance. No component of the New Zoning Code would increase the potential for disturbance of bird nests.

Based on the above information, cumulative impacts to sensitive species and habitats, including riparian habitats, could occur citywide; however, the incremental contribution of the Downtown Plan and New Zoning Code to cumulative impacts to sensitive species and habitats would not be cumulatively considerable and cumulative impacts related to sensitive species and habitats would be ***less than significant.***

Wildlife Movement

Citywide development generally would not disrupt wildlife movement because the future development in the City would primarily focus on infill development where wildlife corridors are not present. Nevertheless, individual developments on "greenfield" or previously undeveloped sites in and around the Santa Monica Mountains and the periphery of the City may have the potential to affect wildlife movement. However, as discussed under Impact 4.3-4, the Downtown Plan Area encompasses downtown Los Angeles, which lacks wildlife movement corridors; therefore, the Downtown Plan would not add cumulatively considerable impacts related to wildlife movement. The New Zoning Code would apply only to the Downtown Plan Area at this time so analysis of potential impacts in other areas of the City would be speculative. Nevertheless, it is not anticipated that any component of the New Zoning Code would increase the potential for impacts to wildlife movement. Based on this information, the incremental effect of the Downtown Plan and New Zoning Code would not be cumulatively considerable and cumulative impacts related to wildlife movement would be ***less than significant.***

Heritage Trees and Other Protected Trees

The City's Tree Preservation Ordinance provides protection for four tree species citywide, as previously discussed. All future development in the City, including in the Downtown Plan Area, would also be subject to these existing ordinances and regulations. Compliance with the Tree Preservation Ordinance would ensure that there would be no net loss of protected trees citywide, including the Downtown Plan Area. The New Zoning Code would apply only to the Downtown Plan Area at this time so analysis of potential impacts in other areas of the City would be speculative. Nevertheless, it is not anticipated that any component of the New Zoning Code would conflict with the Tree Preservation Ordinance. Based on this information, the

incremental effect of the Downtown Plan and New Zoning Code not be cumulatively considerable and cumulative impacts related to Protected Tree Ordinance and other local policies would be ***less than significant.***

Habitat and Natural Community Plans

As discussed under Impact 4.3-6, no portion of the City is subject to a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Thus, cumulative impacts related to such plans would not occur and the incremental effect of the Downtown Plan and New Zoning Code would not be cumulatively considerable and the Proposed Project would have ***no cumulative impact*** related to Habitat and Natural Community Plans.

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4.4 CULTURAL RESOURCES

This section provides an overview of cultural resources and evaluates impacts associated with the Proposed Project. Topics addressed include historical, and archaeological resources, as well as human remains. It was prepared with reliance on documents compiled by the SurveyLA program (SurveyLA).

SurveyLA is a comprehensive survey program developed by the City of Los Angeles Office of Historic Resources to identify significant historical resources throughout the City of Los Angeles. SurveyLA field surveys were undertaken and field survey results are presented by Community Plan Area (CPA). The Proposed Project encompasses the Central City and Central City North CPA Survey areas. Additional general information regarding the SurveyLA program is available online via the link https://planning.lacity.org/preservation-design/historic-resources-survey.

ENVIRONMENTAL SETTING

PREHISTORY

Citywide Prehistory

The prehistoric chronological sequence that is applicable to near-coastal and many inlands areas within southern California, including the City of Los Angeles, is generally divided into four periods: Early Man, Milling Stone, Intermediate, and Late Prehistoric. The Early Man - Horizon I period (ca. 10,000 – 6,000 B.C.) is represented by numerous pre-8,000 B.C. sites identified along the mainland coast and Channel Islands. Early Man - Horizon I sites are generally associated with a greater emphasis on hunting than in later periods, though recent data indicates that the economy was a diverse mixture of hunting and gathering, including a significant focus on aquatic resources. The Milling Stone – Horizon II period (ca. 6,000 – 3,000 B.C.) is characterized by subsistence strategies centered on collecting plant foods and small animals, including an apparent importance of seed processing suggested by the appearance and abundance of stone grinding implements, namely milling stones and handstones. The Intermediate – Horizon III period (ca. 3,000 B.C. – A.D. 500) is characterized by a shift toward a hunting and maritime subsistence strategy, along with a wider use of plant foods. A pronounced trend occurred toward greater adaptation to regional or local resources including an increased variety and abundance of fish, land mammals, and sea mammals along the coast. Tool kits for hunting, fishing, and processing food and other resources reflect this increased diversity, with larger knives, flake scrapers, shell fishhooks, and drill-like implements, and various projectile points being more common than in the preceding period. An increase in mortars and pestles also became more common, indicating an increasing reliance on acorns. The Late Prehistoric – Horizon IV period (ca. A.D. 500 – Historic Contact) experienced further increase in the diversity of food resources demonstrated by more classes of artifacts, including finely sharpened projectile points associated with usage of the bow and arrow. Other items include steatite cooking vessels and containers, a variety of bone tools, and personal ornaments made from shell, bone, and stone. During this period, there was also an increase in population size accompanied by the advent of larger, more permanent villages.

Citywide Ethnography

Los Angeles lies in an area traditionally occupied by the Native American group known as the Gabrieleño. The name Gabrieleño was applied by the Spanish to those natives that were attached to Mission San Gabriel. Today, most contemporary Gabrieleño prefer to identify themselves as Tongva. Tongva territory included the Los Angeles basin and southern Channel Islands as well as the coast from Aliso Creek in the south to

Topanga Creek in the north. The Tongva language belongs to the Takic branch of the Uto-Aztecan language family, which can be traced to the Great Basin region.

The Tongva established large permanent villages and smaller satellite camps throughout their territory. Society was organized along patrilineal non-localized clans, a common Takic pattern. Tongva subsistence was oriented around acorns supplemented by roots, leaves, seeds, and fruits of a wide variety of plants. Meat sources included large and small mammals, freshwater and saltwater fish, shellfish, birds, reptiles, and insects. Tongva employed a wide variety of tools and implements to gather and hunt food. The digging stick, the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks were common tools. Like the Chumash, the Tongva made oceangoing plank canoes (known as ti'at) capable of holding 6 to 14 people and used for fishing, travel, and trade between the mainland and the Channel Islands.

HISTORY

The following local history is largely summarized from the following SurveyLA-produced reports, accessible online via the links below.

- Historic Resources Survey Report Central City Community Plan Area (Architectural Resources Group 2016); https://planning.lacity.org/preservation-design/survey-la-results-central-city
- Historic Resources Survey Report Central City North Community Plan Area (Historic Resources Group 2016); https://planning.lacity.org/preservation-design/survey-la-results-central-city-north

Citywide History

Europeans first entered the area that now comprises the City of Los Angeles in 1769, as part of a Spanish expedition led Gaspar de Portola. By 1779, colonial authorities selected a site along the Los Angeles River, then called Rio de Porciúncula, as the site for a pueblo. Los Angeles was established in 1781 by a contingent of 44 settlers. Long a local center of the hide and tallow trade, the pueblo remained frontier outpost through the period of Mexican rule (1821-1848). When the United States assumed possession of California at the end of the Mexican-American War of 1846-48, Los Angeles was small city of about 1,500 residents. A limited degree of development followed the influx into California during the Gold Rush era. By the 1860s, the city had become a center of the state's burgeoning cattle industry. Local development remained agricultural in character through much of the rest of the nineteenth century, with dairying and citrus farming vying for predominance in the regional economy.

The late nineteenth century was a period of rapid growth and economic change for the city. A turning point in the history of Los Angeles came in 1876, with the opening of a Southern Pacific (SP) rail line connecting the city to San Francisco and, by extension, the Transcontinental Railroad. This connection with the eastern United States—augmented by the completion of the Atchison, Topeka and Santa Fe (ATSF) Railway's transcontinental line in 1885—paved the way for a late nineteenth-century population boom and an accompanying wave of industrialization. A city of 1002,000 by 1900, Los Angeles was transformed from a small, isolated agricultural community into Southern California's principal industrial hub by the end of the century, a fact that seemed to belie the city's reputation as a peaceful resort town. Mutually reinforcing expansions of the city's population and its industrial base fueled rapid urbanization outside the historic core. Residential neighborhoods began growing in the southern and western areas of the city, while a large industrial district started to take shape east of downtown, centered on the SP and ATSF depot and warehouse facilities. The lure of economic opportunity helped to secure the city's cosmopolitan character by the turn of the twentieth century. Several ethnic enclaves—including Chinatown, Little Tokyo, and Little Italy—formed in older districts in and near the historic pueblo in the nineteenth and early twentieth centuries.

Los Angeles' phenomenal pace of growth continued through the first half of the twentieth century. The construction of the Pacific Electric Railway and other commuter rail lines starting in the late nineteenth

century facilitated the spread of suburban communities, both within the city limits and in independent bedroom communities throughout the Los Angeles Basin. Another factor in the city's continuing growth was the 1913 opening of the Los Angeles Aqueduct. This effort spearheaded by Water Department Superintendent William Mulholland secured a vital supply of Owens Valley water for the Los Angeles area. The Great Migration of African Americans following World War I transformed southeastern Los Angeles and adjacent communities, as transplants from the South settled in racially segregated neighborhoods in these areas. By the late 1920s, the Los Angeles area possessed a large and growing population, improved port facilities at San Pedro Bay, and a burgeoning oil industry. This combination of factors awakened Eastern manufacturers to the area's advantages as a location for West Coast branch factories, including those of major automakers and food processing firms. In turn, the same set of conditions led Federal authorities to locate several substantial war production factories in and around Los Angeles (Verge 1994). By 1950, the massive wartime influx of munitions factory workers and the first phase of a postwar population boom pushed of Los Angeles to a population of 1.9 million.

Postwar Los Angeles faced the twin challenges of rapid suburban expansion and the decline of its central business district. As federal subsidies under the G.I. Bill subsidized the suburbanization of the San Fernando Valley and other far-flung residential areas, a network of freeways, including four that cut through downtown, were erected to convey commuters and shoppers across the ever-widening city. The flight of middle-class residents from the central city, ongoing since the 1920s, led retailers to relocate to new shopping centers closer to their suburban clientele. By the 1950s, redevelopment officials believed, the situation in declining areas such as Bunker Hill was such that the city opted for the wholesale razing of large formerly residential areas. Following the loss of many residents and retailers, downtown Los Angeles was rebuilt largely with modern, high-rise office towers. The trend toward suburbanization held steady through much of the late 20th century. However, early steps toward a return of residents to the central city began in the 1970s, as artists settled in live-work spaces in the industrial district located east of downtown. City officials and real estate interests came to embrace the residential redevelopment of the central city around the turn of the twenty-first century, as several sections of the city's historic core were targeted for new development.

Downtown Plan Area History

Spanish settlement of the area that is now Downtown Los Angeles began with the founding of the pueblo in 1781 and the arrival of eight families that began improving the land by erecting shelters and planting small agricultural plots. The inhabitants of the pueblo, or *pobladores*, directed the local Tongva to construct the Zanja Madre, or "Mother Ditch," to transport water between the Los Angeles River and the pueblo. Water transported via the Zanja Madre was utilized throughout the pueblo for irrigation and various domestic use. By 1818, the population of the pueblo had grown to nearly 600. With the transition from Spanish to Mexican rule in 1821 and the deeding of large ranchos, the Los Angeles pueblo saw a new wave of prosperity and increased population. By 1835, its status was officially changed from "pueblo" to "ciudad," or city.

After the end of the Mexican-American War and the signing of the 1848 Treaty of Guadalupe Hidalgo, American settlers began to flood into the Los Angeles area. The City's first official survey was completed by Lieutenant Edward O.C. Ord in 1849, delineating a network of streets and blocks in and around the plaza and serving as a basis for future development in Downtown Los Angeles. Although the city was experiencing growth, it remained a relatively remote community in the early years of statehood.

In the last quarter of the nineteenth century, Los Angeles experienced a period of intense growth sparked by the development of railroad lines to and from Los Angeles, forging connections between the city and the rest of Southern California. Between 1868 and 1869 the Central City area was connected with port facilities at San Pedro, and in 1876, the Southern Pacific Railroad completed a line connecting Los Angeles with San Francisco. By 1885, the Atchison, Topeka, and Santa Fe Company completed a line from the east

coast to Los Angeles, providing a more direct connection for travel and trade. Downtown Los Angeles saw an onslaught of new development as it emerged as a major regional economic center, leading to the construction of numerous office buildings, hotels, and other commercial structures. The railroad boom also led to a large amount of residential development in the surrounding areas. By this period, the city's water transportation system had been expanded to include a primary ditch (called the Zanja Madre) and at least eight secondary ditches to distribute water throughout the city. The system reached its peak in the early 1880s.

By 1900, the City's population had reached 102,000 people. In addition to residential development, the railroad boom also led to the development of numerous small single room occupancy hotels to house train crews and other migrant workers in the fifty-block area of downtown bound by Main Street, Third Street, Alameda Street and Seventh Street, now generally referred to as Skid Row, (Los Angeles Chamber of Commerce 2017). With the area's proximity to the railroad station, it became a landing ground for many displaced farmers and workers during the Great Depression and later for military personnel and transients during World War II and the Vietnam War. As the city urbanized and land was subdivided, the need for irrigation waned; use of the Zanja Madre system declined and was discontinued around the turn of the century.

As more development occurred, the central business district materialized and the term "Downtown" began to be commonly used to refer to the area. The first written reference to "Downtown Los Angeles" was in a 1906 edition of the *Los Angeles Herald*. Around this time, the City was expanding its limits by incorporating nearby communities. With an expansion in residential land, Downtown was rezoned to exclude residential housing in support of commercial and industrial uses. The area now known as, the Arts District of Downtown, became a major industrial center with numerous manufacturers constructing warehouses and factories in the area (Los Angeles Conservancy 2013).

Early twentieth century development in Downtown Los Angeles was characterized as catering to transportation and automobile use, with the construction of multi-story auto parks, garages, service stations, and improved roadways and infrastructure. A commercial enclave to the southwest of the central business district arose that was oriented around the sale and maintenance of cars.

After World War II, Downtown development saw a decline as residents began to move from the urban core to suburban neighborhoods. Many businesses followed suit, changing the identity of Downtown. Newer nearby cities with larger tracts of land were better able to accommodate the needs of industrial companies, leading to abandonment of the factories and warehouses of the Arts District and the rest of Downtown (Los Angeles Conservancy 2013). Starting as early as the 1950s, urban renewal and redevelopment projects changed the character of Downtown's built environment to the modern skyline that characterizes the area today. As part of this redevelopment, many of the earlier buildings were demolished to make way for newer development. However, the majority of the historic buildings of Downtown Los Angeles remain intact.

In the 1970s, a group of artists illegally reclaimed the warehouses of the Arts District and rehabilitated them for use as galleries and art spaces (Los Angeles Conservancy 2013).

CULTURAL RESOURCES

Los Angeles contains a wide range of cultural resource types spanning the entire history of Los Angeles from pre-Contact, through the Spanish pueblo era, the Mexican era, and the American era. Cultural heritage can be generally categorized as "tangible" or "intangible." Tangible cultural heritage includes the movable and immovable physical representations of heritage, including objects, archaeological sites, buildings, structures, districts, and landscapes. Intangible cultural heritage includes those aspects of heritage that are more ephemeral, such as events, traditions, organizations, knowledge, and the interaction between communities and their environment. Intangible cultural heritage is not a regulated category and intangible

resources cannot be identified as historical resources under CEQA, but they can inform the significance of tangible cultural resources.

HISTORICAL RESOURCES

CEQA considers "historical resources" to be part of the environment that could be impacted by a project. Historical resources are defined to include resources that have been designated by a state or local agency or found eligible to be designated by the state or local agency. Properties can be designated at the national, state, and/or local level. The State Register includes those resources that have been designated at the national or state level. The City has two types of formal designation: those designated as Historic Cultural Monuments and those properties in a Historic Preservation Overlay Zone. Below is a summary of those resources that have been designated at the National, State or local level in the Downtown Plan Area, as well as summary of those designated Citywide.

In regards to eligible historical resources, the City and the former CRA, have prepared numerous surveys, prepared by qualified architectural historians, to identify those resources (buildings, structures, improvements) that could be potentially eligible for designation based on documentary research and visual review of the resource itself, or photographs of the resource. The principal survey relied on by the City to identify eligible resources for purposes of CEQA compliance is SurveyLA, which is further described below.

Designated Historical Resources

State and National

Currently, the Central City Community Plan Area contains 121 state- and/or federally designated historical resources, including three historic districts listed on the NRHP (see **Table 4.4-1**). The Central City North Community Plan area contains 9 state- or federally designated historic resources (see **Table 4.4-2**).

TABLE 4.4-1 HISTORICAL RESOURCES DESIGNATED AT THE STATE AND NATIONAL LEVEL, CENTRAL CITY COMMUNITY PLAN AREA

City of L.A. ZI No.	Resource Name	Address/Location
ZI-0	800 South Robertson Boulevard Office Building	800 South Robertson Boulevard
ZI-1008	The Mirror Building (SM#744)	145 S. Spring Street
ZI-1012	Merced Theater (SM#171)	418 N. Main Street
ZI-1013	Pico House (SM#159)	430 N. Main Street
ZI-1014	Old Plaza Firehouse (SM#730)	134 Plaza Street
ZI-1015	Bella Union Hotel Site (SM#656)	314 N. Main Street
ZI-1022	Nuestra Senora la Reina de Los Angeles (Plaza Church) (SM#144)	535 N. Main Street
ZI-1023	Nuestra Senora la Reina de Los Angeles (Plaza Church) (SM#144)	535 N. Main Street
ZI-1024	Los Angeles Plaza Park (SM#156)	500 N. Main Street
ZI-2001	Van Nuys Building	210 W. 7th Street
ZI-2002	Bartlett Building	651 S. Spring Street
ZI-2003	Barclay's Bank	639 S. Spring Street
ZI-2004	California - Canadian Bank	625 S. Spring Street
ZI-2005	E. F. Hutton Buliding	623 S. Spring Street
ZI-2006	Hotel Hayward	601 S. Spring Street
ZI-2007	Pacific Southwest Bank	Northwest 6th Street & Spring Street
ZI-2008	Spring Arcade Building	541 S. Spring Street

TABLE 4.4-1 HISTORICAL RESOURCES DESIGNATED AT THE STATE AND NATIONAL LEVEL, CENTRAL CITY COMMUNITY PLAN AREA		
City of L.A. ZI No.	Resource Name	Address/Location
ZI-2009	Stationer's Building	525 S. Spring Street
ZI-2010	Building	523 S. Spring Street
ZI-2011	Palm Court (Alexandria Hotel)	210 W. 5th Street
ZI-2012	Crocker Bank	453 S. Spring Street
ZI-2013	Title Insurance & Trust Company Building and Annex	433 S. Spring Street
ZI-2014	Banco Popular	Northeast 4th Street & Spring Street
ZI-2015	Continental Building	408 S. Spring Street
ZI-2016	Hellman Annex	410 S. Spring Street
ZI-2017	El Dorado Hotel	416 S. Spring Street
ZI-2018	Rowan Building	131 W. 5th Street
ZI-2019	Security Building	510 S. Spring Street
ZI-2020	President Trading Company	514 S. Spring Street
ZI-2021	Lloyd's Bank	548 S. Spring Street
ZI-2022	Mortgage Guarantee Building	626 S. Spring Street
ZI-2023	Banks and Huntley Building	630-634 S. Spring Street
ZI-2024	Bank of America Building	117 W. 7th Street
ZI-2025	Financial Center Building	704 S. Spring Street
ZI-2026	Trustee Building	340 S. Broadway
ZI-2027	O. T. Johnson Block	350 S. Broadway
ZI-2028	O. T. Johnson Building	356 S. Broadway
ZI-2029	Judson Rives Building	424 S. Broadway
ZI-2030	Bumiller Building	430 S. Broadway
ZI-2031	Chester Williams Building	215 W. 5th Street
ZI-2032	Jewelry Trades Building	220 W. 5th Street
ZI-2033	O. T. Johnson Building #2	510 S. Broadway
ZI-2034	Roxie Theater	518 S. Broadway
ZI-2035	Cameo Theater (formerly Clune's Broadway)	528 S. Broadway
ZI-2036	Arcade Theater (formerly Pantages Theater)	534 S. Broadway
ZI-2037	Arcade Building	540 S. Broadway
ZI-2038	Hubert - Thom McAn Building	546 S. Broadway
ZI-2039	Silverwood's Building	558 S. Broadway
ZI-2040	Walter P. Story Building	610 S. Broadway
ZI-2041	Desmond's Building	614 S. Broadway
ZI-2042	Broadway Cafeteria	618 S. Broadway
ZI-2043	Palace Theater	636 S. Broadway
ZI-2044	Forrester Building	638 S. Broadway
ZI-2045	J. E. Carr Building	644 S. Broadway
ZI-2046	Lankershim Hotel	700 S. Broadway
ZI-2047	Yorkshire Hotel	710-714 S. Broadway
ZI-2048	Parmelee Building	716 S. Broadway
ZI-2049	Barker Brothers	722 S. Broadway
ZI-2050	Globe Theater	744 S. Broadway
ZI-2051	Chapman Building	756 S. Broadway
ZI-2052	Tower Theater	802 S. Broadway

TABLE 4.4-1 HISTORICAL RESOURCES DESIGNATED AT THE STATE AND NATIONAL LEVEL, CENTRAL CITY COMMUNITY PLAN AREA		
City of L.A. ZI No.	Resource Name	Address/Location
ZI-2053	Singer Building	806 S. Broadway
ZI-2054	Rialto Theater Building	812 S. Broadway
ZI-2055	Apparel Center Building	814 S. Broadway
ZI-2056	Braun Building	820-822 S. Broadway
ZI-2057	AnJac Fashion Building	830 S. Broadway
ZI-2058	Orpheum Theater	842 S. Broadway
ZI-2059	Ninth and Broadway Building	Northwest 9th Street & Broadway
ZI-2060	Eastern Columbia Building	849 S. Broadway
ZI-2061	May Company	Southwest Broadway & 8th Street
ZI-2062	Merritt Building	301 W. 8th Street
ZI-2063	Issacs Building	737-747 S. Broadway
ZI-2064	Chency Block	731 S. Broadway
ZI-2065	Woolworth's	719 S. Broadway
ZI-2066	United Building	703 S. Broadway
ZI-2067	Bullock's	641 S. Broadway
ZI-2068	Bullock's Hollenbeck	639 S. Broadway
ZI-2069	Mailing's	617-619 S. Broadway
ZI-2070	Los Angeles Theater	615 S. Broadway
ZI-2071	Norton Building	601-605 S. Broadway
ZI-2072	Wood Brothers Building	315 W. 6th Street
ZI-2073	Swelldom Building	Northwest 6th Street & Broadway
ZI-2074	Metropolitan Annex	553 S. Broadway
ZI-2075	Hartfields	537 S. Broadway
ZI-2076	Reed's	533 S. Broadway
ZI-2077	Broadway Interiors	529 S. Broadway
ZI-2078	Remick Building	517-519 S. Broadway
ZI-2079	Fifth Street Store	501-515 S. Broadway
ZI-2080	Metropolitan Building	315 W. 5th Street
ZI-2081	Wilson Building	431 S. Broadway
ZI-2082	Broadway Mart Center	401-423 S. Broadway
ZI-2083	Nelson Building	355 S. Broadway
ZI-2084	Karl's	341-345 S. Broadway
ZI-2085	Grand Central Market	315 S. Broadway
ZI-2086	Million Dollar Theater	307 S. Broadway
ZI-2152	Title Guarantee & Trust Company Building	401-411 W. 5th Street
ZI-2153	Pershing Square Building	448 S. Hill Street
ZI-2154	Barker Brothers Building	800-898 W. 7th Street & 709-711 S. Flower St
ZI-2155	Federal Title Building	437 Hill Street
ZI-2156	Myrick - Markham Building	324-326 Hill Street
ZI-2181	Hotel Clark	400-426 Hill Street
ZI-2187	Roosevelt Building	648-654 S. Flower Street
ZI-2190	Fire Station No. 28	644-646 S. Figueroa Street
ZI-2302	Plaza Substation	10 Olvera Street
ZI-2306	AnJac Fashion Building	830 S. Broadway
ZI-2309	Little Tokyo Historic District	106-120 N. San Pedro St & 301-369 E 1st St
ZI-2310	First Cemetery of Los Angeles (site of)	521 N. Main Street

TABLE 4.4-1 HISTORICAL RESOURCES DESIGNATED AT THE STATE AND NATIONAL LEVEL, CENTRAL CITY COMMUNITY PLAN AREA

City of L.A. ZI No.	Resource Name	Address/Location
ZI-2314	Spring Street Financial District	210 W. 5th Street; 401 & 404-11 S. Main Street
ZI-2318	Bradbury Building	304 S. Broadway
ZI-2332	Fire Station No. 23	225 E. 5th Street
ZI-2335	Friday Morning Club	938-940 S. Figueroa Street
ZI-2336	Garfield Building	403 W. 8th Street
ZI-2345	Los Angeles Central Library Building and Grounds	630 W. 5th Street
ZI-2360	James Oviatt Building	617 S. Olive Street
ZI-2384	California Theater Building	812 S. Main Street
ZI-2390	Los Angeles Herald Examiner Building Annex	1101-1111 S. Hill St & 200-214 W. 11th St
ZI-2483	Patriotic Hall	1033-1037 S. Hope Street
ZI-2486	Charnock Block (Pershing Hotel)	104-114 E. 5th Street & 500-506 S. Main St
ZI-2503	Federal Reserve Bank of San Francisco	401-409 W. Olympic Boulevard
ZI-2507	San Fernando Building	400-410 S. Main Street
N/A	Broadway Theater and Commercial District	242, 248-260, 249-259, 900-911,908-910, 921-937, 930-947 South Broadway

SOURCES: City of Los Angeles, 2018; Historic Places LA, 2018

TABLE 4.4-2 HISTORICAL RESOURCES DESIGNATED AT THE STATE AND NATIONAL LEVEL, CENTRAL CITY NORTH COMMUNITY PLAN AREA

City of L.A. ZI No.	Resource Name	Address/Location
ZI-0	Naval and Marine Corps Reserve Center	1700 Stadium Way
ZI-1011	Navy and Marine Corps Reserve Center (SM#972)	1700 Stadium Way
ZI-2177	Post Office Terminal Annex	900 N. Alameda Street
ZI-2346	Los Angeles Union Station Passenger Terminal and Grounds	800-850 N. Alameda Street
ZI-2448	Bernard Street Residence	411-415 Bernard Street
ZI-2449	Bernard Street Residence	706 Bernard Street
ZI-2477	Commerce Eng. Co. Foundry Company	2416-2454 Porter Street
ZI-2488	Southern California Gas Company Administration Building	1700 S. Santa Fe Avenue
ZI-2512	Savoy Street Residence	437-439 3/4 Savoy Street

SOURCE: City of Los Angeles, 2018

Local – HPOZ

There are 35 designated HPOZs in the City. An additional HPOZ is proposed, 27th and 28th Street, and another is currently inactive, Holmby-Westwood. The majority of the HPOZs are located in the central portion of the City and range in size from neighborhoods of approximately 50 parcels to more than 4,000 properties. While most HPOZs are primarily residential, there are several that have a mix of single-family and multi-family residential, and some that include commercial and industrial properties (City of Los Angeles 2018c).

Downtown Plan Area Historic Preservation Overlay Zones

The Downtown Plan Area does not currently contain any HPOZs.

Local – HCM

The City's Office of Historic Resources has recorded thousands of HCMs throughout the City, officially recognizing and providing protection to some of Los Angeles' historical resources (Los Angeles 2020a, 2020b). The HCM list is continually updated as new resources are designated.

Citywide Historic-Cultural Monuments

As of November 7, 2017, there are 1,150 HCMs in the City of Los Angeles (City of Los Angeles 2017).

Downtown Plan Area Historic-Cultural Monuments

Currently, the Central City Community Plan Area contains 119 City-designated HCMs (see **Table 4.4-3**), and the Central City North Community Plan Area contains 19 City-designated HCMs (see **Table 4.4-4**).

Eligible Historical Resources

Local Surveys

Citywide

SurveyLA identifies and evaluates potential built-environment resources and historic districts for NRHP, CRHR, and local listing. SurveyLA field surveys have been completed for all 35 CPAs in the City of Los Angeles. All individual survey reports have been completed and data entry into HistoricPlacesLA, the City's online information and management database to inventory, map, and describe significant historical resources, is ongoing. HistoricPlacesLA may be accessed online via the link below.

- HistoricPlacesLA: http://www.historicplacesla.org/

In addition to the survey reports completed as part of the SurveyLA effort, other recent historical resources surveys reports have been completed that further identify resources in the City. These reports have been prepared for the Adelante Eastside Redevelopment Area, the Cornfield Arroyo Seco Specific Plan Area, the Hollywood Redevelopment Project Area, the Normandie 5 Redevelopment Area, the Northeast Los Angeles River Revitalization Area, the San Pedro Commercial Area Redevelopment Area, the Westlake Recovery Redevelopment Area, and the Wilshire Center and Koreatown Recovery Redevelopment Area.

Downtown Plan Area

The Historic Resources Survey Report for the Central City Community Plan Area (Architectural Resources Group, Inc. 2016a) and the Historic Resources Survey Report for the Central City North Community Plan Area (Historic Resources Group, Inc. 2016b) prepared for the SurveyLA documents historical resources in the Downtown Plan Area and the SurveyLA data is continually updated by the Los Angeles Office of Historic Resources. SurveyLA identifies the following resource types:

- Individual Resources are generally resources located within a single assessor parcel such as a residence or duplex. However, a parcel may include more than one individual resource, if each appears to be significant.
- Non-Parcel Resources are not associated with Assessor Parcel Numbers and generally do not have addresses. Examples may include street trees, street lamps, landscaped medians, bridges, and signs.

- Historic Districts and Multi-Property Resources are areas that are related geographically and by theme. Districts may include single or multiple parcels depending on the resource. Examples of resources that may be recorded as historic districts include residential neighborhoods, garden apartments, commercial areas, large estates, school and hospital campuses, and industrial complexes. These areas require additional analysis and field work for HPOZ determination. District contributors and non-contributors are located within resources recorded as historic districts. Non-contributing resources may be those that are extensively altered, built recently, or that do not relate to historic contexts and themes defined for the district.
- Planning Districts are areas that are related geographically and by theme, but do not meet eligibility standards for designation, and as such are not considered "historical resources" as defined by CEQA (and will not be analyzed as such for purposes of this EIR). This is generally because the majority of the contributing features have been altered, resulting in a cumulative impact on the overall integrity of the area and making it ineligible as a Historic District. The Planning District determination, therefore, is used as a tool to inform new Community Plans being developed by the Department of City Planning. These areas have consistent planning concepts, such as height, massing, setbacks, and street trees, which may be considered in the local planning process.

According to SurveyLA, the Central City Community Plan Area includes four NRHP-listed historic districts. In addition, the current SurveyLA Consolidated Data Report for the Central City Community Plan Area contains 190 individually eligible resources in the Central City Community Plan Area. The SurveyLA listed or determined eligible for listing in the National Register of Historic Places, California Register of Historical Resources, or for local designation as a City of Los Angeles Historic-Cultural Monument.

In addition to the SurveyLA effort, historic surveys by the Community Redevelopment Agency (CRA) in Central City North Community Plan Area led to the designation of the New Chinatown and the Greater Chinatown historic districts in 1982. These historic districts were determined eligible for listing in the National Register through the federal Section 106 review process and are listed in the California Register.

Figures 4.4-1a – **4.4-1g** display known eligible and designated historical resources located in the Downtown Plan Area. City of Los Angeles HCMs are grouped together and shaded pink; NRHP and CRHR designated resources are grouped together and shaded purple; eligible resources are grouped together and shaded peach. Many of the resources depicted are listed or eligible for multiple designations (for example a resource may be a designated HCM and also listed in the NRHP). In such situations, only the highest level of designation is displayed (in the aforementioned example, the resource would be grouped and displayed as NRHP designated). Also included are **Figures 4.4-1h, 4.4-1i, and 4.4-1j**, which display the locations of districts, multi-property sites, non-parcel, and individual properties in the Downtown Plan Area that were identified by SurveyLA as potentially eligible for historic designation.

TABLE 4.4-3 CITY DESIGNATED HISTORIC-CULTURAL MONUMENTS, CENTRAL CITY COMMUNITY PLAN AREA

Monument No.	HCM Name	Address/Location
LA-1074	800 South Robertson Boulevard Office Building	800 South Robertson Boulevard
LA-871	810 South Spring Street Building	810 South Spring Street
LA-80	Alexandria Hotel, Addition, Annex and Palm Court	210 W. 5th Street & 501-511 S. Spring Street
LA-4	Angel's Flight	4th Street & Hill
LA-920	Aoyama Tree	135 North Central Avenue
LA-525	Arcade Theater (formerly Pantages Theater)	532-536 S. Broadway
LA-631	Banks-Huntley Building	634 S. Spring Street
LA-288	Barclay Hotel	103-107 W. 4th Street
LA-671	Barclay's Bank	639-641 South Spring Street
LA-356	Barker Brothers Building	700-726 S. Figueroa Street
LA-476	Belasco Theater	1046-1054 S. Hill Street
LA-60	Biltmore Hotel	503-539 S. Olive Street
LA-765	Blackstone's Department Store	901 S Broadway
LA-357	Boston Stores - J.W. Robinson's	600-632 W. 7th Street
LA-6	Bradbury Building	216-224 W. 3rd Street
LA-358	Brock Jewelers - Clifton's	513-515 W. 7th Street
LA-43	California Club Building	532-538 S. Flower Street
LA-524	Cameo Theater (formerly Clune's Broadway)	526-530 S. Broadway
LA-140	Cast Iron Commercial Building	611 Agatha Street
LA-899	Charles C. Chapman Building	756 South Broadway
LA-323	Church of the Open Door (Former Site of)	550 S. Hope Street - Demolished: 01-01-1988
LA-346	Coast Federal Savings Building	315 W. 9th Street
LA-138	Coca Cola Building	1200-1334 S. Central Avenue
LA-119	Cohn - Goldwater Building	1145-1149 San Julian Street
LA-104	Coles P.E. Buffet / Pacific Electric Building	100-134 E. 6th Street
LA-1075	Commercial Club Building	1100 South Broadway
LA-1145	Commercial Exchange Building	416-436 West 8th Street
LA-730	Continental Building	408 S. Spring St.
LA-966	Douglas Building	257 South Spring Street
LA-294	Eastern Columbia Building	211 W. 9th Street
LA-786	Edwards-Wildey Building	609 S Grand Ave
LA-299	Embassy Auditorium and Hotel	501 W. 9th Street
LA-1155	F. and W. Grand Silver Store Building	537 South Broadway
LA-271	Farmers and Merchants Bank Building	401-411 S. Main Street
LA-125	Fine Arts Building	807-815 W. 7th Street
LA-137	Finney's Cafeteria	217-219 W. 6th Street
LA-37	Fire Station No. 23	225 E. 5th Street

TABLE 4.4-3 CITY DESIGNATED HISTORIC-CULTURAL MONUMENTS, CENTRAL CITY COMMUNITY PLAN AREA

Monument No.	HCM Name	Address/Location
LA-348	Fire Station No. 28	644-646 S. Figueroa Street
LA-289	Fire Station No. 30	1401 S. Central Avenue
LA-71	First African Methodist Episcopal Church Building (Former Site of)	754-760 E. 8th Street - Demolished: 07-04-1972
LA-505	First Baptist Church of San Pedro (Facade & Stained-Glass Window)	555 W. 7th Street
LA-26	First Cemetery of Los Angeles (site of)	521 N. Main Street
LA-953	Foreman and Clark Building	701 South Hill Street
LA-1125	Forve-Pettebone Building	510-514 South Broadway
LA-737	Gans Brothers Building	814 S Spring St
LA-121	Garfield Building	401-415 W. 8th Street
LA-930	Garment Capitol Building	217-221 East 8th Street
LA-766	General Petroleum Building	612 S Flower St
LA-354	Giannini - Bank of America	505 W. 7th Street
LA-709	Gray Building	824 S. Los Angeles Street
LA-957	Great Republic Life Building	756 South Spring Street
LA-1067	Grether & Grether Building	730 S. Los Angeles Street
LA-459	Hamburger's Department Store	300-332 W. 8th Street
LA-345	Harris Newmark Building	127 E. 9th Street
LA-729	Hellman Building	411 S. Main St./ 410 S. Spring St.
LA-873	Higgins Building	108 West 2nd Street
LA-544	Irvine - Byrne Building	249-259 S. Broadway & 301 W. 3rd Street
LA-195	James Oviatt Building	615-617 S. Olive Street
LA-312	Japanese Union Church of Los Angeles	120-122 N. San Pedro Street
LA-1154	Joannes Brothers Company Building	310 South Hewitt Street
LA-881	Judson Rives Building	424 South Broadway
LA-806	Kerckoff Building and Annex	101-133 E 6th St
LA-69	Los Angeles Athletic Club Building	425-437 W. 7th Street
LA-46	Los Angeles Central Library Building and Grounds	630 W. 5th Street
LA-150	Los Angeles City Hall	200 N. Spring Street
LA-1022	Los Angeles Department of Water and Power General Office Building (John Ferraro Building)	111 N. Hope Street
LA-178	Los Angeles Herald Examiner Building	1111-1131 S. Broadway
LA-313	Los Angeles Hompa Hongwanji Buddhist Temple	109-119 N. Central Avenue
LA-64	Los Angeles Plaza Park	Cesar E. Chavez Avenue
LA-205	Los Angeles Stock Exchange Building	610-618 S. Spring Street
LA-225	Los Angeles Theater	609-619 S. Broadway
LA-711	M. J. Connell Building 4, 5, & 6	738 & 746 S. Los Angeles St. and 743 Santee S

TABLE 4.4-3 CITY DESIGNATED HISTORIC-CULTURAL MONUMENTS, CENTRAL CITY COMMUNITY PLAN AREA

Monument No.	HCM Name	Address/Location
LA-710	M. J. Connell Buildings 1, 2, 3 & 7	714, 716, 720 & 724 S. Los Angeles St.
LA-1001	May Company Garage	900 S. Hill Street
LA-460	Mayan Theater	1036-1044 S. Hill Street
LA-286	Mayflower Hotel	531-535 S. Grand Avenue
LA-1019	Metropolitan Building	315 W. 5th Street
LA-186	Morgan House (Harbor Area YWCA)	437 W. 9th Street
LA-3	Nuestra Senora la Reina de Los Angeles (Plaza Church)	100-110 Cesar E. Chavez Ave & 535 N. Main St
LA-347	One Bunker Hill Building	455 S. Grand Avenue
LA-255	Original Pantry	809-817 W. 9th Street
LA-398	Pacific Mutual Building	523 W. 6th Street
LA-449	Palace Theater	630-636 S. Broadway
LA-596	Petroleum Building	1001-1013 S. Flower St/700-714 W Olympic Bl
LA-61	Philharmonic Auditorium (Former Site of)	- Demolished: 01-01-1984
LA-472	Rialto Theater Building	808-812 S. Broadway
LA-355	Roosevelt Building	648-654 S. Flower Street
LA-526	Roxie Theater	512-524 S. Broadway
LA-16	Saint Joseph's Church (site of)	1200-1210 S. Los Angeles Street - Demolished: 09-04-1983
LA-66	Saint Paul's Cathedral (site of)	901-915 Wilshire Boulevard - Demolished: 01-11-1979
LA-17	Saint Vibiana's Cathedral	110-136 E. 2nd Street
LA-728	San Fernando Building	400 S. Main Street
LA-615	San Pedro Firm Building	108-116 N. San Pedro Street
LA-741	Security Building	500-510 S. Spring Street
LA-748	South Park Loft Building	816 S Grand Ave
LA-789	Southern California Gas Company	800, 810, and 820 S Flower St
LA-480	Spanish - American War Memorial (Pershing Square)	5th Street & Olive Street
LA-984	Spreckels Building	322-24 West Seventh St. and 708-16 South Hill St.
LA-340	Standard Oil Company	601-605 Olympic Boulevard & 953 S. Hope St
LA-522	State Theater Building	300-314 W. 7th Street
LA-1029	Stowell Hotel	416 S. Spring Street
LA-177	Subway Terminal Building	415-419 S. Hill Street
LA-985	Sun Realty Company Building	629-33 South Hill Street
LA-686	Superior Oil Company Building	550 S. Flower Street
LA-767	Temple Mishkon Tephilo	206 Main St
LA-712	Textile Center Building	315 E. 8th St.
LA-27	The Castle (Former Site of)	325 S. Bunker Hill Avenue (Now Hope Street) - Demolished: 01-01-1969

TABLE 4.4-3 CITY DESIGNATED HISTORIC-CULTURAL MONUMENTS, CENTRAL CITY COMMUNITY PLAN AREA

Monument No.	HCM Name	Address/Location
LA-5	The Salt Box (Former Site of)	339 S. Bunker Hill Avenue (Now Hope Street) - Demolished: 10-09-1969
LA-278	Title Guarantee & Trust Company Building	401-411 W. 5th Street
LA-772	Title Insurance Building	456 S Spring St
LA-385	Title Insurance & Trust Company Building and Annex	433 S. Spring Street
LA-450	Tower Theater	218-230 W. 8th Street & 800-804 S Broadway
LA-1030	Union Bank and Trust Company	760 S. Hill St.
LA-523	United Artists Theater Building	921-939 S. Broadway
LA-898	Van Nuys Building	204, 210 & 212 West 7th Street
LA-196	Variety Arts Center Building	938-940 S. Figueroa Street
LA-937	Westinghouse Electric Building	420 South San Pedro Street
LA-161	Wolfer Printing Company Building	301-311 Winston Street
LA-317	Young Apartments	1615-1631 S. Grand Avenue

SOURCE: City of Los Angeles, 2018

TABLE 4.4-4 CITY DESIGNATED HISTORIC-CULTURAL MONUMENTS, CENTRAL CITY NORTH COMMUNITY PLAN AREA

Monument No.	HCM Name	Address/Location
LA-281	Cathedral High School	1253 Bishops Road
LA-826	Chinatown East Gate	945 N Broadway
LA-825	Chinatown West Gate	954 N Hill Street
LA-909	First Street Bridge, No. 53C1166	E 1st Street between Vignes Street and Mission Road
LA-906	Fourth Street Bridge, No. 53C0044	E 4th Street between Santa Fe Avenue and Mission Road
LA-211	Granite Block Paving (Between Alameda and N. Main St.)	Bruno Street
LA-101	Los Angeles Union Station Passenger Terminal and Grounds	357 Aliso Street
LA-224	Macy Street Viaduct (between Mission & Vignes)	Cesar E. Chavez Avenue
LA-888	National Biscuit Company Building	1850 Industrial Street
LA-1101	Naval and Marine Corps Reserve Center	1700 Stadium Way
LA-907	North Broadway-Buena Street Vista Bridge	Broadway between Park Row Drive East and Pasadena Avenue
LA-901	North Main Street Bridge, No. 53C1010	N Spring Street between E Cesar E Chavez Ave and Albion Street
LA-900	North Spring Street Bridge, No. 53C0859	N Spring Street between Aurora Street and Avenue 18
LA-902	Olympic Boulevard Bridge, No. 53C0163	E Olympic Boulevard between Rio Vista Avenue and Santa Fe Avenue
LA-872	Raphael Junction Block Building (New York Suspender Factory-California Ice Company)	1635-1637 North Spring Street
LA-82	River Station Area	1231 N. Spring Street
LA-795	Santa Fe Inbound Freight House	355 South Santa Fe Avenue
LA-904	Seventh Street Bridge, No. 53C1321	E 7th Street between Santa Fe Avenue and Meyers Street
LA-903	Washington Boulevard Bridge	E Washington Boulevard between E 23rd Street and S Soto Street

SOURCE: City of Los Angeles, 2018.

Figure 4.4-1a Downtown Plan Area Historical Resources

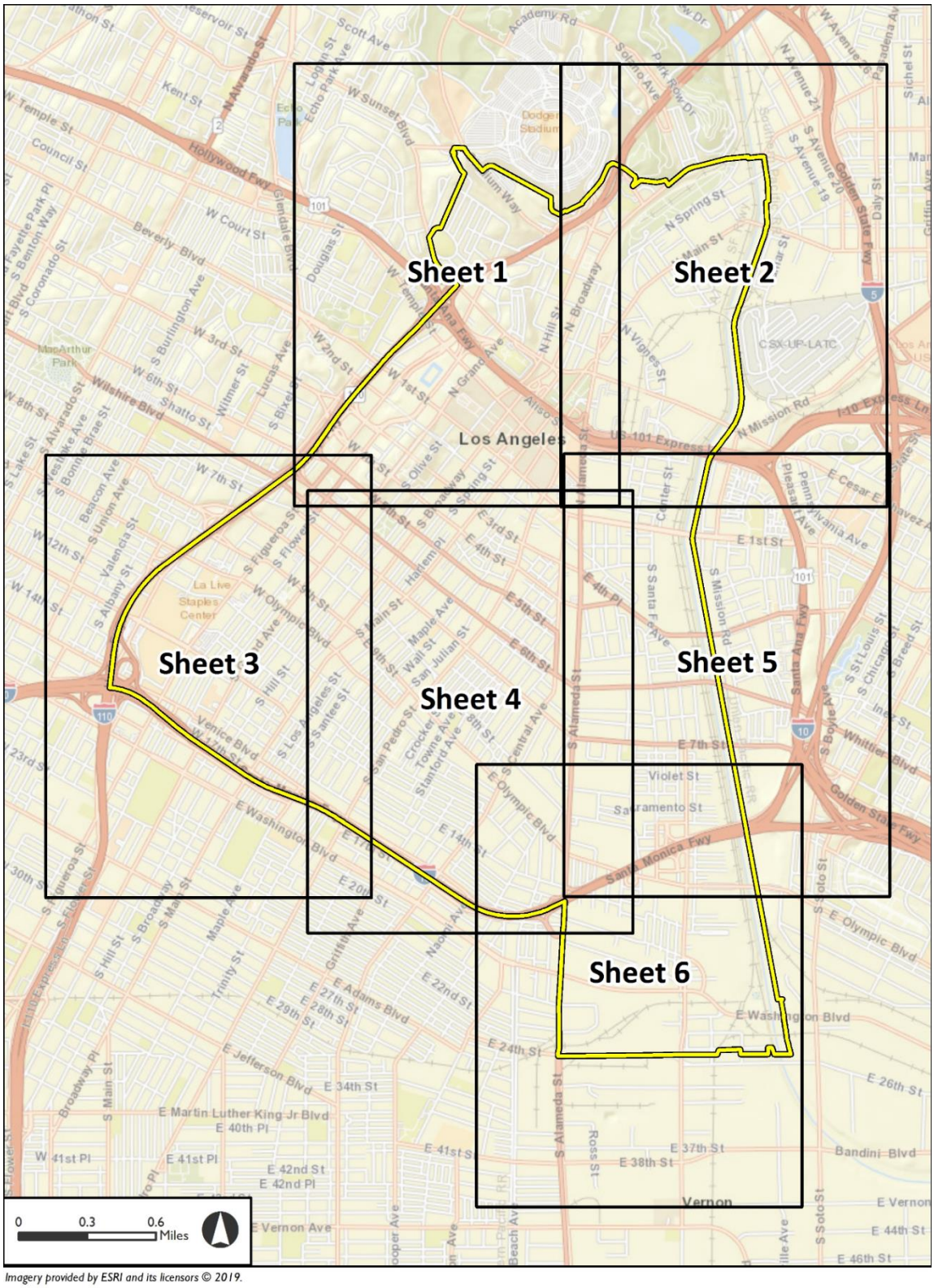


Figure 4.4-1b Downtown Plan Area Historical Resources

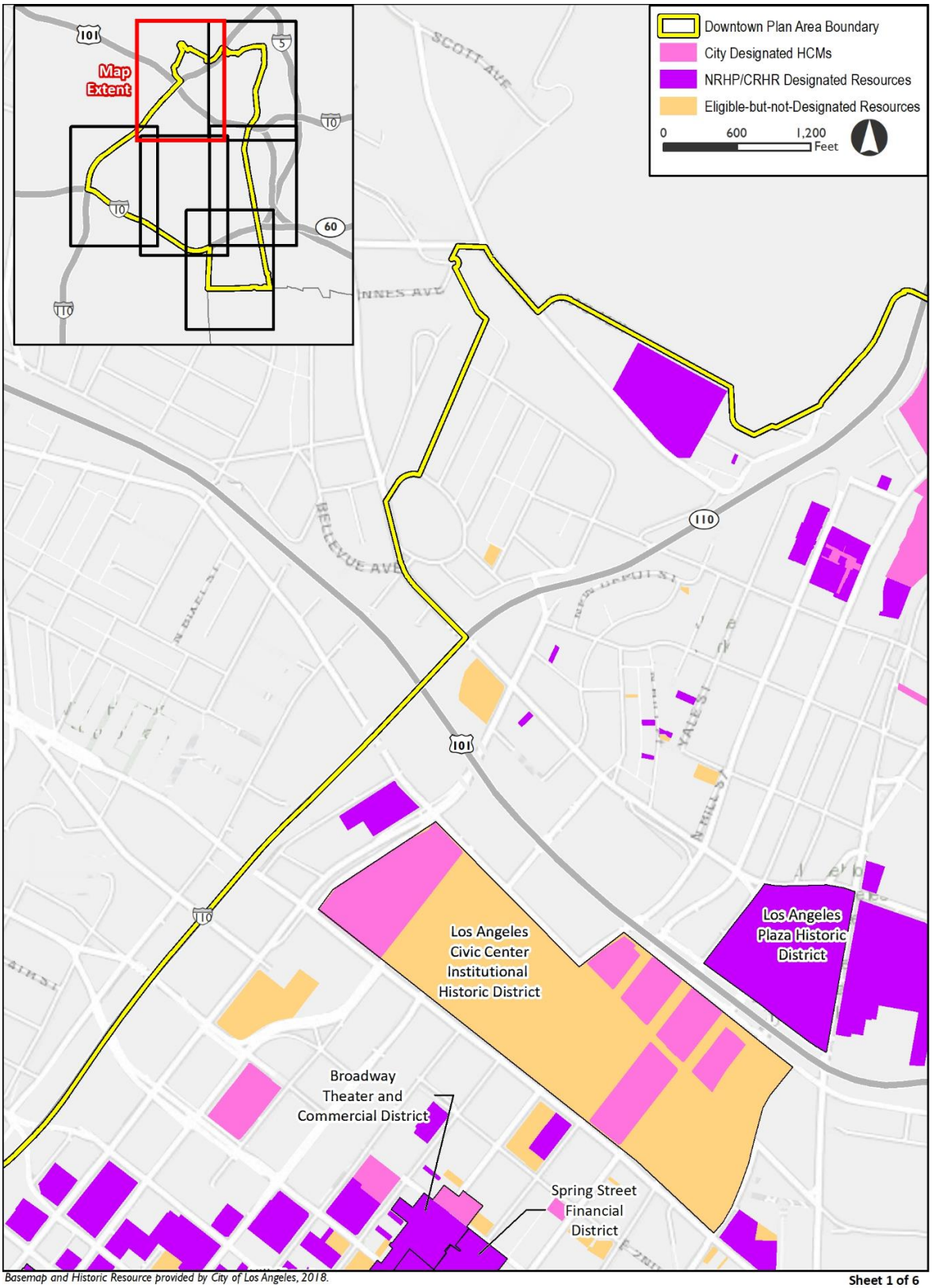


Figure 4.4-1c Downtown Plan Area Historical Resources

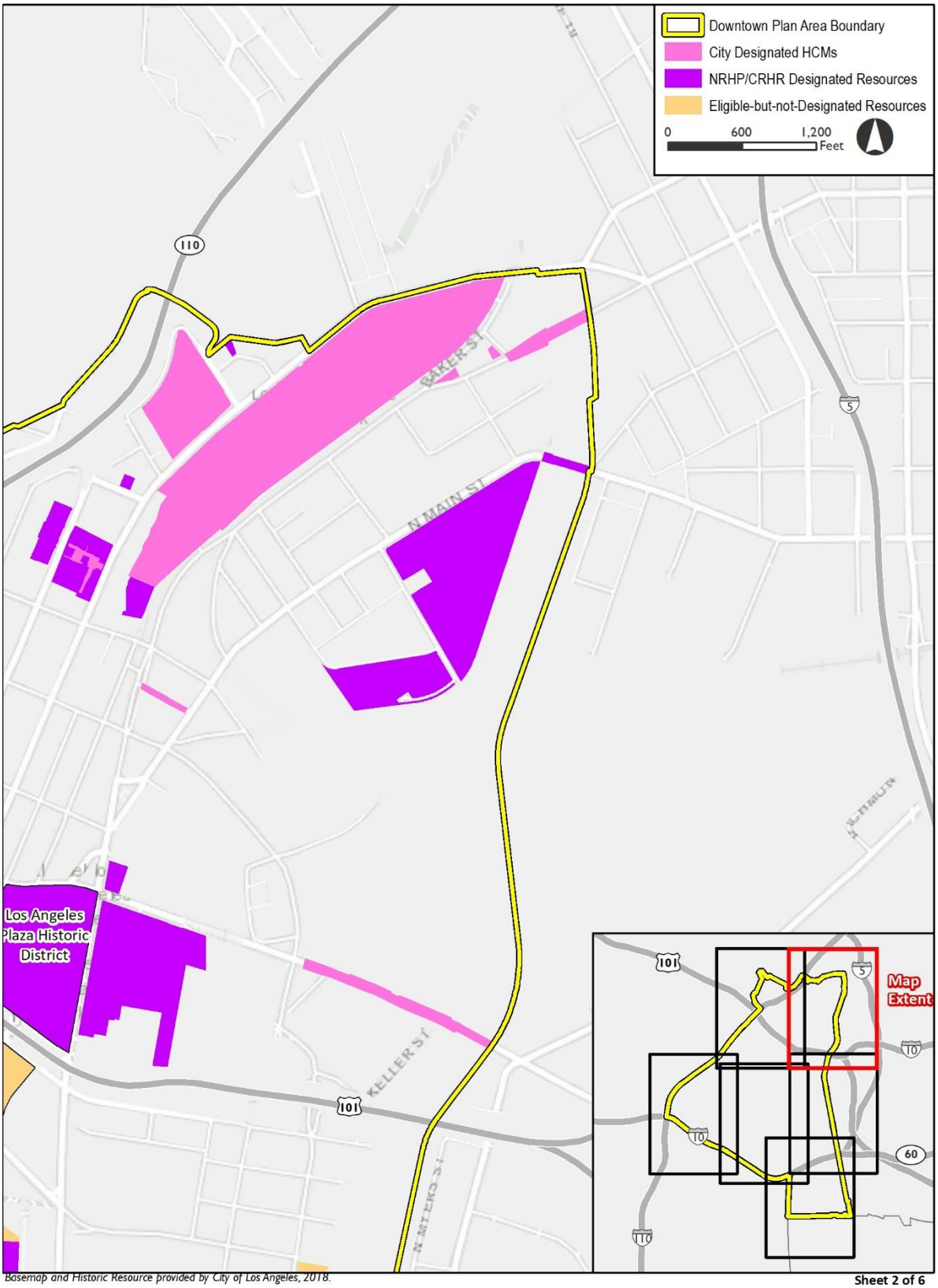


Figure 4.4-1d Downtown Plan Area Historical Resources

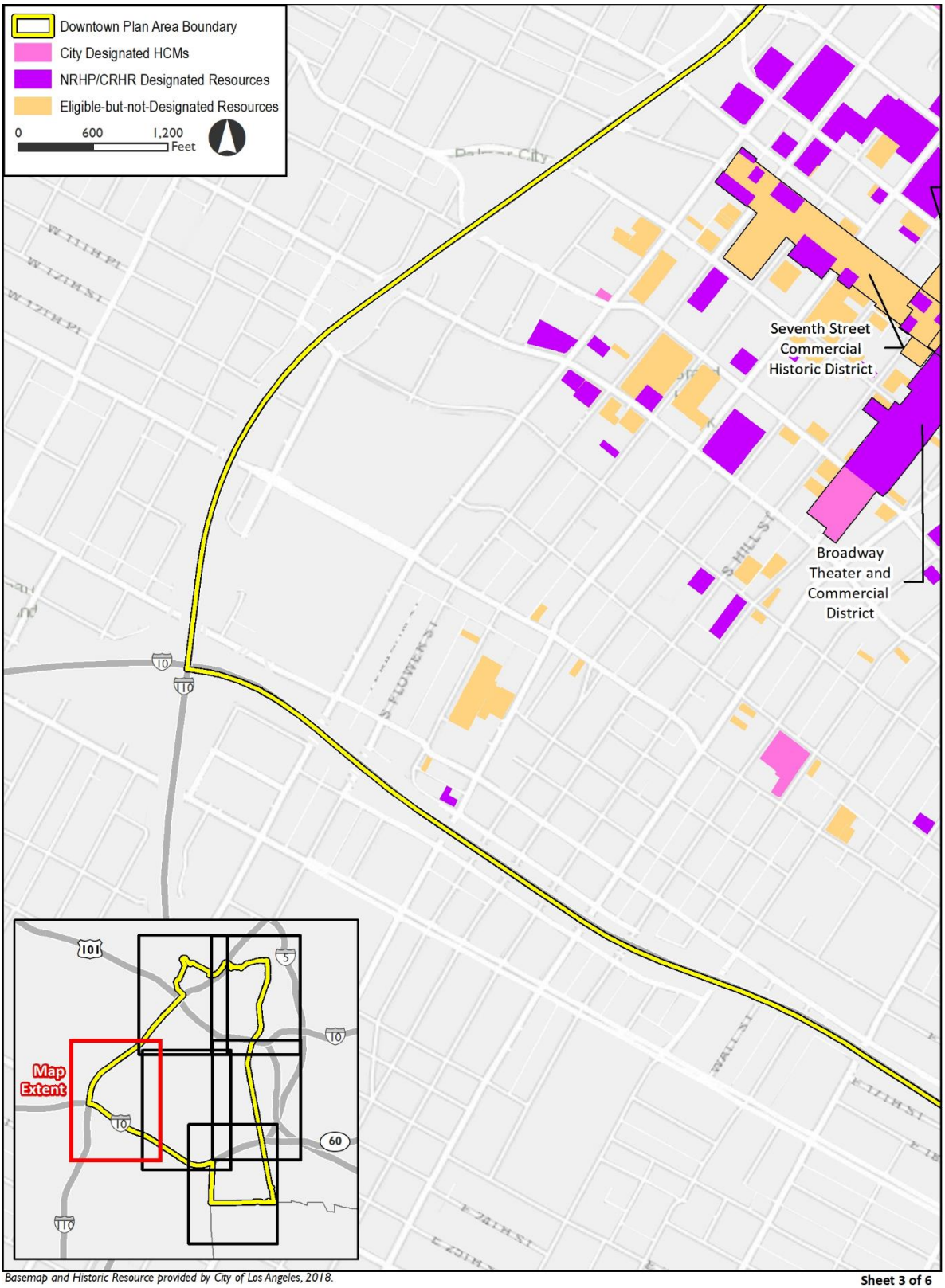


Figure 4.4-1e Downtown Plan Area Historical Resources

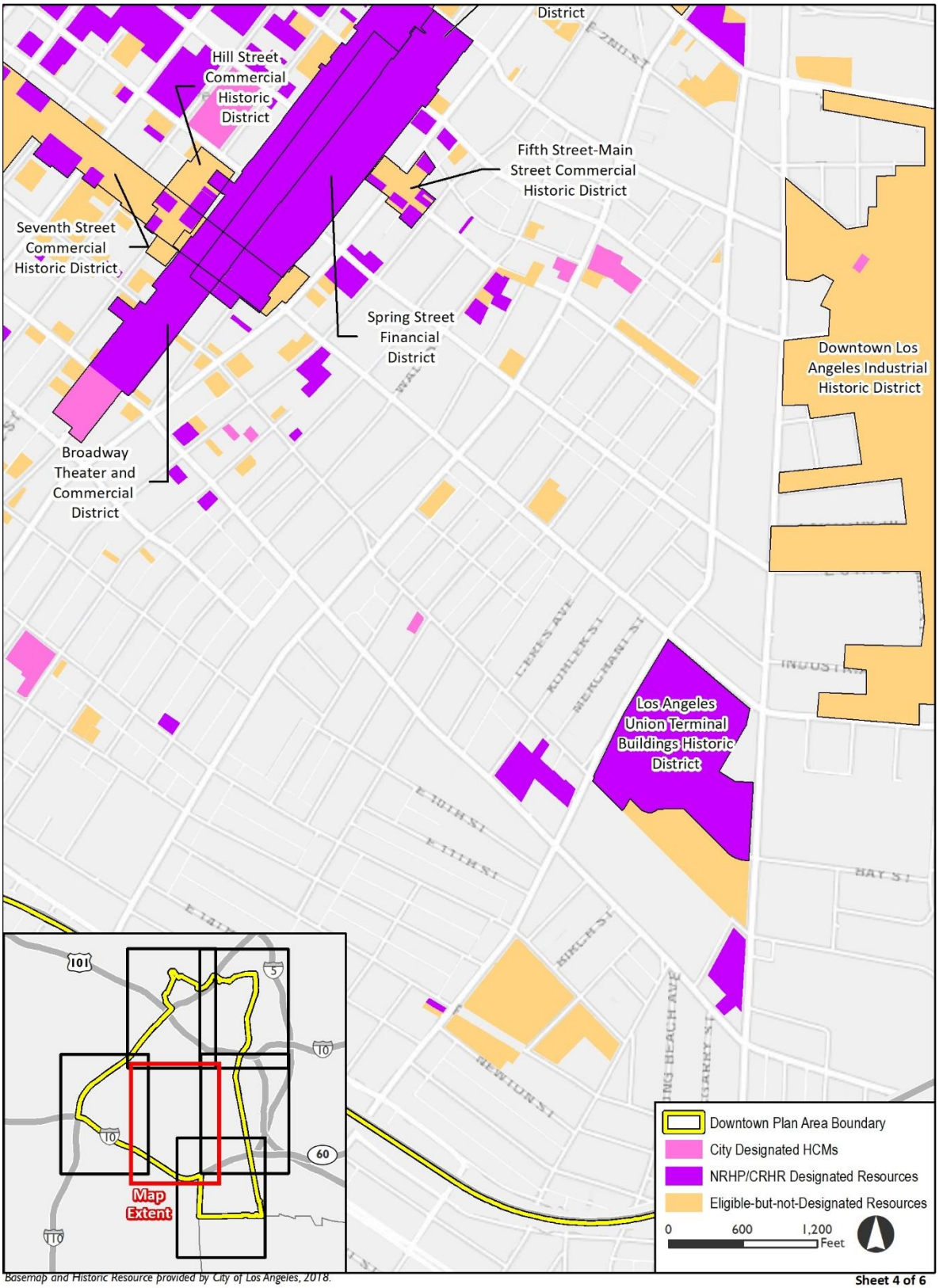


Figure 4.4-1f Downtown Plan Area Historical Resources

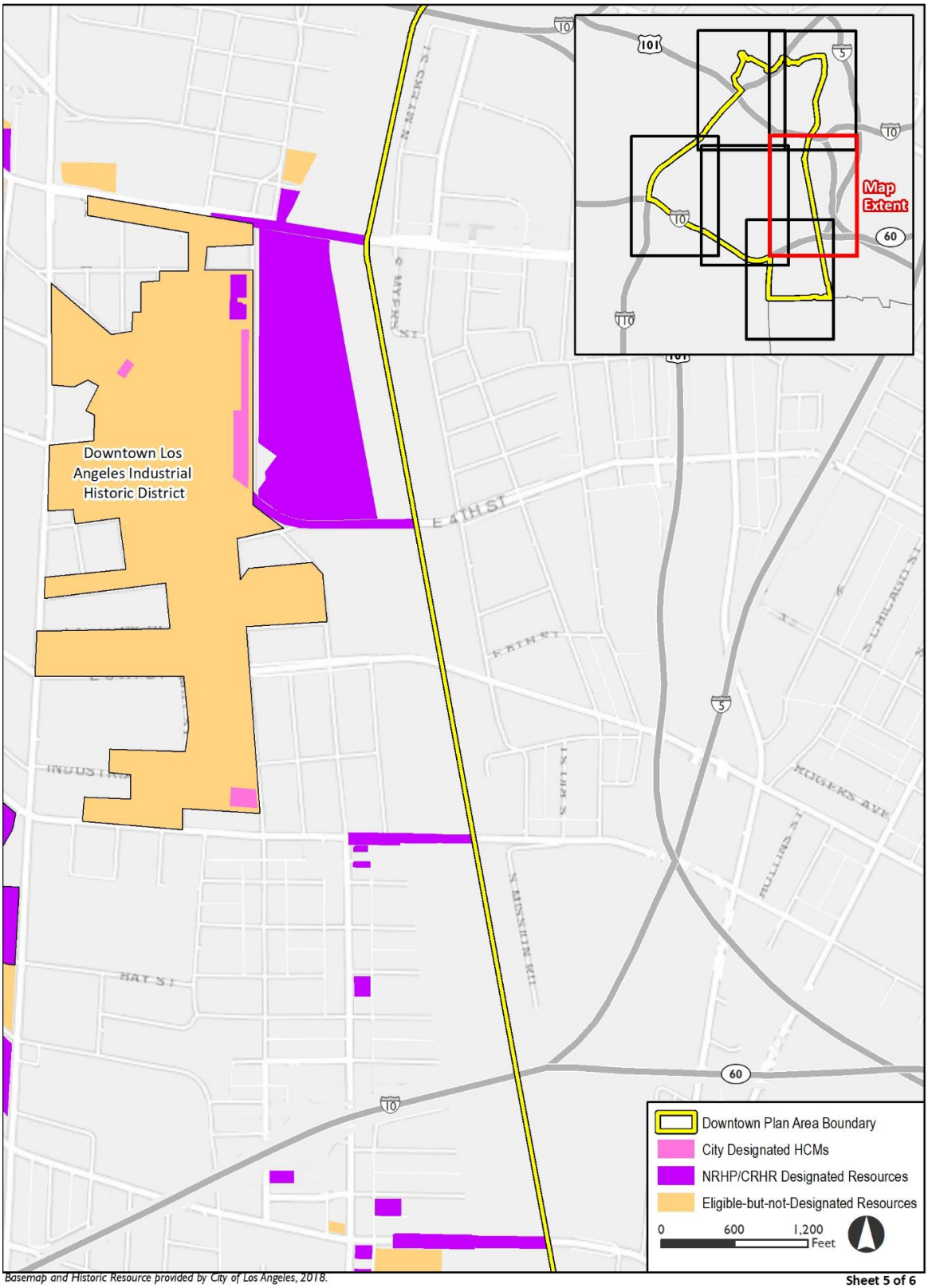


Figure 4.4-1g Downtown Plan Area Historical Resources

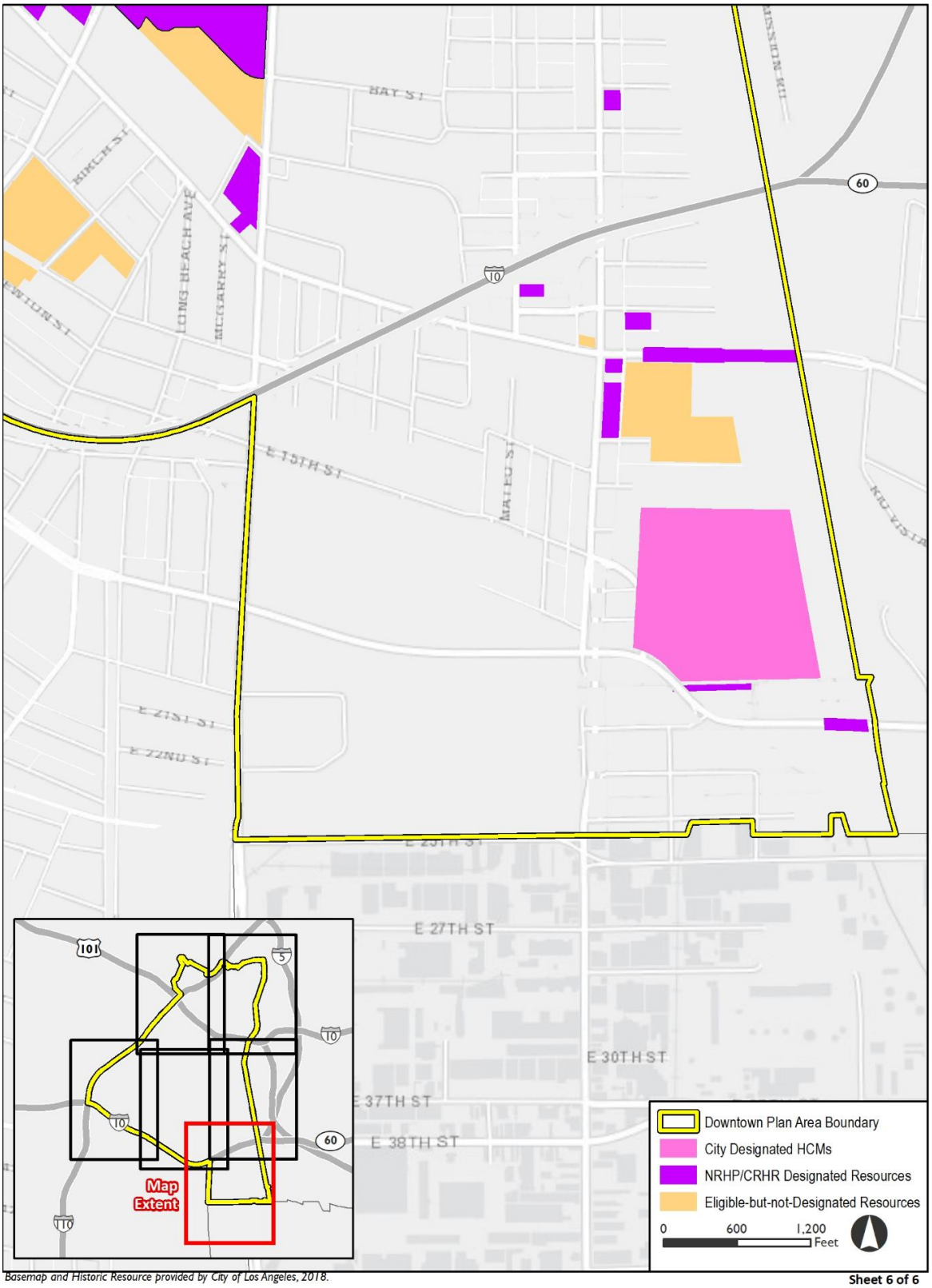
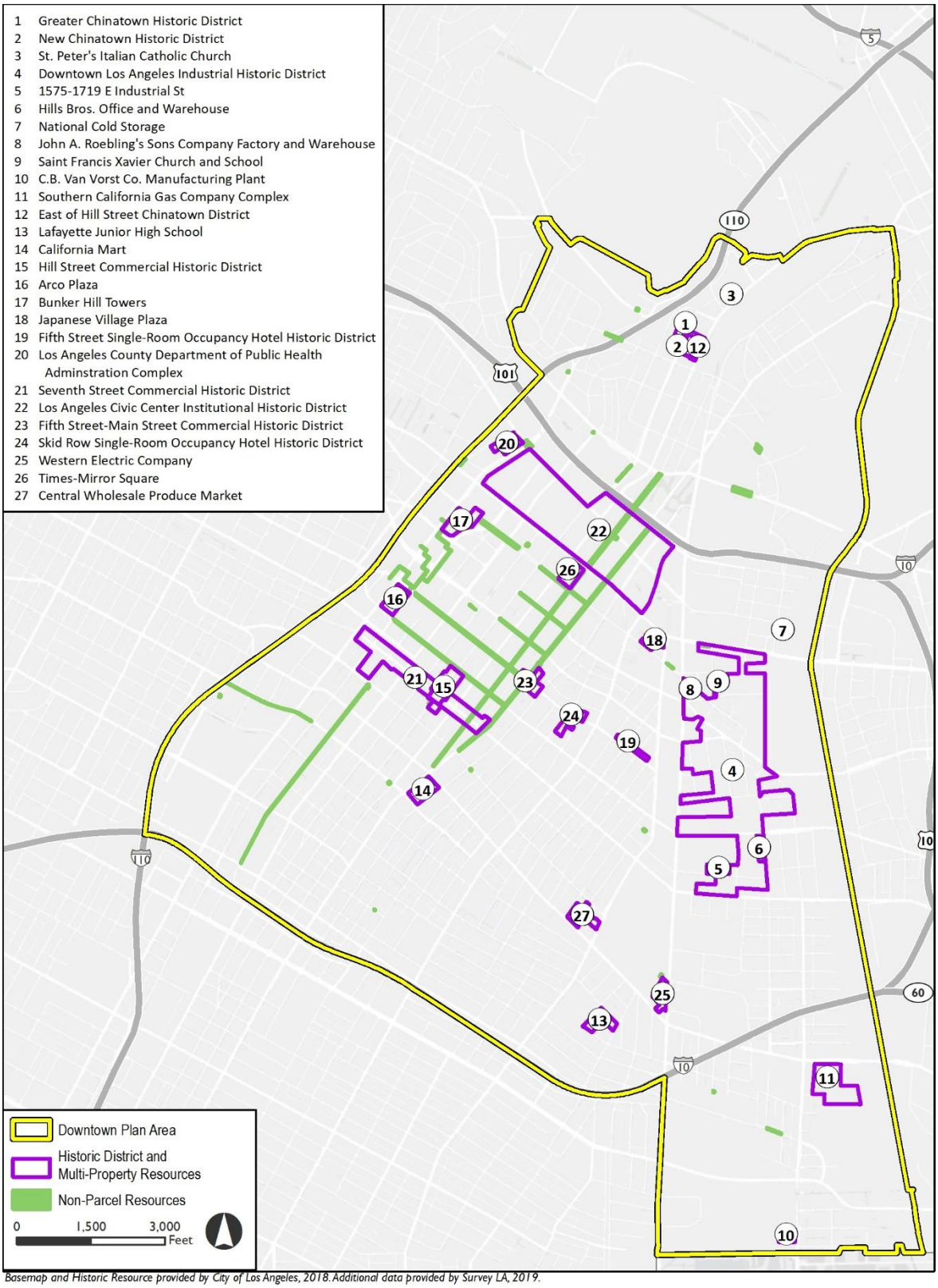
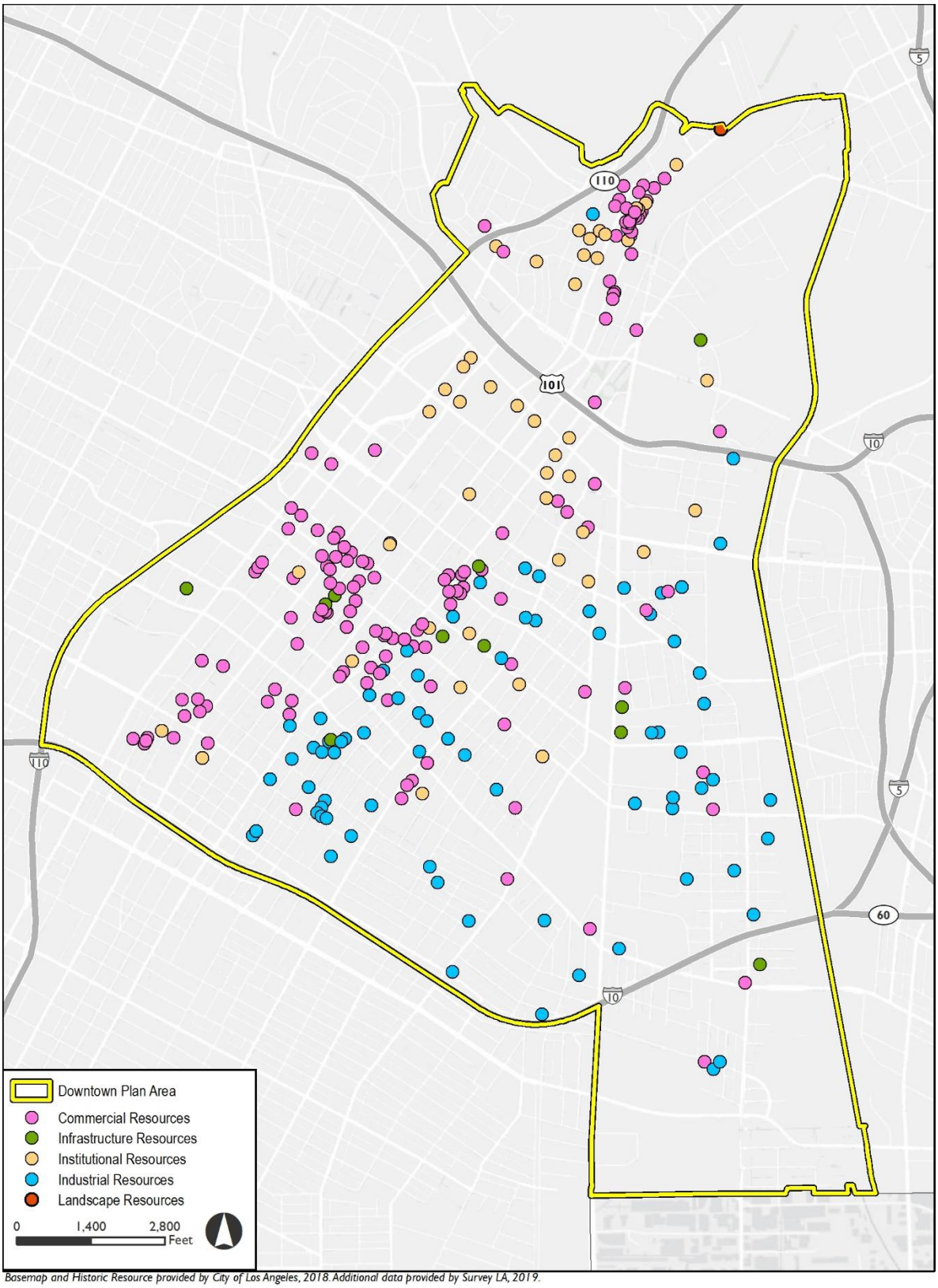


Figure 4.4-1h Resources Identified by SurveyLA



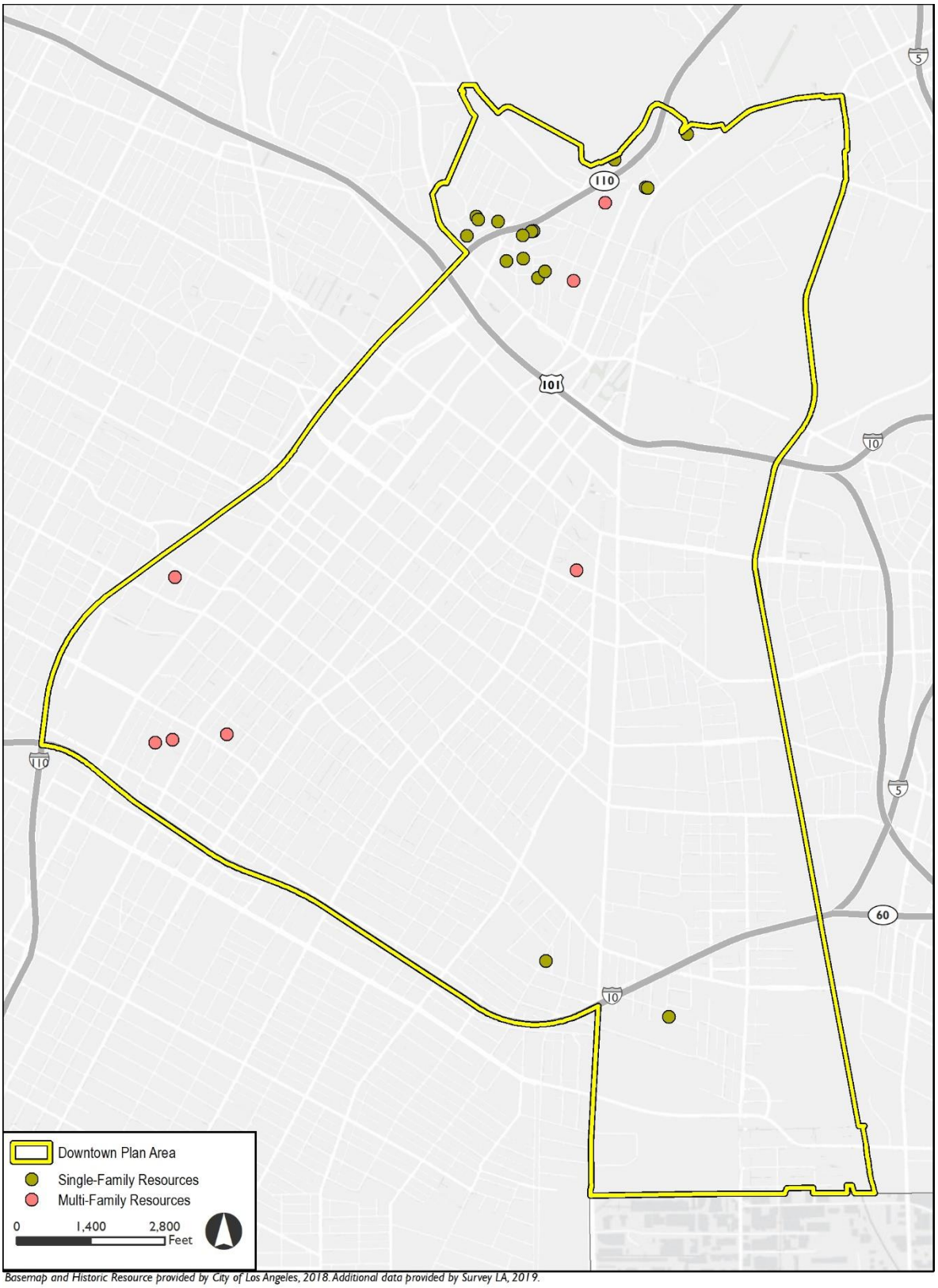
Basemap and Historic Resource provided by City of Los Angeles, 2018. Additional data provided by Survey LA, 2019.

Figure 4.4-1i Resources Identified by SurveyLA



Basemap and Historic Resource provided by City of Los Angeles, 2018. Additional data provided by Survey LA, 2019.

Figure 4.4-1j Resources Identified by SurveyLA



Basemap and Historic Resource provided by City of Los Angeles, 2018. Additional data provided by Survey LA, 2019.

Archaeological Sites

As discussed above, people have been living and using the land in the City and Downtown Plan Area for hundreds of years. Prehistoric and historic archaeological sites are known to exist throughout the City.

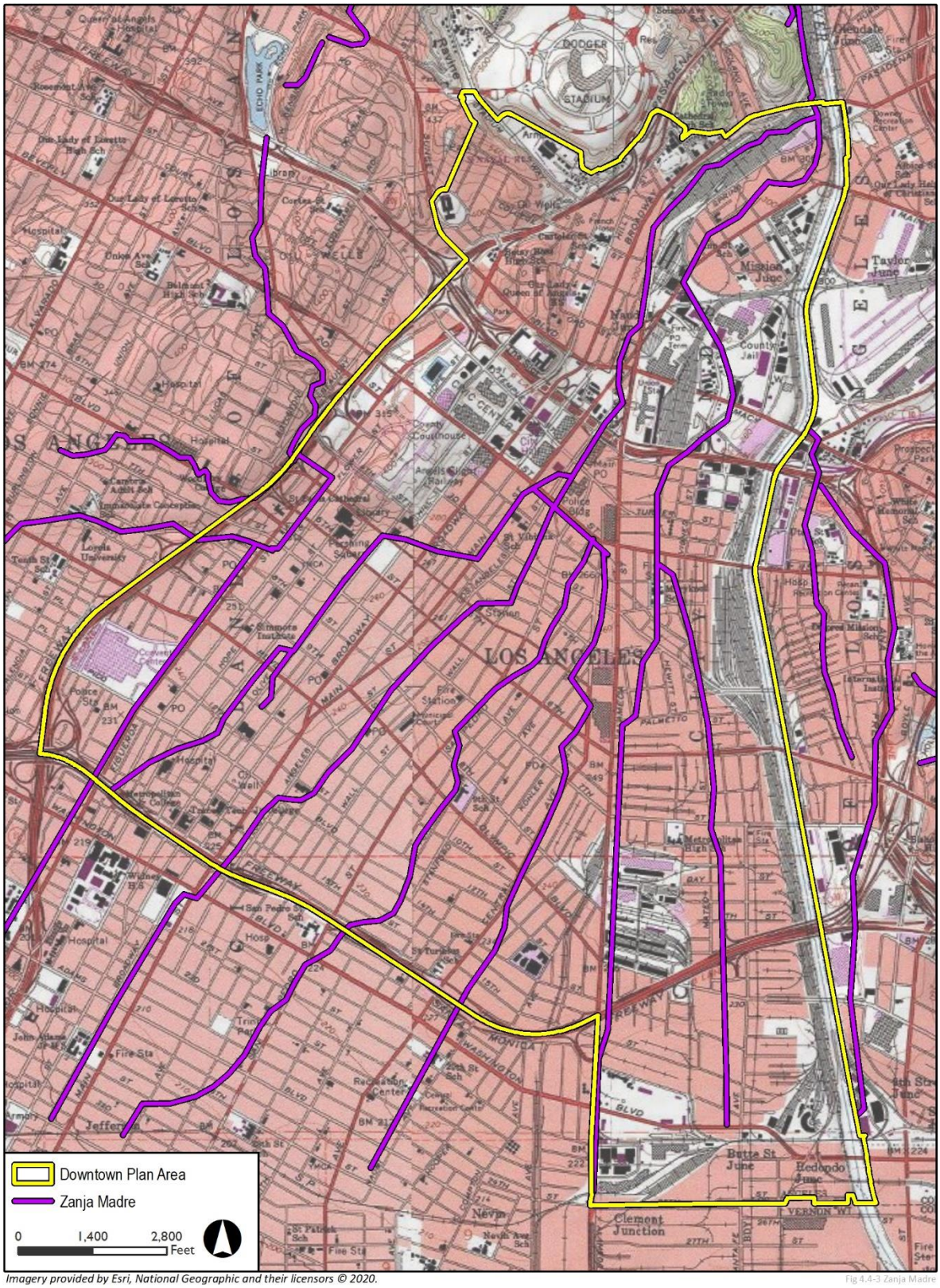
Citywide Archaeological Sites

Archaeological sites and survey areas exist throughout the City (City of Los Angeles 2001). In August 1993, 196 prehistoric sites, 50 historical sites, and 10 undefined isolated occurrences had been recorded. Of these, at least 26 sites were known to contain human burials, and 10 sites had both prehistoric and historic components. The prehistoric sites include named Native American villages, buried deposits and features, pit houses, occupied caves and rock shelters, bedrock mortars, camp sites, cemeteries and rock art (City of Los Angeles 2006). Historic-period archaeological sites primarily include privies and refuse deposits dating to the Spanish, Mexican, and early American settlement of the City, especially before the advent of citywide sewer and trash systems.

Downtown Plan Area Archaeological Sites

Archaeological sites of Native American origin are known to exist throughout the Los Angeles Basin, including the Tongva ethnographic village of Yangna, thought to be located near the present-day site of the Los Angeles Union Station in the Downtown Plan Area. Historic archaeological sites are also known to exist throughout the area and include sites associated with the Spanish settlement at the Los Angeles pueblo beginning in 1781, Mexican settlement of the area, and early American settlement and the establishment of the City. Remnants of the Zanja Madre, for example, the original aqueduct that carried water from the Los Angeles River to the pueblo, have been unearthed in the Downtown Plan Area. The Zanja Madre was constructed within a month of the founding of the Los Angeles Pueblo. The ditch originated near the modern North Broadway bridge and extended along the base of a bluff to the original Plaza. By 1870, there were over 50 miles of zanja including smaller ditches branching off of the Zanja Madre (**Figure 4.4-2**). During this time, the zanjas were enclosed by brick or replaced with piping (Gumprecht 1999). The system was mostly abandoned in 1906, with only small portions of zanjas used as part of the storm drain system. (Gust and Parker 2004). Portions of the abandoned zanjas have been unearthed throughout the City, including portions of the Zanja Madre within the Downtown Plan Area.

Figure 4.4-2 Zanja Madre



REGULATORY FRAMEWORK

Several levels of government maintain jurisdiction over historic, archaeological, and tribal resources. The framework for the identification and, in certain instances, protection of historical resources is established at the federal level, while the identification, documentation, and protection of such resources are often undertaken by state and local governments. This section includes a discussion of the applicable federal, state, and local laws, ordinances, regulations, and standards governing cultural resources, which must be adhered to before and during implementation of the proposed project.

FEDERAL

Neither the Downtown Plan nor the New Zoning Code has a federal nexus and, therefore, compliance with reference to the NHPA and other federal laws is provided here for informational purposes only. Projects that involve federal funding or permitting (i.e., have a federal nexus) must comply with the provisions of the National Historic Preservation Act of 1966 (NHPA), as amended (16 United States Code [U.S.C.] 470f). Cultural resources are considered during federal undertakings chiefly under Section 106 of the National Historic Preservation Act (NHPA) through one of its implementing regulations, 36 Code of Federal Regulations (CFR) 800 (Protection of Historic Properties), as well as the National Environmental Policy Act (NEPA). Properties of traditional religious and cultural importance to Native Americans are considered under Section 101(d)(6)(A) of the NHPA. Other relevant federal laws include the Archaeological Data Preservation Act of 1974, American Indian Religious Freedom Act of 1978, Archaeological Resources Protection Act of 1979, and Native American Graves Protection and Repatriation Act of 1989.

National Historic Preservation Act

The National Historic Preservation Act (NHPA), established in 1966, is a federal law created to avoid unnecessary harm to historic properties. The NHPA includes regulations that apply specifically to federal land-holding agencies, but also includes regulations (Section 106) that pertain to all projects funded, permitted, or approved by any federal agency that have the potential to affect cultural resources. Provisions of NHPA establish a National Register of Historic Places (maintained by the National Park Service), the Advisory Council on Historic Preservation, State Historic Preservation Office (SHPO), and federal grants-in-aid programs.

National Register of Historic Places

The National Register of Historic Places (NRHP) was established by the National Historic Preservation Act (NHPA) of 1966 as “an authoritative guide to be used by federal, State, and local governments, private groups, and citizens to identify the Nation’s cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (CFR 36 CFR 60.2). The NRHP recognizes properties that are significant at the national, state, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it is significant under one or more of the following criteria:

Criterion A: It is associated with events that have made a significant contribution to the broad patterns of our history;

Criterion B: It is associated with the lives of persons who are significant in our past;

Criterion C: It embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a

significant and distinguishable entity whose components may lack individual distinction;

Criterion D: It has yielded, or may be likely to yield, information important in prehistory or history.

Secretary of the Interior's Standards

The Secretary of the Interior is responsible for establishing professional standards and providing guidance related to the preservation and protection of all cultural resources listed in or eligible for listing in the NRHP.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979 (16 U.S.C. §§ 470aa *et seq*.) was enacted for the protection of archaeological resources on Native American lands and on public lands, including those held by the National Park system, the National Wildlife Refuge system, the National Forest System, and all other lands which the U.S. holds in fee.

American Indian Religious Freedom Act and Native American Graves Protection and Repatriation Act

The American Indian Religious Freedom Act of 1978 and Native American Graves and Repatriation Act of 1990 (25 U.S.C. §§ 3001 et seq.) establishes that traditional religious practices and beliefs, sacred sites, and the use of sacred objects shall be protected and preserved.

STATE

Office of Historic Preservation (OHP)

As an office of the California Department of Parks and Recreation, the OHP implements the policies of the NHPA on a statewide level. The OHP also carries out the duties set forth in the Public Resources Code (PRC) and maintains the California Historic Resources Inventory. The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the state's jurisdiction.

California Register of Historical Resources (California Register)

The California Register is "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change."[1] The criteria for eligibility for the California Register are based upon National Register criteria. These criteria are:

Criterion 1: Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California of the United States;

Criterion 2: Associated with the lives of persons important to local, California or national history;

Criterion 3: Embodies distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values; and

[1]PRC Section 50241.1(a).

Criterion 4: Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

The California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register resources listed automatically includes the following:

California properties listed in the National Register (Category 1 in the State Inventory of Historical Resources) and those formally Determined Eligible for listing in the National Register (Category 2 in the State Inventory of Historical Resources);

California Registered Historical Landmarks from No.0770 onward; and

Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Resources Commission for inclusion in the California Register.

Other resources that may be nominated for listing in the California Register include:

- Historical resources with a significance rating of Categories 3 through 5 in the State Inventory of Historical Resources (Categories 3 and 4 refer to potential eligibility for the National Register, while Category 5 indicates a property with local significance);
- Individual historical resources;
- Historical resources contributing to historic districts; and
- Historical resources designated or listed as a local landmark.

Additionally, a historical resource eligible for listing in the California Register must meet one or more of the criteria of significance described above and retain enough of its historic character or appearance to be recognizable as a historical resource and to convey the reasons for its significance. Historical resources that have been rehabilitated or restored may be evaluated for listing.

California Penal Code Section 622½

California Penal Code Section 622.5 provides the following: "Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor."

California Penal Code Section 623

California Penal Code Section 623 provides the following: "Except as otherwise provided in Section 599c, any person who, without the prior written permission of the owner of a cave, intentionally and knowingly does any of the following acts is guilty of a misdemeanor punishable by imprisonment in the county jail not exceeding one year, or by a fine not exceeding one thousand dollars ($1,000), or by both such fine and imprisonment: (1) breaks, breaks off, cracks, carves upon, paints, writes or otherwise marks upon or in any manner destroys, mutilates, injures, defaces, mars, or harms any natural material found in any cave. (2) disturbs or alters any archaeological evidence of prior occupation in any cave. (3) kills, harms, or removes any animal or plant life found in any cave. (4) burns any material which produces any smoke or gas which is harmful to any plant or animal found in any cave. (5) removes any material found in any cave. (6) breaks, forces, tampers with, removes or otherwise disturbs any lock, gate, door, or any other structure or obstruction designed to prevent entrance to any cave, whether or not entrance is gained.

California Public Resources Code (PRC) Sections 5020.1, 5024 and 5024.5

PRC Section 5020.1 provides definitions associated with historical resources. PRC Section 5020.1(h) defines a historic district as "a definable unified geographic entity that possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development." PRC Section 5020.1(j) defines a historical resource as "any object, building, structure, site, area, place, record, manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California." PRC Section 5020.1(p) defines State Historic Resources Inventory as "the compilation of all identified, evaluated, and determined historical resources maintained by the office and specifically those resources evaluated in historical resource surveys conducted in accordance with criteria established by the office, formally determined eligible for, or listed in, the National Register of Historic Places, or designated as historical landmarks or points of historical interest." PRC Section 5020.1(q) defines substantial adverse change to a historical resource as "demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

The California State Legislature enacted PRC Sections 5024 and 5024.5 as part of a larger effort to establish a state program to preserve historical resources. These sections require state agencies to take a number of actions to ensure preservation of state-owned historical resources under their jurisdictions. These actions include evaluating resources for National Register eligibility and California Historical Landmark (California Landmark) eligibility; maintaining an inventory of eligible and listed resources; and managing these historical resources so that that they will retain their historic characteristics.

PRC Sections 5097.5, 5097.9, and 5097.98-99

PRC Section 5097.5 provides protection for cultural and paleontological resources, where Section 5097.5(a) states, in part, that:

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

PRC Section 5097.9 establishes the California Native American Heritage Commission (NAHC) to make recommendations to encourage private property owners to protect and preserve sacred places in a natural state and to allow appropriate access to Native Americans for ceremonial or spiritual activities. NAHC is authorized to assist Native Americans in obtaining appropriate access to sacred places on public lands, and to aid state agencies in any negotiations with federal agencies for the protection of Native American sacred places on federally administered lands in California.

PRC Sections 5097.98-99 require that the NAHC be consulted whenever Native American graves or human remains are found. According to these sections, it is illegal to take or possess remains or artifacts taken from Native American graves; however, it does not apply to materials taken before 1984.

California Code of Regulations, Title 14, Section 4307 and Section 1427

Title 14, Section 4307 states that "no person shall remove, injure, deface or destroy any object of paleontological, archaeological, or historical interest or value." Section 1427 "recognizes that California's archaeological resources are endangered by urban development and population growth and by natural forces. Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archaeological or historical interest or value, whether situated on private lands or within any

public park of place, is guilty of a misdemeanor. It is a misdemeanor to alter any archaeological evidence found in any cave, or to remove any materials from a cave."

California Environmental Quality Act (CEQA)

Archaeological Resources - California Public Resources Code (PRC) Section 21083.2

PRC Section 21083.2 requires agencies to determine whether proposed projects would have effects on unique archaeological resources. Section 21083.2(g) states that "unique archaeological resource means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: (1) contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; or (2) has a special and particular quality such as being the oldest of its type or the best available example of its type; or (3) is directly associated with a scientifically recognized important prehistoric or historic event of person." Treatment options under Section 21083.2 include activities that preserve such resources in place and in an undisturbed state. Other acceptable methods include excavation and curation, or study in place without excavation and curation. Section 21083.2 also provides required mitigation measures to the extent that unique archaeological resources are not preserved in place or not left in an undisturbed state.

Historical Resources – PRC Section 21084.1

Under CEQA, a "project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment." This statutory standard involves a two-part inquiry. The first involves a determination of whether the project involves a historical resource, as specifically defined by CEQA. If so, then the second part involves determining whether the project may involve a "substantial adverse change in the significance" of the resource. Section 21084.1 of the PRC defines a historical resource as:

> an historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources. Historical resources included in a local register of historical resources, as defined in subdivision (k) of Section 5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1, are presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant. The fact that a resource is not listed in, or determined to be eligible for listing in, the California Register of Historical Resources, not included in a local register of historical resources, or not deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1 shall not preclude a lead agency from determining whether the resource may be an historical resource for purposes of this section.

Section 15064.5(a) of the CEQA Guidelines, provide that for the purposes of CEQA compliance, the term "historical resources" shall include the following:

(1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register;
(2) A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements in PRC Section 5024.1(g), shall be presumed to be historically or culturally significant. Public agencies must treat such resources as significant for purposes of CEQA unless the preponderance of evidence demonstrates that it is not historically or culturally significant;
(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific,

economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be 'historically significant' if the resource meets one of the criteria for listing on the California Register; and

(4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register, not included in a local register of historical resources (pursuant to PRC Section 5020.1(k)), or not deemed significant in a historical resources survey (meeting the criteria in PRC Section 5024.1(g)) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC Section 5020.1(j) or 5024.1.

Section 15064.5 of the CEQA Guidelines also provides that "substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." Material impairment occurs when a project alters or demolishes in an adverse manner "those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion" in a state or local historic registry.

California Health and Safety Code Sections 7050.5

California Health and Safety Code Section 7050.5(b) specifies protocol when human remains are discovered. The code states:

> In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in PRC Section 5097.98.

Assembly Bill (AB) 52

AB 52 specifies that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. AB 52 requires that a lead agency consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a project prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. Furthermore, it provides examples of mitigation measures that may be considered to mitigate any impact. These provisions are applicable to projects that have a notice of preparation (NOP) for an environmental impact or a notice of negative declaration or mitigated negative declaration filed on or after July 1, 2015.

LOCAL

City of Los Angeles General Plan Conservation Element (2001)

The City of Los Angeles General Plan contains growth and development policies that reflect a comprehensive long-range view of the City as a whole. The General Plan provides a comprehensive strategy for accommodating long-term growth should it occur as projected. The Conservation Element of the

General Plan consists of an identification and analysis of the existing natural and historical resources in the City of Los Angeles. Policies in the Conservation Element include the preservation of resources of historical, archaeological, and paleontological significance. Any proposed development plan must consider the potential for encountering and preserving these cultural resources. Policies from the Conservation Element related to paleontological, archaeological, and historical resources are listed in **Table 4.4-5**.

TABLE 4.4-5 RELEVANT GENERAL PLAN CULTURAL RESOURCES OBJECTIVES AND POLICIES

Objective/Policy	Objective/Policy Description
Conservation Element – Archaeological and Paleontological	
Objective	Protect the city's archaeological and paleontological resources for historical, cultural, research and/or educational purposes.
Policy	Continue to identify and protect significant archaeological and paleontological sites and/or resources known to exist or that are identified during land development, demolition or property modification activities.
Conservation Element – Cultural and Historical	
Objective	Protect important cultural and historical sites and resources for historical, cultural, research, and community educational purposes.
Policy	Continue to protect historic and cultural sites and/or resources potentially affected by proposed land development, demolition or property modification activities.

SOURCE: City of Los Angeles, Conservation Element of the City of Los Angeles General Plan, adopted September 26, 2001.

City of Los Angeles Cultural Heritage Ordinance (Los Angeles Administrative Code [LAAC] 22.171)

The City's Cultural Heritage Ordinance was first adopted by the Los Angeles City Council in 1962 and has since been amended several times. The provisions of the Cultural Heritage Ordinance are codified in Division 22, Chapter 9, Article 1 of the LAAC, commencing with Section 22.171. The Ordinance created a Cultural Heritage Commission and criteria for designating Historic-Cultural Monuments (HCMs). The Commission comprises five citizens, appointed by the Mayor, who have exhibited a knowledge of Los Angeles' history, culture and architecture. Any interested party may apply for a proposed HCM designation. Section 22.171.7 of the LAAC states that a historical or cultural monument is:

> *Any site (including significant trees or other plant life located on the site), building, or structure of particular historic or cultural significance to the City of Los Angeles, including historic structures or sites that are "identified with important events of national, state, or local history, or exemplifies significant contributions to the broad cultural, economic or social history of the nation, State, or community is associated with the lives of historic personages important to national, State, or local history; or which embodies the distinctive characteristics of style, type, period, or method of construction; or represents a notable work of a master builder, designer, or architect whose individual genius influenced his or her age.*

Each nomination is reviewed by the Cultural Heritage Commission, then by the Planning and Land Use delayManagement Committee of the City Council, and the City Council as a whole. Once a property has been designated a Monument, the Commission and its staff review permits for alteration, relocation, or demolition. The Commission can delay demolition of a Monument for 180 days and has the authority to recommend to the City Council to delay demolition for another 180 days. Locally designated cultural resources are presumed to be historically significant under CEQA. Therefore, demolition and/or alterations of HCMs are subject to review under CEQA.

City of Los Angeles Historic Preservation Overlay Zone Ordinance (LAMC 12.20.3)

City's Historic Preservation Overlay Zone (HPOZ) Ordinance was first adopted by the Los Angeles City Council in 1979 and has since been amended several times. The most recent iteration City of Los Angeles Ordinance Number 1849031, found in Section 12.20.3 of the LAMC, describes the procedures for the establishment of Historic Preservation Overlay Zones (HPOZs), the powers and duties of HPOZ Boards, and the review processes for projects within HPOZs. The Ordinance was adopted by the Los Angeles City Council on April 25, 2017 and became effective on June 17, 2017. This ordinance is intended to recognize, preserve, and enhance buildings, structures, landscaping, natural features, and areas within the City having historic, architectural, cultural or aesthetic significance in the interest of the health, economic prosperity, cultural enrichment and general welfare of the people. This Ordinance describes the powers and duties of HPOZ Boards, and the review processes for projects within HPOZs.

As required by this ordinance, the construction, addition, demolition, reconstruction, alteration, removal, or relocation of any publicly or privately-owned building, structure, landscaping, natural feature, lot, street features, furniture or fixtures within a HPOZ identified as a Contributing Element or a Non-Contributing Element in the historical resources survey for the zone must obtain approval by the Director of the City's Department of City Planning (DCP) or Area Planning Commission. Depending on the scope of a project, an application may be reviewed through a ministerial process Conforming Work for a Contributing Element or Conforming Work for Non-Contributing Element; or through a discretionary process Certificate of Appropriateness or Certificate of Compatibility. The determination to approve, conditionally approve or disapprove a project is based on the project's conformance to the HPOZ's Preservation Plan, and if no Preservation Plan exists, compliance with the United States Secretary of Interior's Standards of Rehabilitation, and whether the project protects and preserves the historic and architectural qualities and the physical characteristics which make the building, structure, landscape, or natural feature a Contributing Element of the preservation zone. Any person proposing to demolish, remove or relocate any Contributing building, structure, landscaping, or natural feature within a preservation zone not qualifying as Conforming Work on Contributing Elements shall apply for a Certificate of Appropriateness and must conduct appropriate environmental review. No Certificate of Appropriateness shall be issued to demolish, remove or relocate any building, structure, landscaping, natural feature or lot within a HPOZ that is designated as a contributing element unless it can be demonstrated that the owner would be deprived of all economically viable use of the property.

The LAMC is currently undergoing a comprehensive update to all Zoning Code sections as part of the re:code LA effort. re:code LA, which started in 2013 and will continue through 2020, will update the Zoning Code to make the Code more streamlined, visual, and easy to use. The existing Zoning Code regulations are not being repealed as part of this Project. The existing Zoning Code will continue to be located in Chapter 1 of the Los Angeles Municipal Code, while the New Zoning Code will be located in a new Chapter 1A of the Los Angeles Municipal Code. Relevant components of the New Zoning Code are described in detail in Section 3, *Project Description*. The HPOZ Ordinance will be incorporated into the New Zoning Code.

Los Angeles Municipal Code (LAMC) Article 1 Chapter IX Section 91.106.4.5

All building permits on sites designated as historic at the local, state, or federal level must be reviewed by the Department of Building and Safety to determine whether the project will result in the loss of, or serious damage to, a significant historical or cultural asset. Section 91.106.4.5 states that the City of Los Angeles Department of Building and Safety "shall not issue a permit to demolish, alter or remove a building or structure of historical, archaeological or architectural consequence if such building or structure has been officially designated, or has been determined by state or federal action to be eligible for designation, on the National Register, or has been included on the City of Los Angeles list of HCMs, without the department

having first determined whether the demolition, alteration or removal may result in the loss of or serious damage to a significant historical or cultural asset."

If it is determined that loss or damage to a historical resource could occur, the project applicant is required to conduct a CEQA analysis to determine if the impact is significant, and the Department of Building and Safety may not issue a permit without first finding that specific economic, social or other considerations make infeasible the preservation of the building or structure."

LAMC Article 1 Chapter IX Section 91.106.4.5.1

Under this section of the LAMC, permits for the demolition of a building or structure that are over 45 years old will not be issued unless abutting properties owners and occupant, and the City Council District Office, and the Certified Neighborhood Council representing the site are notified in writing and a public notice of application for demolition has been posted at the site at least 60 days prior to the date of issuance of the demolition of building or structure permit.

City of Los Angeles Cultural Heritage Master Plan (2000)

The City of Los Angeles Cultural Affairs Department developed a Cultural Heritage Master Plan, adopted by the City Council in 2000. The Master Plan contains numerous important policy recommendations on historic preservation in the City of Los Angeles, many of which have shaped the creation and early work of the Office of Historic Resources.

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance were developed based on Appendix G of the CEQA Guidelines. The Proposed Project would have a significant impact to cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5 (Threshold 4.4-1)
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5 (Threshold 4.4-2)
- Disturb any human remains, including those interred outside of dedicated cemeteries (Threshold 4.4-3)

METHODOLOGY

The cultural resources analysis considers the presence and absence of known cultural resources, as well as the potential for significant cultural resources to occur within the Downtown Plan Area, and considers the potential impacts on such resources from adoption and implementation of the Proposed Project.

The analysis of historical resources examines the likelihood that the Proposed Project could cause a substantial adverse change in the significance of a historical resource. For purposes of the analysis of impacts to historical resources, historical resources include all resources on the California Register (which include those on the National Register); all HCMs, all HPOZs; all resources identified as eligible for listing or designated on a state or local register in a survey that meets the standards of PRC Section 5024.1(g), including SurveyLA and applicable CRA surveys.

A significant impact to historical resources will occur if there is a "substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." CEQA Guidelines Section 15064.5(b)(1). Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995) is considered to be mitigated to a level of less-than-significant impact on the historical resource.

The analysis of archaeological resources identifies the likelihood of ground disturbing activities to potentially result in a significant impact to unique archaeological resources (non-unique resources do not have to be addressed in an Environmental Impact Report). PRC Section 21083.2 defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Similar to archaeological resources, the analysis of human remains considers the likelihood of ground disturbing activities to potentially encounter human remains.

PROJECT IMPACTS

Threshold 4.4-1	Cause a substantial adverse change in the significance of a historical resource as pursuant to § 15064.5

Impact 4.4-1

Downtown Plan: Although the existing regulations provide certain protections for significant historical resources, individual reasonably anticipated developmentfrom the Downtown Plan could potentially cause a substantial adverse change in or disturbance of historical resources as defined in CEQA Guidelines Section 15064.5. Impacts to historical resources would be ***significant and unavoidable.***

New Zoning Code: Historical resources exist citywide. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may impact historical resources. Projecting the location and type of future growth would be speculative. The New Zoning Code will strengthen existing protection of historical resources by continuing to provide and expanding upon incentives, such as through adaptive reuse of historic structures. The Proposed Project does not intend to implement the new Zoning Code outside of the Downtown Plan Area and therefore, any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Impacts would be ***less than significant.***

Downtown Plan Impact

Based on CEQA Guidelines Section 15064.5, future reasonably anticipated development activities from the Downtown Plan would have a significant impact on historical resources if they would cause a substantial adverse change in the significance of a historical resource. Historical resources include properties eligible for listing on the NRHP, the CRHR, or a local register of historical resources. In addition, as explained in Section 15064.5, "[s]ubstantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." As described in the Setting, there are hundreds of historical resources identified within the Downtown Plan Area, including both designated resources and those found potentially eligible in SurveyLA or other surveys.

Within the Plan Area, there are 130 state- and/or federally-designated historical resources, including three historic districts, and 138 designated HCMs. SurveyLA, which is a tool used to identify potentially eligible historical resources, identified 190 properties within the Downtown Plan Area which could be eligible for federal, state, and/or local designation pending further investigation. **Figure 4.4-1** identifies the location of these historical resources and indicates that although they are located throughout the Downtown Plan Area, there is a higher concentration in the Central City Community Plan Area and the northern portion of the Central City North Community Plan Area. Historical resources located within the northern portion of the Central City North Community Plan Area are generally associated with the earlier historical development of Los Angeles and include the NRHP-listed Los Angeles Plaza Historic District among others. In the area east of Alameda Street in the Central City Community Plan Area is a concentration of historical resources which are significant for their association with the early industrial development, many of which were identified by SurveyLA as contributors to the NRHP-eligible Downtown Los Angeles Industrial Historic District. The highest concentration of historical resources is located in the Central City Community Plan Area in the area generally west of Broadway. These resources are typically significant with their architectural value and association with the early twentieth century growth of Los Angeles and includes numerous properties which are designated and/or have been found eligible by SurveyLA or other historic resources surveys for designation at the federal, state, and/or local level.

The Downtown Plan does not introduce any features that would preclude implementation of, or alter the regulatory control ordinances that designated historical resources are subject to the Cultural Heritage Ordinance regulations discussed above. There are no historical resources that are called for removal or alteration under the Downtown Plan. However, development that would occur over the life of the Downtown Plan has the potential to occur on, or adjacent to, historical resources. Development can impact historical resources either through direct effects (demolition or alteration of a historical resource's physical characteristics that convey its historical significance, such as incompatible façade changes) or through indirect effects to the area surrounding a resource (such as creating a visually incompatible structure adjacent to a historical structure).

The provisions in the Cultural Heritage Ordinance reduce impacts to historic properties in the City as a whole, including throughout the Downtown Plan Area where a specific development site is located on designated historic properties. Specifically, the Cultural Heritage Ordinance requires that the Office of Historic Resources review projects that are: 1) located adjacent to properties designated as HCMs; 2) discretionary and located on properties that have been identified in survey meeting requirements of PRC Section 5024.1(g), including SurveyLA as having potentially historical resources; 3) discretionary and included in the CRA Survey as eligible for listing. These projects are required to include any modifications identified by the Office of Historic Resources, or a historical resource assessment prepared by a qualified architectural historian as deemed necessary, that will retain eligibility of the historical resource. The Office of Historic Resources typically recommends modifications that are consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating,

Restoring, and Reconstructing Historic Buildings. Such modifications may include setbacks, step backs, height and other project features related to context-sensitive project design. If the historic or cultural significance of a potential resource is contested, applicants will be required to provide a historical resource assessment prepared by a qualified architectural historian to determine the proposed resource's potential significance.

All discretionary projects that have the potential to impact historical resources must be individually reviewed by the Office of Historic Resources. While the Office of Historic Resources reports that it is extremely uncommon in the City to lose designated historical resources when a property owner has complied with the City's regulations, the Cultural Heritage Ordinance and the HPOZ Ordinance, it cannot prevent a property from being demolished or redeveloped or prevent structures from being altered. Rather these ordinances provide for processes, including environmental review, but they do not prohibit demolition. Therefore, even though the Downtown Plan incorporates changes that would assist in further protecting both designated and eligible historical resources, it is possible that demolition and/or significant alteration to some of the historical resources within the Downtown Plan Area would occur during the life of the Downtown Plan. In addition to the citywide Cultural Heritage Ordinance described above, the Downtown Plan includes a series of policies (see **Table 4.4-6**) and zoning strategies intended to encourage the protection, rehabilitation, and reuse of existing historical resources in the Downtown Plan Area as described further below.

Zoning Regulations

The Downtown Plan includes new zoning regulations that are intended to shape the massing, scale and architectural features of a building. Recognizing that the Plan Area comprises of distinct neighborhoods, these regulations are tailored to ensure new infill development is compatible with the existing character of each of these neighborhoods. Accordingly, all future development within the Plan Area will be subject to compliance with zoning specifications regarding building height and width, articulation, entrances, entry-features and transparencies, and in certain areas specifies allowable materials intended to ensure infill development is compatible with the character of these areas.

The Downtown Plan Community Plan Implementation Overlay (CPIO) includes information regarding best practices in design for certain neighborhoods in the Plan Area. Although these neighborhood-specific best practices are not mandatory, they serve as a design resource for future projects and provide ideas for context-sensitive development.

Transfer of Development Rights (TDR) Program

The Community Benefits Program for the Downtown Community Plan includes a Transfer of Development Rights (TDR) program to promote the preservation of historical resources, while enabling the transfer of development rights to be utilized on more appropriate sites. As identified in the Downtown Plan Community Plan Implementation Overlay (CPIO), the TDR program will be implemented in the area designated as Hybrid Industrial 2 (IH2) to the east of Alameda Street generally bounded by 1st Street to the north, Alameda Street to the west, the Bay Street to the south and the Los Angeles River to the east, in addition to the blocks bounded by Bay Street to the north, Mateo Street to the east, the 110 Freeway to the south and Santa Fe Avenue to the west.

The donor site would be eligible to transfer development rights to a receiver site if it complies with one of the following: a site designated as a Los Angeles Historic-Cultural Monument, a site listed in or formally determined to be eligible for the California Register of Historical Resources or the National Register of Historic Places; a contributor to a historic district identified by SurveyLA, or an individual resource identified by SurveyLA, or another historical resource survey completed after the effective date of the Downtown Plan CPIO by a person meeting the Secretary of the Interior's Professional Qualification

Standards for Historic Preservation and accepted as complete by the Director, in consultation with the Office of Historic Resources (OHR)

The donor site would be able to sell unused floor area, up to the maximum Bonus FAR permitted in the Form District, to a receiver site within the Downtown Plan area. As part of this program, owners of the donor and receiver sites are required to execute a covenant and agreement that would run with the land. The covenant on the donor site would acknowledge the reduced FAR and transfer of this development to the receiver site. The donor site would be required to execute a preservation easement, to address minimum requirements related to maintenance of the building, property, or historic features. This program is intended to incentivize the protection of the existing historical resources.

SurveyLA also identifies a large concentration of historical resources in the area bounded by Hill Street to the west, 3rd Street to the north, Main Street to the east, and 9th Street to the south and along 7th Street between Figueroa Street and Main Street, and along 7th Street between Figueroa Street and Main Street in addition to several HCMs to the west of Hill Street. However, most of the resources are designated in the National Register of Historic Places, the California Register of Historical Resources, or the City of Los Angeles List of Historic-Cultural Monuments and are therefore protected under applicable regulations. In addition, a majority of the buildings in these areas are currently built to maximum FARs and do not possess additional FARs for transfer. Therefore, the Downtown Plan does not propose implementation of the TDR program for this area.

Downtown Adaptive Reuse Program

The City's current Adaptive Reuse Programs relaxes parking, density, and other typical zoning requirements in order to facilitate the conversion and retention of existing, historically significant buildings to dwelling units. The program has demonstrated its effectiveness as a revitalization tool that encourages the use of underutilized buildings.

Under the Downtown Community Plan, the Downtown Adaptive Reuse Program will be expanded through the New Zoning Code to allow for the conversion of eligible buildings to any use permitted or conditionally permitted by the designated Use District of the property. This will help reduce vacancy in old historic buildings and encourage transition to different uses to suit changing market needs, while preserving Downtown's architectural and cultural past.

In order to qualify as an Adaptive Reuse Project, a project has to meet at least one of the following criteria:

- Buildings constructed in accordance with building and zoning codes in effect prior to July 1, 1974
- Buildings constructed in accordance with building and zoning codes in effect on or after July 1, 1974, if five years have elapsed since the date of issuance of final Certificates of Occupancy.
- Buildings designated on the National Register of Historic Places, the California Register of Historical Resources, or the City of Los Angeles List of Historic-Cultural Monuments. Contributing Buildings in National Register Historic Districts or Contributing Structures in Historic Preservation Overlay Zones (HPOZ) established pursuant to Division 13.11. (Historic Preservation) of this Chapter are also eligible buildings.
- Any parking garage or structure, or parking area of any existing building, built at least 10 years prior to the date of application, in excess of the minimum parking required.

TABLE 4.4-6 DOWNTOWN PLAN POLICIES RELATED TO CULTURAL RESOURCES

Policy Number	Policy
LU 3.3	Foster healthy communities composed of mixed-income housing in proximity to transit, jobs, amenities, services, cultural resources, and recreational facilities.
LU 9.2	Reinforce the distinct qualities of each neighborhood, and ensure that growth complements and is compatible with existing character and historic resources; and supports community needs.
LU 12.1	Protect and support the rehabilitation of historic resources designated at the local, state, or national level.
LU 12.2	Incentivize the preservation, rehabilitation, and adaptive reuse of one of the largest and most distinguished stock of historic buildings in the United States for a variety of uses.
LU 12.3	Prevent the unnecessary loss of resources of historic significance, special character, cultural, or social significance.
LU 12.4	Support existing and future policy that is intended to enhance, restore and activate those resources that have been designated as resources through the Los Angeles Historic Resources Survey.
LU 12.5	Encourage incorporation of existing buildings in new development as feasible and appropriate.
LU 13.1	Strengthen the awareness of historic resources by supporting the implementation of a unified set of informational and wayfinding signs that provide a description of these sites.
LU 13.2	Support local institutions' and organizations' efforts to advocate for, educate, and share the legacy of historic and cultural resources.
LU 13.3	Support existing and future efforts that are intended to enhance, restore, and activate historic resources.
LU 13.4	Promote community participation and input in cultural and historic preservation efforts.
LU 13.5	Partner with community organizations and local residents to identify and protect cultural resources and assets.
LU 14.1	Ensure that where new development occurs, it complements the physical qualities and distinct features of existing historic resources.
LU 14.2	Retain the integrity of historic resources, while achieving a balance between preservation and the need to accommodate housing and jobs in Downtown.
LU 14.3	Preserve and promote the distinct qualities and features of historically and culturally significant neighborhoods and communities.
LU 14.4	Encourage innovative design that creates the preservation-worthy buildings of the future.
LU 14.5	Support efforts to preserve and restore the rich inventory of culturally significant murals and public art found throughout Downtown.
LU 22.1	Create a streamlined process to ensure adaptive reuse of existing (historic) structures is the preferred development option.
LU 22.2	Remove prohibitive regulations to ensure maximum use of small or narrow infill sites for contextual new development or use as creative open space.
LU 23.3	Expand the range of uses permitted through adaptive reuse to include commercial reuse that encourages (historic) preservation and responds to market changes.
LU 25.1	The existing built environment will be supported by prioritizing public benefits that favor (historic) preservation, renovation and adaptive reuse, and new construction that is responsive to and respectful of traditional building forms.
LU 33.7	Introduce shared street typologies for Arts District streets that preserve historic industrial characteristics while promoting access and safety for all users.
LU 41.7	Retain, support, and reinforce the historic and cultural elements of Little Tokyo, including the businesses and cultural institutions within the community.
LU 41.10	Support and reinforce the historic and cultural components of Chinatown, including architectural design, and the long-standing local businesses and legacy institutions that serve the local community.
LU 41.12	Promote courtyard-style developments that are characteristic of the area and reinforce the neighborhood's historic pedestrian orientation and reflect the community's cultural heritage.
LU 49.3	Utilize historic buildings to accommodate institutional, commercial, and residential uses.
LU 52.10	Ensure that new structures are respectful of and responsive to City Hall as a primary focal point.

TABLE 4.4-6 DOWNTOWN PLAN POLICIES RELATED TO CULTURAL RESOURCES

Policy Number	Policy
LU 52.11	Preserve the legacy of this area (El Pueblo de Los Angeles Historic District) and ensure future development provides clear access to the historic district.
LU 52.13	Reinforce the historic character and low-scale form of El Pueblo.
SO 6.4	Honor existing historical features and support context sensitive design.

These policies would reduce impacts to historical resources. Policies such as LU 12.1, 12.2, 12.3, 12.5, 13.3, 14.2, 22.1, 22.2, 23.3, and 49.3 would help by encouraging the retention and sensitive treatment of historical resources. Policies such as LU 14.1 and 14.3, would help to ensure new development is both compatible with individual historical resources and also larger historic districts, thereby minimizing negative impacts occurring through a dramatic change in historic setting. However, these policies will not eliminate the potential for demolition or renovation of historic structures, or changes in setting from new development, in a manner which could affect those physical characteristics which convey a resource's historic significance. Therefore, impacts to historical resources would be ***potentially significant***.

New Zoning Code Impact

As described in Existing Conditions, there are over 24,500 cultural resources (as determined through the SurveyLA effort) (City of Los Angeles 2018b).[2]

As discussed in Section 2.5.3, there are many combinations of Form, Frontage, Development Standards, Use, and Density Districts that could be applied to properties to make a zone. The New Zoning Code would allow for a variety of new Form and Use Districts that could be applied elsewhere in the City through future community plan updates or amendments. If applied outside of the Downtown Plan Area, these different or more intensive zone districts could result in impacts to a historical resource. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts to specific historical resources cannot be identified. The Proposed Project expands the Citywide and Downtown Adaptive Reuse Programs to allow for the conversion of eligible buildings to any use permitted or conditionally permitted by the designated Use District of the property. The Citywide Adaptive Reuse Program will require a discretionary action for such conversions. The expansion of the Adaptive Reuse Programs would further incentivize the reuse and preservation of eligible buildings, reducing potential impacts to historical resources. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative.

While the new districts and Development Standards Rules would be codified through the New Zoning Code, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific impacts to historical resources. Impacts to historical resources would be ***less than significant***.

[2] As of April 2018, 25,500 resources of those identified through the SurveyLA effort have been uploaded to the HistoricPlacesLA database.

Mitigation Measures

Downtown Plan

No feasible mitigation measures have been identified. As discussed above, historical resources that are designated under HCM or HPOZ may be demolished if an applicant goes through the discretionary review process and receives an approved entitlement. Resources included in SurveyLA or any other survey meeting the requirements of PRC Section 5024.1(g) whether subject to additional review or based on discretionary entitlements, are not prohibited from demolition or alteration, provided they go through the appropriate process including environmental review. As a policy matter, the City finds that requiring additional review of projects otherwise undergoing discretionary review is undesirable based on the requirements it would place on City resources and the delay it would result in for projects. Additionally, as a policy matter, the City finds that it is undesirable to put additional regulations or processes to projects involving historical resources that are designated under the HCM or HPOZ, or subject to other discretionary review. Based on the above, there is no feasible mitigation to prevent the demolition or substantial alteration of historical resources. Therefore, impacts to historical resources from the Downtown Plan will be ***significant and unavoidable.***

New Zoning Code

None required for the New Zoning Code

Threshold 4.4-2	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5

Impact 4.4-2

Downtown Plan: Implementation of the Downtown Plan could result in development that could cause a substantial adverse change in or disturbance of known or unknown archaeological resources as defined in CEQA Guidelines Section 15064.5. However, mitigation is available to address such impacts. Therefore, impacts to archaeological resources would be ***less than significant with mitigation incorporated***.

New Zoning Code: Archaeological resources exist citywide. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may impact these resources. Projecting the location and type of future growth would be speculative. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area, and therefore, any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Impacts would be ***less than significant.***

Downtown Plan Impact

Effects on archaeological resources are only known once a specific development has been proposed because the effects are highly dependent on both the individual development site conditions and the characteristics of the proposed ground-disturbing activity. Ground-disturbing activities associated with reasonably anticipated development from the Downtown Plan, particularly in areas that have not been studied through a cultural resources investigation, or when excavation depths exceed those previously attained, have the potential to damage or destroy previously-unknown historic or prehistoric archaeological resources that may be present on or below the ground surface. Impacts to archaeological resources are especially likely in instances where ground disturbance will occur in native soils, in historic-age fill of unknown origin, and in areas that were developed prior to the implementation of City-wide sewer and trash collection programs.

Because of the extensive history of the Downtown Los Angeles area throughout the Prehistoric, Spanish, Mexican, and American periods, the entire Downtown Plan Area is considered sensitive for archaeological resources. Development throughout Downtown Los Angeles has encountered subsurface archaeological resources, such as remnants of the Zanja Madre, Tongva sites, and historic archaeological sites such as refuse deposits and privies associated with the early growth of the City. The Zanja Madre, for example, is thought to have run from El Pueblo de Los Angeles in several branches southward through Downtown but has not been fully mapped. Consequently, impacts related to damage to or destruction of previously-unknown sub-surface cultural resources could occur as a result of development under the Downtown Plan. Such damage or destruction would be ***potentially significant***.

New Zoning Code Impact

Archaeological sites and survey areas exist throughout the City. As discussed above, the New Zoning Code would allow for a variety of new zone districts that could be applied elsewhere in the City through future community plan updates or amendments. If applied outside of the Downtown Plan Area, these different or more intensive zone districts could result in impacts to an archaeological resource during future ground-disturbing activities. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts to specific archaeological resources cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative.

As discussed above, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific impacts to archaeological resources. ***Less than significant*** impacts to archaeological resources would occur.

Mitigation Measures

Downtown Plan

The following measure is required to address potential impacts to archaeological resources.

4.4-2(a) Archaeological Resources Evaluation and Avoidance/Recovery

For discretionary projects that are excavating previously undisturbed land or below previously excavated depths, all reasonable methods shall be used to determine the potential that archaeological or tribal cultural resources are present on the project site, including thorough searches of databases and records, surveys, and/or consultation with local tribe(s) with ancestral ties to the project area. If there is a medium to high potential that resources are located on the project site and it is possible that resources will be impacted, a Qualified Archaeologist shall monitor and direct all excavation, grading or other ground disturbance activities to identify any resources and avoid potential impacts to such resources.

4.4-2(b) Archaeological Assessment

For all discretionary projects, the City shall require assessment and treatment of all cultural resources identified on a site, whether through monitoring under MM4.4-2(a) or through inadvertent discovery, in a manner consistent with PRC Section 21083.2, as determined appropriate by a Qualified Archaeologist. When an archaeological resource is identified on site, all work shall cease in the immediate area, work may continue unimpeded on other portions of the site. A Qualified Archaeologist shall identify the resource, prepare a mitigation plan consistent with PRC section 21083.2 and the project applicant and its contractors

shall comply with the plan. A report shall be prepared according to current professional standards that describes the resource, how it was assessed, and disposition.

4.4-2(c) Notification of Intent to Excavate Language

For all projects not subject to mitigation measure 4.4-2(a) or 4.4-2(b) that are seeking excavation or grading permits, the Department of Building and Safety shall issue the following notice and obtain an acknowledgement of receipt of the notice from applicants:

- California Penal Code Section 622.5 provides the following: "Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor."
- Best practices to ensure archaeological resources are not damaged include but are not limited to the following steps:
    - A qualified archaeologist monitors excavation and grading activities in soils that have not been previously disturbed, to identify, record, and evaluate the significance of any archaeological finds during construction.
    - If archaeological resources are uncovered (in either a previously disturbed or undisturbed area), all work ceases in the area of the find until a qualified archaeologist has evaluated the find in accordance with federal, state, and local guidelines.
    - Personnel of the project shall not collect or move any archaeological materials or associated materials.
    - If cleared by a qualified archaeologist, construction activity may continue unimpeded on other portions of the project site.
    - The found deposits shall be treated in accordance with federal, state, and local guidelines and regulations.
    - As provided in Public Resources Code Section 21083.2, archaeological resources should be preserved in place or left in an undisturbed state. When preserving in place or leaving in an undisturbed state is not possible, excavation should occur unless testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, and this determination is documented by an archaeologist.
    - Construction activities in the area where resources were found may commence once the identified resources are properly assessed and processed by a qualified archeologist and the archaeologist clears the site for construction activity.

4.4-2(d) Zanja Madre HAER Documentation

Portions of the Zanja Madre are known to exist throughout the Downtown Plan Area. If any portion of the Zanja Madre is uncovered as a result of implementation of mitigation measure 4.4-2(c), the following steps should be taken.

If segments of Zanja Madre System are present and disturbance to the System cannot be avoided, they should be inspected by a qualified archaeologist. If the present segment/s are found to retain integrity, documentation meeting the standards and guidelines established the Historic American Engineering Record (HAER) should be undertaken and transmitted to the Library of Congress prior to any alteration or demolition activity. Documentation should include narrative records, measured drawings, and photographs in conformance with HAER Guidelines. In addition to HAER documentation, specific treatments shall be

developed and implemented based on potential California Register or eligibility criteria or as a unique archaeological resource as follows:

- Treatment Under Criterion 1: Treatment shall include interpretation of the Zanja Madre System for the public. The interpretive materials may include, but not be limited to, interpretive displays of photographs and drawings produced during the HAER documentation, signage at the Zanja Madre alignment, relocating preserved segments in a publicly accessible display, or other visual representations of Zanja alignments through appropriate means such as a dedicated internet website other online-based materials. At a minimum, the interpretive materials shall include photographs and drawings produced during the HAER documentation, and signage. These interpretive materials shall be employed as part of Project public outreach efforts that may include various forms of public exhibition and historic image reproduction. Additionally, the results of the historical and archaeological studies conducted for the Project shall be made available to the public through repositories such as the local main library branch or with identified non-profit historic groups interested in the subject matter. The interpretive materials shall be prepared at the expense of the Project applicant, by professionals meeting the Secretary of the Interior standards in history or historical archaeology. The development of the interpretive materials shall consider any such materials already available to the public so that the development of new materials would add to the existing body of work on the historical Los Angeles water system, and to this end, shall be coordinated, to the extent feasible and to the satisfaction of the Department of City Planning. The interpretive materials shall include a consideration of the Zanja Madre segment located on the Project Site in relation to the entire Zanja system. The details of the interpretive materials, including the content and format, and the timing of their preparation, shall be completed to the satisfaction and subject to the approval of the Department of City Planning.
- Treatment Under Criterion 2: No additional work; archival research about important persons directly associated with the construction and use of Zanja Madre would be addressed as part of HAER documentation.
- Treatment Under Criterion 3: No additional work; HAER documentation is sufficient.
- Treatment Under Criterion 4: No additional work; archaeological data recovery and HAER documentation are sufficient.
- Treatment as a unique archaeological resource: Same as Criterion 1 treatment.

<u>New Zoning Code</u>

None required.

Significance After Mitigation

<u>Downtown Plan</u>

Implementation of **Mitigation Measures 4.4-2(a), 4.4-2(b), 4.4-2(c)**, and **4.4-2(d)** would avoid significant direct impacts to archaeological resources to the maximum extent feasible and provide for recovery and/or documentation of any significant resources, including any present portions of the Zanja Madre, that cannot be preserved in place. With mitigation, significant archaeological resources would be preserved and impacts to archaeological resources would be ***less than significant with mitigation.***

<u>New Zoning Code</u>

Not applicable.

T**hreshold 4.4-3**	Disturb any human remains, including those interred outside of dedicated cemeteries

Impact 4.4-3

Downtown Plan: Although human remains are not known to be present in the Downtown Plan Area, new reasonably anticipated development from the Downtown Plan could result in damage to or destruction of as of yet undiscovered human remains. With adherence to existing regulations, impacts Downtown would be ***less than significant***.

New Zoning Code: Human remains, including Native American burials, may exist citywide. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may disturb these remains. Projecting the location and type of future growth would be speculative. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Impacts would be ***less than significant.***

Downtown Plan Impact

Human burials outside of formal cemeteries often occur in prehistoric archaeological contexts. Although the Downtown Plan Area is built out, the potential still exists for these resources to be present. Excavation during future construction activities in the Downtown Plan Area would have the potential to disturb these resources, including Native American burials.

Human burials, in addition to being potential archaeological resources, have specific provisions for treatment in Section 5097 of the California Public Resources Code. The California Health and Safety Code (Sections 7050.5, 7051, and 7054) has specific provisions for the protection of human burial remains. Existing regulations address the illegality of interfering with human burial remains, and protects them from disturbance, vandalism, or destruction, and established procedures to be implemented if Native American skeletal remains are discovered. Public Resources Code Section 5097.98 also addresses the disposition of Native American burials, protects such remains, and established the NAHC to resolve any related disputes.

Implementation of the above-described regulations would ensure that development carried out under the Downtown Plan would have a ***less than significant*** impact from potential disturbance of human remains, including those interred outside of formal cemeteries.

New Zoning Code Impact

Although the City is mostly built out and open space areas are largely protected from extensive urban development, the potential still exists for resources to be present. As discussed above, the New Zoning Code would allow for a variety of new zone districts that could be applied elsewhere in the City through future community plan updates or amendments. If applied outside of the Downtown Plan Area, these different or more intensive zone districts could result in impacts during future ground-disturbing activities. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts related to the disturbance of human remains cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative.

As discussed above, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific impacts. Less than significant impacts related to the disturbance of human remains would occur.

Mitigation Measures

None required for either the Downtown Plan or the New Zoning Code.

CUMULATIVE IMPACTS

The geographic area to analyze cumulatively considerable cultural resource impacts includes the entire City of Los Angeles.

Historical Resources

Cumulative development throughout Los Angeles could involve demolition or alteration of historical resources. The nature and magnitude of such impacts would depend on the nature and location of individual future developments so it would be speculative to try to predict the specific level of cumulative impact that may occur as the City continues to develop. Nevertheless, it is conservatively projected that Citywide development could result in the alteration or loss of some historical resources, with potentially significant cumulative impacts.

As discussed under Impact 4.4-1, the Downtown Plan could similarly involve the loss of historical resources throughout the Downtown Plan Area. Although the Downtown Plan includes a number of policies aimed at the preservation of historical resources, the loss of such resources remains a possibility. The New Zoning Code would only apply to the Downtown Plan Area at this time. Therefore, although the New Zoning Code would not contribute to the Downtown Plan impact, it would be speculative to predict what impact, if any, the New Zoning Code may have in other areas of the City. Based on this information, the Downtown Plan could foreseeably have cumulatively considerable contributions to a significant cumulative impact to historical resources. As discussed above, the New Zoning Code would not repeal, amend, and conflict with existing regulations intended to avoid impacts to historical resources, such as the City's 35 existing HPOZs. The New Zoning Code also retains standards for adaptive reuse projects to facilitate and encourage the conversion and retention of existing or historically significant buildings to preserve the City's architectural and cultural past while reducing vacant space and energy that goes into new construction. The New Zoning Code includes Frontage standards that would ensure that new development is compatible with the existing neighborhood character. These standards would be tailored specific to the area and incorporated into the zone module to ensure application.

The potential for impacts to historical resources from individual developments is site-specific and depends on the location and nature of each individual development proposal. All future development projects would continue to be subject to existing federal, state, and local requirements and discretionary projects may be subject to project-specific mitigation requirements as outlined herein. It is anticipated that cumulative impacts to historical resources can be avoided through implementation of regulatory compliance measures (existing rules for HCM, HPOZ) and project design features (CPIO, and implementation of Proposed Project policies) on a project-by-project basis, but alteration or demolition of historical resources remains a possibility throughout the Downtown Plan Area and Citywide.

Based on the above, the incremental effect of the Downtown Plan on historical resources would be cumulatively considerable and cumulative impacts to historical resources in the Downtown Plan Area would be ***significant and unavoidable***.

Archaeological Resources

Cumulative development throughout Los Angeles could potentially disturb known and currently unknown archaeological resources that could be present throughout the City. The nature and magnitude of such impacts would depend on the nature and location of individual future developments so it would be speculative to try to predict the specific level of cumulative impact that may occur as the City continues to develop. Nevertheless, it is anticipated that Citywide development would have the potential to disturb archaeological resources. Potentially significant cumulative archaeological resource impacts could, however, be mitigated to below a level of significance through resource avoidance or recovery on a case-by-case basis.

As discussed under Impact 4.4-2, the Downtown Plan could potentially disturb archaeological resources that may be present in the Downtown Plan Area. However, it is anticipated that with regulatory compliance measures identified in the regulatory setting and Mitigation Measures 4.4-2(a), 4.4-2(b), 4.4-2(c), 4.4-2(d), would reduce the Downtown Plan's cumulative impacts to a less than significant level. The New Zoning Code would only apply to the Downtown Plan Area at this time. Therefore, it would be speculative to predict what impact, if any, the New Zoning Code may have in other areas of the City. Nevertheless, it is not anticipated that any aspect of the New Zoning Code would result in the loss of archaeological resources. Based on this information, neither the Downtown Plan nor the New Zoning Code would have cumulatively considerable impacts related to archaeological resources. The incremental effects of the Proposed Project would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

Human Remains

Although unlikely, cumulative development throughout Los Angeles could potentially disturb currently unknown human remains that could be present in the City. The nature and magnitude of such impacts would depend on the nature and location of individual future developments so it would be speculative to try to predict the specific level of cumulative impact that may occur as the City continues to develop. Nevertheless, Citywide development could potentially result in the discovery and disturbance of human remains. Potential cumulative impacts to human remains could, however, be reduced to below a level of significance through compliance with applicable regulatory requirements on a case-by-case basis.

As discussed under Impact 4.4-4, human remains are not known to be present in the Downtown Plan Area, but unknown remains could be present. Therefore, implementation of the Downtown Plan could potentially disturb human remains. However, as with cumulative Citywide development, compliance with current requirements related to the avoidance and treatment of human remains would reduce such impacts to a less than significant level, as discussed under Impact 4.4-4. The New Zoning Code would only apply to the Downtown Plan Area at this time. Therefore, it would be speculative to predict what impact, if any, the New Zoning Code may have in other areas of the City. Nevertheless, it is not anticipated that any aspect of the New Zoning Code would result in disturbance of human remains. Based on this information, neither the Downtown Plan nor the New Zoning Code would substantially contribute to any significant cumulative impact to human remains.

Based on the above, the Proposed Project's incremental effect would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

REFERENCES

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4.5 ENERGY

This section addresses the potential construction and operational impacts on energy resources. The analysis identifies the utility companies that provide electricity and natural gas services in the City, describes the existing consumption, the nature and location of related infrastructure, and the anticipated demand for electricity and natural gas.

ENVIRONMENTAL SETTING

PETROLEUM

California is one of the top producers of petroleum in the nation, with drilling operations primarily concentrated in Kern and Los Angeles Counties. A network of crude oil pipelines connects production areas to oil refineries in the Los Angeles area, the San Francisco Bay area, and the Central Valley. California oil refineries also process large volumes of Alaskan and foreign crude oil received in ports in Los Angeles, Long Beach, and the San Francisco Bay area. Crude oil production in California and Alaska is in decline, and California refineries have become increasingly dependent on foreign imports. Led by Saudi Arabia and Ecuador, foreign suppliers now produce more than half of the crude oil refined in California (CEC 2016; CEC 2017a).

According to the United States Energy Information Administration (EIA), transportation accounted for nearly 40 percent of California's energy demand, amounting to approximately 3,017 trillion British thermal units (Btu) in 2015 (EIA 2017a). California's transportation sector, including on-road and rail transportation, consumed roughly 558 million bbl of petroleum fuels in 2015 (EIA 2017b). Furthermore, petroleum-based fuels are used for approximately 98.5 percent of the State's transportation activity (EIA 2017a). Most gasoline and diesel fuel sold in California for motor vehicles is refined in California to meet state-specific formulations required by the California Air Resources Board (CARB).

Citywide Petroleum Consumption

Southern California is in Petroleum Administration for Defense District 5 (PADD 5). PADDs are geographic groupings of the United States that assists the U.S. Energy Information Administration in assessing regional petroleum product supplies and their movements throughout the nation. Demand in PADD 5 includes in-region consumption, transfers of fuels to other parts of the United States (other PADDs) and to other regional markets within PADD 5, and exports to the global market. Supply in PADD 5 includes in-region refinery production, receipts of fuels produced in other regions and other PADD 5 regional markets, and imports (EIA 2015). There are no petroleum refineries located in the City of Los Angeles. As discussed below, the closest petroleum refineries are the Lunday-Thagard Co. Refinery and World Oil Refining Refinery, both located in the City of South Gate, adjacent to the southeastern boundary of the Southeast Los Angeles community.

For the purposes of analyzing the New Zoning Code, existing city-wide petroleum consumption was not calculated because future petroleum use citywide would not be expected to change as a result of the New Zoning Code or any change would be highly speculative. The New Zoning Code component of the Proposed Project will not change the land use designations or zoning in the City and therefore, there is no forecasted growth or related increase in development or transportation impacts associated with the New Zoning Code that would impact petroleum consumption.

Downtown Plan Area Petroleum Consumption

Petroleum fuels are generally purchased by individual users such as residents and employees. As shown in **Figure 4.5-1**, while no petroleum refineries are located in the Downtown Plan Area, four gasoline stations and a local network of gas transmission and hazardous liquid pipelines are present in the Downtown Plan Area. As discussed above closest petroleum refineries are the Lunday-Thagard Co. Refinery, located at 9301 Garfield Avenue, and the World Oil Refining Refinery, located at 9302 Garfield Avenue in South Gate, Los Angeles, approximately 5.7 miles southeast of the Downtown Plan Area.

Petroleum consumption was identified by calculating the direct energy consumption of the Downtown Plan Area (see *Methodology* in Section 4.5.4, *Environmental Impacts*, for more information). Daily vehicle miles traveled (VMT) within the Downtown Plan Area were retrieved from the traffic study prepared by Fehr & Peers and were estimated at approximately 5.8 million in 2017, as shown in **Table 4.5-1**. Based on this daily VMT, approximately 38,898 million Btu (mmBtu) were consumed per day in 2017 by the transportation sector, as shown below in **Table 4.5-2**.

TABLE 4.5-1 CURRENT DAILY AND ANNUAL VMT FOR THE DOWNTOWN PLAN AREA

	Daily VMT	Annual VMT[1]
Downtown Plan Area Total	5,767,020	2,001,155,908

NOTES:
1 Annual VMT is calculated by multiplying daily VMT by 347 days, to account for reduced travel on weekends, in accordance with industry standards.
SOURCE: Fehr & Peers 2018.

TABLE 4.5-2 CURRENT DIRECT TRANSPORTATION ENERGY USE IN THE DOWNTOWN PLAN AREA

	2017 Daily Energy Use (mm Btu)	2017 Annual Energy Use (mmBtu)	2017 Daily Per Capita Energy Use (mmBtu)
Downtown Plan Area Total	38,898	13,497,776	0.51

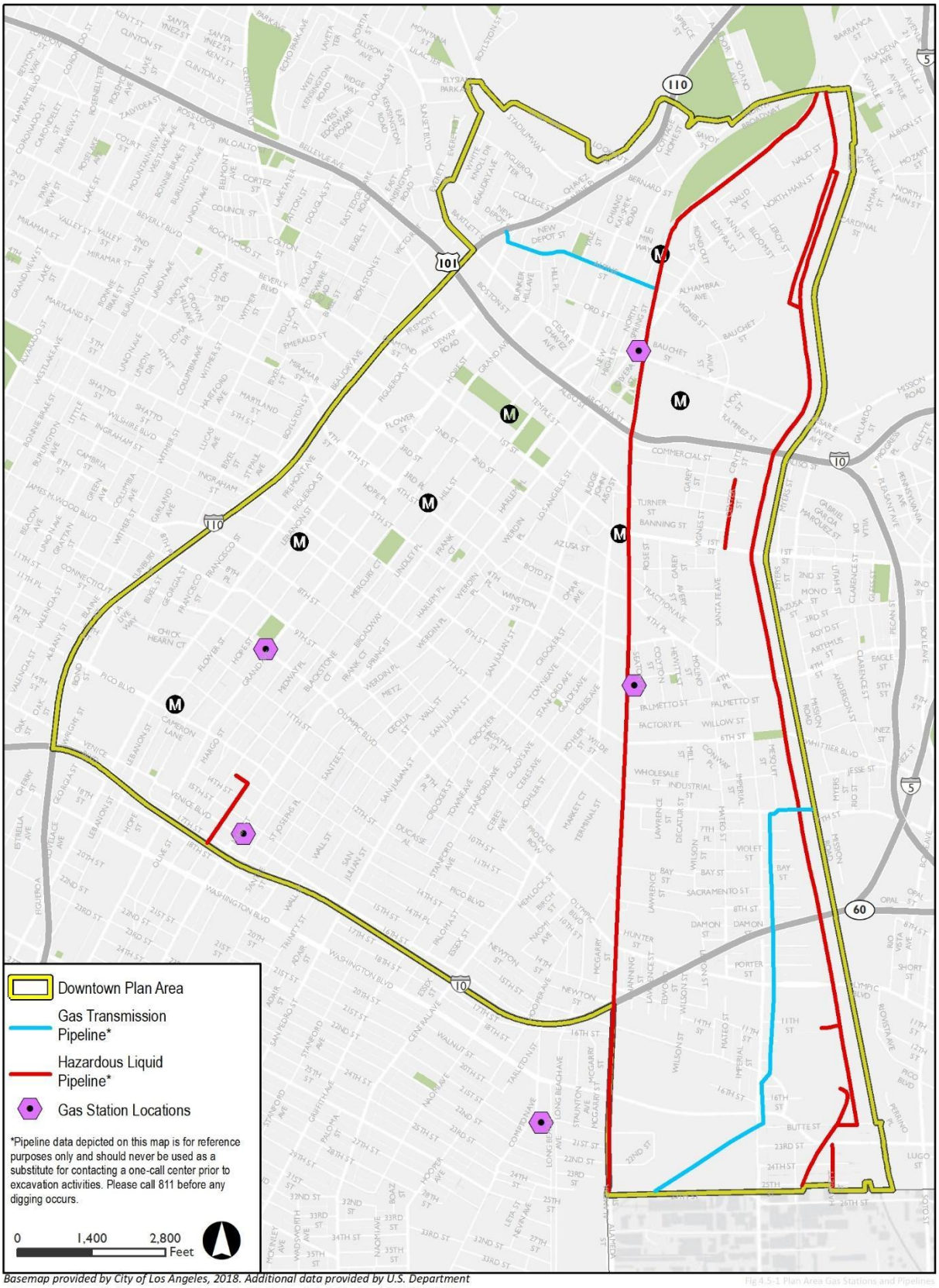
NOTES:
Transportation energy consumption was derived from the Downtown Plan Area VMT (see **Table 4.5-1**), default fleet mix from CalEEMod (see Appendix I), average fuel economy from the United States Department of Transportation – Federal Highway Administration, and energy unit data from EIA.
Totals may not add up due to rounding.
SOURCE: United States Department of Transportation – Federal Highway Administration 2016; EIA 2018.

ELECTRICITY

In 2015, California produced 69 percent of the electricity it used in 2015. The remainder was imported from outside the state. In 2015, California used 282,896.3 gigawatt hours (GWh) of electricity (California Energy Commission [CEC] 2017c) while a total of 196,194 GWh was produced in-state (CEC 2017b). Likewise, in 2015, Californians consumed an estimated 24,505.5 million Therms (MMthm) (CEC 2017e).

The Los Angeles Department of Water and Power (LADWP) provides electrical service throughout Los Angeles. LADWP generates power from a variety of different sources that include approximately 25 percent natural gas, 37 percent coal, 21 percent renewables, 10 percent nuclear, and three percent hydroelectric (LADWP 2017). LADWP utilizes renewable energy sources and is committed to meeting the requirement of the Renewable Portfolio Standard (RPS) Enforcement Program to use at least 33 percent of the City's energy from renewables by 2020 (CARB 2016b). Eligible renewable resources include biodiesel, biomass, hydroelectricity and small hydro, Los Angeles Aqueduct hydro power plants, digester gas, fuel cells, geothermal, landfill gas, municipal solid waste, ocean thermal, ocean wave, and tidal current technologies, renewable derived biogas, multi-fuel facilities using renewable fuels, solar photovoltaic, solar thermal electric, wind, and other renewables (LADWP 2013a).

Figure 4.5-1 Petroleum Infrastructure in the Downtown Plan Area



Basemap provided by City of Los Angeles, 2018. Additional data provided by U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA), 2017.

LADWP provides electricity service to over 3.9 million residents in its service area, encompassing the City and parts of the Owens Valley (LADWP 2013b). LADWP has over 7,460 megawatts (MW) of generation capacity from a diverse mix of energy sources. Its distribution network includes 6,800 miles of overhead distribution lines and nearly 3,600 miles of underground distribution cables (LADWP 2017). The LADWP system supplies more than 26 million megawatt-hours (MWh) of electricity per year.

2016 Power Integrated Resource Plan

The LADWP's 2016 Integrated Resource Plan (IRP) serves as a 20-year roadmap that guides the LADWP's Power System in its efforts to supply reliable electricity in an environmentally responsible and cost effective manner. The 2016 IRP includes a public outreach process and IRP Advisory Committee that, along with a series of public outreach workshops, played an integral role in the development of the resource cases that were evaluated and in the final selection of the recommended resource case. Strong interest in the City Council's 100 percent renewable energy Motion was communicated during the 2016 IRP's public outreach process. In response, LADWP will form research partnerships and develop a robust stakeholder process to investigate the investments necessary to achieve a 100 percent clean energy future. The 2016 IRP re-examines and expands its analysis on the 2015 IRP recommended case with updates in line with the latest regulatory framework, and analyzes several new case scenarios, including a 65 percent RPS at higher levels of local solar, energy storage, and transportation electrification.

Recent updates since the 2015 IRP include a RPS of 55 percent by 2030 and increasing to 65 percent by 2036, sale of LADWP's 21-percent share in coal-fired Navajo Generation Station, and completion of a reliability study titled, "Maximum Distribution Renewable Energy Penetration Study (MDREPS)." The major focus of the 2016 IRP was on developing new case scenarios that are cost effective in reducing greenhouse gas emissions by examining various scenarios of RPS, local solar, energy storage, and transportation electrification. Early coal replacement and energy efficiency continue to be key strategies to reduce greenhouse gas emissions. Increasing the RPS to 55 percent by 2030 and 65 percent by 2036, including increased amounts of local solar and energy storage, are other key contributors to reduce greenhouse gas emissions. The 2016 IRP analyzed electrification of the transportation sector as a strategy to further reduce greenhouse gas emissions and to significantly reduce local emissions such as VOC, NO_x, CO, and $PM_{2.5}$. As a result, the 2016 IRP recommends expanding existing programs to promote increased workplace and residential electric vehicle charging stations to support greater electric vehicle adoption while collaborating with regulatory agencies to reach mutually beneficial policies (LADWP 2017). In September 2018, under SB 100, California's RPS was updated to require retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 40 percent by 2024, 50 percent by 2026, 60 percent by 2030, and 100 percent by 2045. The LADWP continues to work towards meeting the requirements of the RPS.

Citywide Electricity Consumption

In 2015, the most recent year with available data, LADWP's electricity generation and distribution infrastructure delivered 24.0 million MWh of electricity to its customers. Commercial users consumed the most electricity supplied by the LADWP in 2015 with approximately 12.8 million MWh, or 53 percent of the total electricity provided by the LADWP. Residential customers consumed approximately 8.4 million MWh, or 35 percent, of electricity supplied by the LADWP in 2015. Industrial users consumed approximately 2.7 million MWh, or 10 percent, while other LADWP customers consumed approximately 0.4 million MWh, or approximately 0.02 percent.

Downtown Plan Area Electricity Consumption

Electricity consumption in the Downtown Plan Area for existing conditions was estimated using CalEEMod (see Section 4.2, *Air Quality*, for modeling methodology and assumptions, and Appendix I for model

results). As shown in **Table 4.5-3**, existing (2017) Downtown Plan Area residential and non-residential development consumed a combined total of just over 2 million megawatts (MWh) of electricity. With a Downtown Plan Area population of approximately 76,000, this equates to approximately 27.2 MWh per capita of electricity consumption in 2017.

TABLE 4.5-3 CURRENT DOWNTOWN PLAN AREA ELECTRICITY CONSUMPTION

	Electricity Consumption (MWh)[1]	Proportion of Statewide Consumption	Per Capita Electricity Consumption (MWh)
Downtown Plan Area	2,069,837	0.72%	27.2

NOTE: The per capita consumption for electricity is determined by dividing electricity consumption data from CalEEMod by the existing Downtown Plan Area population, as detailed in Section 4.12, *Population*, *Housing and Employment*.
SOURCE: CEC 2017c, City of Los Angeles 2018.

As shown in **Table 4.5-3**, the Downtown Plan Area accounted for approximately 0.2672 percent of the State's electricity consumption in 2017 (CEC 2017c, Appendix C). With a 2017 per capita consumption of 9.827.2 MWh, the Downtown Plan Area ranked per capita average is well above California's average per capita consumption of approximately 7.2 MWh of electricity in 2016 (CEC 2017c; California Department of Finance [DOF] 2017). This is largely due to the high number of businesses and industrial facilities in the Downtown Plan Area relative to the population.

NATURAL GAS

Southern California Gas Company (SoCal Gas) is responsible for providing natural gas supply to the County and City. SoCal Gas is regulated by the California Public Utilities Commission (CPUC) and other state and federal agencies. In 2017, Californians consumed approximately 12,570 million Therms (MMthm) of natural gas or 1,257,000 billion Btu (CEC 2017e). The state population in 2017 was approximately 39.5 million, resulting in an average statewide per capita natural gas demand of 0.03 billion Btu per capita (California Department of Finance 2018b).

2016 California Gas Report

The 2016 California Gas Report presents a comprehensive outlook for natural gas requirements and supplies for California through the year 2035. This report is prepared in even-numbered years, followed by a supplemental report in odd-numbered years, in compliance with California PUC Decision D.95-01-039. The below projections in the California Gas Report are for long-term planning and do not necessarily reflect the day-to-day operational plans of the utilities.

California natural gas demand, including volumes not served by utility systems, is expected to decrease at a rate of 1.4 percent per year from 2016 to 2035. The forecast decline is due to a combination of moderate growth in the Natural Gas Vehicle (NGV) market and across-the-board declines in all other market segments: residential, commercial, electric generation, and industrial markets.

Residential gas demand is expected to decrease at an annual average rate of 0.5 percent. Demand in the commercial market is expected to decline at an annual rate of 1.0 percent, and demand in the industrial market (non-refinery) is expected to decrease at an annual rate of 1.7 percent. Aggressive energy efficiency programs make a significant impact in managing growth in the residential, commercial, and industrial markets. Gas demand in the refinery industrial market sector is forecast to decline approximately 0.34 percent per year.

For energy demand related to natural gas usage, SoCal Gas relies on the CEC California Energy Demand 2016-2026 Revised/Final Forecast, dated January 2016. SoCal Gas selected the Mid Energy Demand scenario with the Mid Additional Achievable Energy Efficiency (AAEE) scenario. For the first time in CEC

forecasts, the Mid AAEE scenario shows a declining, long-term, state-wide energy demand; per the forecasts, southern California energy demand will decline at a faster rate than that of northern California.

SoCal Gas engages in a number of energy efficiency and conservation programs designed to help customers identify and implement ways to benefit environmentally and financially from energy efficiency investments. Programs administered by SoCal Gas include services that help customers evaluate their energy efficiency options and adopt recommended solutions, as well as simple equipment retrofit improvements, such as rebates for new hot water heaters.

Southwestern United States Gas Supplies

Natural gas obtained from the Southwestern United States, especially the San Juan Basin in New Mexico, provides the majority of gas sold by SoCal Gas. This gas is delivered to the Southern California region through the El Paso Natural Gas Company and the Transwestern Pipeline Company pipelines. The conventionally produced gas supplies from the San Juan Basin peaked in 1999 and have been declining at an annual rate of three percent, with an increase in the rate of decline in recent years. The Permian Basin has provided additional supplies, although increasing demand in Mexico for natural gas may reduce this supply source. There is currently a proposal to construct a North-South Pipeline from SoCal Gas' Adelanto compressor station near Victorville down to the Moreno pressure limiting station in Moreno Valley (California Gas and Electric Utilities 2016).

Rocky Mountain Gas Supplies

Natural gas obtained from the Rocky Mountain sources is considered to be a viable alternative to the traditional source of natural gas in the Southwestern United States. These natural gas supplies are delivered to the Southern California region through the Kern River Gas Transmission Company's pipeline. Access to Rocky Mountain gas is also available through pipeline interconnections with the San Juan Basin. Rocky Mountain gas has increasingly flowed to Midwestern and Pacific Northwest markets (California Gas and Electric Utilities 2016).

Canadian Gas Supplies

Natural gas obtained from Canada and delivered to Southern California is not expected to change significantly. Only a small share of Southern California gas supplies come from Canada due to the high cost of transport (California Gas and Electric Utilities 2016).

Regional Gas Consumption

SoCal Gas is the distributor of natural gas in Southern California, providing retail and wholesale customers with transportation, exchange and storage services and procurement services to most retail core customers. SoCal Gas is a gas-only utility and, in addition to service the residential, commercial, and industrial markets, provides gas for enhanced oil recovery (EOR) and electric generation (EG) customers in Southern California. SoCal Gas' natural gas system is the nation's largest natural gas distribution utility and serves a 20,000-square-mile area in Central and Southern California. The system supplies natural gas to 21.6 million customers through 5.9 million meters in more than 500 communities (California Gas and Electric Utilities [CGEU] 2016).

Most natural gas consumed in Southern California is produced out of state (CGEU 2016). The availability of natural gas is based upon present conditions of gas supply and regulatory policies because SoCal Gas is under the jurisdiction of the CPUC and federal regulatory agencies. In addition, SoCal Gas makes available to its customers, energy efficiency programs with rebates and incentives for the purpose of reducing natural gas consumption. SoCal Gas obtains its gas resources from several sedimentary basins, including: the San

Juan Basin in New Mexico, the Permian Basin in West Texas, Rocky Mountain, western Canada, and California (California Gas and Electric Utilities 2016). Natural gas also represents roughly 43 percent of California's total energy consumption from fossil fuels (CEC 2017b).

SoCalGas serves approximately 21.6 million customers through 5.9 million meters of gas lines within a 20,000-square-mile service area that includes over 500 communities in Central and Southern California. In 2015, a total of approximately 4,947 million therms of natural gas were consumed by SoCalGas' customers. Of this total, residential, industrial, commercial and miscellaneous other customers consumed 2,038 million, 1,614 million, 979 million, and 315 million therms of natural gas, respectively. In 2016, the total gas consumption for Los Angeles County was 2,869 million therms. Of this total, 1,758 million therms was for non-residential use and 1,110 therms was for residential use (California Energy Commission 2016). More specifically, from 2016 to 2035, SoCalGas residential demand is expected to decline from 239 billion cubic feet (Bcf) to 218 Bcf, reflecting an annual decline rate of 0.5 percent, non-residential markets are expected to decline from 113 Bcf in 2016 to 105 Bcf by 2035, reflecting an annual decline rate of 0.24 percent.

Downtown Plan Area Natural Gas Consumption

As shown in **Table 4.5-4,** Downtown Plan Area accounted for approximately 0.1 percent of the State's natural gas consumption in 2017 (CEC 2017e). With a 2017 Downtown Plan Area population of approximately 76,000, this equates to natural gas consumption of about 16.7 billion Btu per capita. As noted above, the average statewide per capita natural gas demand in 2017 was 0.03 billion Btu per capita (California Department of Finance 2018). Therefore, per capita natural gas demand in the Downtown Plan Area is higher than statewide per capita demand. This is primarily because of the high number of businesses and industrial facilities in the Downtown Plan Area

TABLE 4.5-4 CURRENT DOWNTOWN PLAN AREA NATURAL GAS CONSUMPTION

	Natural Gas Consumption (billion Btu)	Proportion of Statewide Consumption	Per Capita Natural Gas Consumption (billion Btu)
Downtown Plan Area	1,271	0.10%	16.7

NOTE: The per capita consumption for natural gas is determined by dividing electricity consumption data from CalEEMod by the existing Downtown Plan Area population, as detailed in Section 4.12, *Population*, *Housing and Employment*.
SOURCES: CEC 2017e; City of Los Angeles 2018.

ALTERNATIVE FUELS

A variety of alternative fuels are used to reduce petroleum-based fuel demand. The use of these fuels is encouraged through various state-wide regulations and plans (e.g., Low Carbon Fuel Standard and SB 32). Conventional gasoline and diesel may be replaced, depending on the capability of the vehicle with transportation fuels including the following:

Hydrogen

Hydrogen is being explored for use in combustion engines and fuel cell electric vehicles. The interest in hydrogen as an alternative transportation fuel stems from its clean-burning qualities, its potential for domestic production, and the fuel cell vehicle's potential for high efficiency (two to three times more efficient than gasoline vehicles). Currently, 34 hydrogen refueling stations are located in California; however, none are located in the Downtown Plan Area (DOE 2017).

Biodiesel

Biodiesel is a renewable alternative fuel that can be manufactured from vegetable oils, animal fats, or recycled restaurant greases. Biodiesel is biodegradable and cleaner-burning than petroleum-based diesel fuel. Biodiesel can run in any diesel engine generally without alterations, but fueling stations have been slow to make it available. There are currently 10 biodiesel refueling stations in California, none of which is located in the Downtown Plan Area (DOE 2017).

Electric Vehicles

Electricity can be used to power electric and plug-in hybrid electric vehicles directly from the power grid. Electricity used to power vehicles is generally provided by the electricity grid and stored in the vehicle's batteries. Fuel cells are being explored as a way to use electricity generated onboard the vehicle to power electric motors. There are approximately 63 electrical charging stations in the Downtown Plan Area (DOE 2017).

Biogas

There is growing interest regarding biogas[1] production potential in SoCal Gas' service territory from the following activities:

- Non-hazardous-waste landfills,
- Landfill diversion of organic waste material,
- Wastewater treatment,
- Concentrated animal feeding operations, and
- Food and green waste processing.

When biogas is conditioned and upgraded to pipeline quality specifications it can be interconnected to a gas utility's pipeline and distributed to a specific customer. Biomethane may also be consumed on-site for a variety of uses, including electrical power generation from internal combustion engines, fuel cells, and turbines, or as a fuel source for natural gas vehicles. Currently, there are instances where biogas is being vented naturally or flared to the atmosphere, which wastes this valuable renewable resource. In January 2014, the CPUC approved SoCal Gas' application to offer a Biogas Conditioning/Upgrading Services Tariff, which would meet the current and future needs of biogas producers seeking to upgrade their biogas for beneficial use (California Gas and Electric Utilities 2016).

[1] Biogas is a mixture of methane and carbon dioxide produced by the bacterial degradation of organic matter.

REGULATORY FRAMEWORK

Federal, state and local laws, regulations, plans, and guidelines that are potentially applicable to the Proposed Project or are relevant to the determination of whether the Proposed Project would have a significant impact related to energy are discussed below.

FEDERAL

Energy Policy Conservation Act (EPCA) and CAFE Standards

The EPCA of 1975 established nation-wide fuel economy standards in order to conserve oil. Pursuant to this Act, the National Highway Traffic Safety Administration (NHTSA), part of the U.S. Department of Transportation (USDOT), is responsible for revising existing fuel economy standards and establishing new vehicle fuel economy standards.

The Corporate Average Fuel Economy (CAFE) program was established to determine vehicle manufacturing compliance with the government's fuel economy standards. Compliance with CAFE standards is determined based on each manufacturer's average fuel economy for the proportion of their vehicles produced for sale in the United States.

Public Utility Regulatory Policies Act of 1978 (PURPA), Public Law 95-617.

PURPA sought to promote conservation of electric energy. Additionally, PURPA created a new class of nonutility generators (small power producers) from which, along with qualified co-generators, utilities are required to buy power.

PURPA was in part intended to augment electric utility generation with more efficiently produced electricity and to provide equitable rates to electric consumers. Utility companies are required to buy all electricity from qualifying facilities (Qfs) at avoided cost (i.e., the incremental savings associated with not having to produce additional units of electricity). PURPA expanded participation of nonutility generators in the electricity market and demonstrated that electricity from nonutility generators could successfully be integrated with a utility's own supply. In addition, PURPA requires utilities to buy whatever power is produced by Qfs (usually cogeneration or renewable energy). The Fuel Use Act (FUA) of 1978 (repealed in 1987) also helped Qfs become established. Under FUA, utilities were not allowed to use natural gas to fuel new generating technologies, but Qfs, by definition not utilities, were able to take advantage of abundant natural gas and abundant new technologies (such as combined-cycle). The technologies lowered the financial threshold for entrance into the electricity generation business as well as shortened the lead time for constructing new plants.

National Energy Policy Act of 1992 (EPACT92)

EPACT92 calls for programs that promote efficiency and the use of alternative fuels. EPACT92 requires certain federal, state, and local government and private fleets to purchase a percentage of light duty alternative fuel vehicles (AFV) capable of running on alternative fuels each year. In addition, EPACT92 has financial incentives. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. The Act also requires states to consider a variety of incentive programs to help promote AFVs.

Energy Policy Act of 2005

The Energy Policy Act of 2005 provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Clean Air Act (CAA).

Clean Air Act (CAA). CAA Section 211(o), as amended by the Energy Policy Act of 2005, requires the Administrator of the USEPA to annually determine a renewable fuel standard (RFS) which is applicable to refineries, importers, and certain blenders of gasoline, and to publish the standard in the Federal Register by November 30 each year. On the basis of this standard, each obligated party determines the volume of renewable fuel that it must ensure is consumed as motor vehicle fuel. This standard is calculated as a percentage, by dividing the amount of renewable fuel that the Act requires to be blended into gasoline for a given year by the amount of gasoline expected to be used during that year, including certain adjustments specified by the CAA.

Energy Independence and Security Act of 2007 (EISA)

EISA is designed to improve vehicle fuel economy and help reduce U.S. dependence on oil. It expands the production of renewable fuels, reducing dependence on oil, and confronting global climate change. Specifically, it:

- Increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022, which represents a nearly five-fold increase over current levels; and
- Reduces U.S. demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020 – an increase in fuel economy standards of 40 percent.

Clean Cities Program

The U.S. Department of Energy's (DOE) Clean Cities Program promotes voluntary, locally based government/industry partnerships for the purpose of expanding the use of alternatives to gasoline and diesel fuel by accelerating the deployment of AFVs and building local AFV refueling infrastructure. The mission of the Clean Cities Program is to advance the nation's economic, environmental and energy security by supporting local decisions to adopt practices that contribute to the reduction of petroleum consumption. The Clean Cities Program carries out this mission through a network of more than 80 volunteer coalitions, which develop public/private partnerships to promote alternative fuels and vehicles, fuel blends, fuel economy, hybrid vehicles, and idle reduction.

STATE

Warren-Alquist Act

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the California Energy Commission (CEC). The Act established a state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The California Public Utilities Commission (CPUC) regulates privately-owned utilities in the energy, rail, telecommunications, and water fields. Both CEC and CPUC have jurisdiction over Investor Owned Utilities (IOUs) in California, while the CEC is the primary energy policy and planning agency and CPUC is the primary regulatory agency.

California Energy Plan

CEC is responsible for preparing the California Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The current (2008) California Energy Plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs; and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

Assembly Bill 2076: Reducing Dependence on Petroleum

Pursuant to Assembly Bill (AB) 2076 (Chapter 939, Statues of 2000), CEC and the California Air Resources Board (CARB) prepared and adopted in 2003 a joint agency report, *Reducing California's Petroleum Dependence*. This report includes recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT. Further, in response to the CEC's 2003 and 2005 *Integrated Energy Policy Reports*, the governor directed CEC to take the lead in developing a long-term plan to increase alternative fuel use.

A performance-based goal of AB 2076 was to reduce petroleum demand to 15 percent below 2003 demand.

Integrated Energy Policy Report (IEPR)

Senate Bill (SB) 1389 (Chapter 568, Statutes of 2002) required CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The CEC shall use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety.

CEC adopts an IEPR every two years and an update to the previous IEPR every year between. The 2016 IEPR provides a summary of priority energy issues currently facing the state and outlines strategies and recommendations to further the State's goal of ensuring reliable, affordable, and environmentally responsible energy sources. Energy topics covered in the IEPR include electricity resource and supply plans; electricity and natural gas demand forecasts; natural gas outlooks; transportation energy demand forecasts; energy efficiency savings; integrated resource planning; a barriers study; climate adaptation and resilience; renewable gas; southern California energy reliability; distributed energy resources; strategic transmission investment plans; and existing power plan reliability issues.

Renewable Portfolio Standards (SB 1078, SB 107, SB X 1-2, SB 100, SB 350)

Established in 2002 under Senate Bill (SB) 1078, and accelerated in 2006 under SB 107, in 2011 under SB X 1-2, in 2015 under SB 350, and most recently in September 2018 under SB 100, California's Renewable Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 40 percent by 2024, 50 percent by 2026, 60 percent by 2030, and 100 percent by 2045 (Legislative Council of California 2002; Legislative Council of California 2006b). The 33 percent standard is consistent with the RPS goal established in the Scoping Plan (CARB 2008). Initially, the RPS provisions applied to investor-owned utilities, community choice aggregators, and electric service providers. SB X 1-2 (2011) added, for the first time, publicly-owned utilities to the entities subject to RPS.

Assembly Bill 1493: Reduction of Greenhouse Gas Emissions

AB 1493 (Chapter 200, Statutes of 2002), known as the Pavley bill, amended Health and safety Code sections 42823 and 43018.5 requiring CARB to develop and adopt regulations that achieve maximum feasible and cost-effective reduction of greenhouse gas (GHG) emissions from passenger vehicles, light-duty trucks, and other vehicles used for noncommercial personal transportation in California.

Implementation of new regulations prescribed by AB 1493 required that the State of California apply for a waiver under the federal Clean Air Act. Although the United States Environmental Protection Agency (USEPA) initially denied the waiver in 2008, the USEPA approved a waiver in June 2009, and in September 2009, CARB approved amendments to its initially adopted regulations to apply the Pavley standards that reduce GHG emissions to new passenger vehicles in model years 2009 through 2016. According to CARB, implementation of the Pavley regulations is expected to reduce fuel consumption while also reducing GHG emissions (CARB 2017b). In 2018, the USEPA and National Highway Traffic Safety Administration (NHTSA) proposed to freeze the clean car standards at the 2020 level through model year 2026 and to revoke California's authority to impose stricter rules (CARB 2018). Negotiations between the USEPA, NHTSA, California, and 19 other states recently ended in February 2019 without a resolution. Federal agencies have not yet formally adopted the proposal to freeze the clean car standards, California officials have filed suit to block the proposal.

Energy Action Plan

The first Energy Action Plan (EAP) emerged in 2003 from a crisis atmosphere in California's energy markets. The state's three major energy policy agencies (CPUC, CEC, and the Consumer Power and Conservation Financing Authority [established under deregulation and now defunct]) came together to develop one high-level, coherent approach to meeting California's electricity and natural gas needs. It was the first time that energy policy agencies formally collaborated to define a common vision and set of strategies to address California's future energy needs and emphasize the importance of the impacts of energy policy on the California environment.

In the October 2005 *Energy Action Plan II*, CEC and CPUC updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP, such as the emerging importance of climate change, transportation-related energy issues and research and development activities. In February 2008, CEC adopted an update to the EAP II that supplements the earlier EAPs and examines the State's ongoing actions in the context of global climate change.

Assembly Bill 1007: State Alternative Fuel Plans

AB 1007 (Chapter 371, Statutes of 2005) required CEC to prepare a State plan to increase the use of alternative fuels in California. CEC prepared the State Alternative Fuels Plan (SAF Plan) in partnership with the CARB and in consultation with other State, federal, and local agencies. The SAF Plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The SAF Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Bioenergy Action Plan, Executive Order S-06-06

Executive Order (EO) S-06-06, which took effect in 2006, establishes targets for the use and production of biofuels and biopower, and directs state agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The EO establishes the following

targets to produce a minimum of 20 percent of the state's biofuels in California by 2010, 40 percent by 2020, and 75 percent by 2050. EO S-06-06 also calls for the state to meet a target for use of biomass electricity. The 2011 Bioenergy Action Plan identifies those barriers and recommends actions to address them so that the State can meet its clean energy, waste reduction, and climate protection goals. The 2012 Bioenergy Action Plan updates the 2011 Plan and provides a more detailed action plan to achieve the following goals:

- Increase environmentally and economically sustainable energy production from organic waste
- Encourage development of diverse bioenergy technologies that increase local electricity generation, combined heat and power facilities, renewable natural gas, and renewable liquid fuels for transportation and fuel cell applications
- Create jobs and stimulate economic development, especially in rural regions of the state
- Reduce fire danger, improve air and water quality, and reduce waste

Title 24, California Code of Regulations

The California Code of Regulations (CCR), Title 24, Part 6, is California's Energy Efficiency Standards for Residential and Non-residential Buildings. Title 24 was established in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, and provide energy efficiency standards for residential and nonresidential buildings. The standards are updated on an approximately three-year cycle to allow consideration and possible incorporation of new efficient technologies and methods. In 2016, CEC updated Title 24 standards with more stringent requirements effective January 1, 2017. All new buildings or substantial remodels for which an application for a building permit is submitted on or after January 1, 2017 must follow the 2016 standards.

Energy efficient buildings require less electricity; therefore, increase energy efficiency reduces fossil fuel consumption and decreased GHG emissions. The CEC Impact Analysis for California's 2016 Building Energy Efficiency Standards estimates that the 2016 Standards are 28 percent more efficient than the previous 2013 standards for residential buildings and five percent more efficient for non-residential buildings. The building efficiency standards are enforced through the local plan check and building permit process. Local agencies are required to adopt the latest Title 24 standards when they update their local building codes. They may also adopt and enforce additional energy standards for new buildings as reasonably necessary due to local climatologic, geologic, or topographic conditions, provided that these standards exceed those provided in Title 24.

California Green Building Standards Code (2016), California Code of Regulations Title 24, Part 11

California's green building code (CalGreen) was developed to provide a consistent approach to green building within the state. Having taken effect in January 2016, the most recent version of the Code lays out the minimum requirements for newly constructed residential and nonresidential buildings to reduce GHG emissions through improved efficiency and processes. It also includes voluntary tiers to further encourage building practices that improve public health, safety and general welfare by promoting a more sustainable design.

Western Electricity Coordinating Council and the North American Electric Reliability Council

The Western Electricity Coordinating Council (WECC) is a voluntary consortium of electrical power providers that is responsible for coordinating and promoting electricity reliability from the Canadian provinces of Alberta and British Columbia in the north of its jurisdiction to the northern Mexican State of

Baja California in the south of its jurisdiction, and the 14 western states (WECC 2015). The Los Angeles Department of Water and Power (LADWP) is a member of the WECC. The WECC has implemented Standard BAL-STD-002-0 to require reliable operation of the power system while ensuring adequate generating capacity at all times. As a means of ensuring power system reliability, the LADWP maintains an extra reserve margin of power generation resources in the event of a power system disturbance. In order to determine how much extra generation reserves are needed, the LADWP adheres to the WECC Reliability Standard. WECC Standard BAL-STD-002-0 requires its providers to:

- Supply requirements for load variations
- Replace generating capacity and energy lost due to forced outages of generation or transmission equipment
- Meet on-demand obligations
- Replace energy lost due to curtailment of interruptible imports

REGIONAL

SCAG Regional Transportation Plan/Sustainable Communities Strategy

SB 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from vehicles for 2020 and 2035. In addition, SB 375 directs each of the State's 18 major Metropolitan Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). In April 2016, SCAG adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. SCAG's RTP/SCS includes a commitment to reduce emissions from transportation sources by promoting compact and infill development to comply with SB 375. A goal of the RTP/SCS is to "encourage land use and growth patterns that facilitate transit and active transportation."

Air Quality Management Plan

As mentioned in Section 4.2, *Air Quality*, under state law, the SCAQMD is required to prepare a plan for air quality improvement for pollutants for which the District is in non-compliance. The SCAQMD updates the plan every three years. Each iteration of the SCAQMD's Air Quality Management Plan (AQMP) is an update of the previous plan and has a 20-year horizon. The 2016 AQMP, adopted on March 3, 2017, incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2012 AQMP, including the approval of the new federal 8-hour ozone standard of 0.070 ppm that was finalized in 2015.

The 2016 AQMP addresses several state and federal planning requirements and incorporates new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and updated meteorological air quality models (SCAQMD 2017). This Plan builds upon the approaches taken in the 2012 AQMP for the attainment of federal PM and ozone standards, and highlights the significant amount of reductions to be achieved. It emphasizes the need for interagency planning to identify additional strategies to achieve reductions within the timeframes allowed under the federal Clean Air Act, especially in the area of mobile sources. The 2016 AQMP also includes a discussion of emerging issues and opportunities, such as fugitive toxic particulate emissions, zero-emission mobile source control strategies, and the interacting dynamics among climate, energy, and air pollution. The Plan also includes attainment demonstrations of the new federal eight-hour ozone standard and vehicle miles travelled (VMT) emissions offsets, as per recent USEPA requirements.

LOCAL

City of Los Angeles General Plan

The Air Quality Element of the City's General Plan includes a goal (Goal 5) that aims to increase energy efficiency through land use and transportation planning; the use of renewable resources and less-polluting fuels; and the implementation of conservation measures including passive methods such as site orientation and tree planting (City of Los Angeles 2003). Additionally, Section 19: Resource Management (Fossil Fuels) of the Conservation Element of the General Plan includes Policy 1, which aims to continue to encourage energy conservation and petroleum product reuse (City of Los Angeles 2001).

City of Los Angeles Green Building Code

The following types of projects are subject to the Los Angeles Green Building Code:

- All new buildings (residential and non-residential)
- All additions (residential and non-residential)
- Alterations with building valuations over $200,000 (residential and non-residential)

The Los Angeles Green Building Code is based on the 2016 CALGreen Standards. The program addresses five key areas: (1) Site: location, site planning, landscaping, storm water management, construction and demolition recycling; (2) Water Efficiency: efficient fixtures, wastewater reuse, and efficient irrigation; (3) Energy & Atmosphere: energy efficiency, and clean/renewable energy; (4) Materials & Resources: materials reuse, efficient building systems, and use of recycled and rapidly renewable materials; and (5) Indoor Environmental Quality: improved indoor air quality, increased natural lighting, and improved thermal comfort/control. Specifically, the Los Angeles Green Building Code requires all non-residential buildings to be constructed such that they're solar ready, while all residential buildings three stories and under must include solar photovoltaic (PV) systems. Likewise, all residential buildings greater than three stories must be solar ready.

Los Angeles 2016 Final Power Integrated Resource Plan

On January 13, 2017, LADWP adopted the *2016 Power Integrated Resource Plan* (IRP), which provides a 20-year roadmap to guide LADWP in meeting future energy needs by forecasting demand for energy and determine how that demand will be met by executing new projects and replacement projects and programs. The IRP is an update of the 2015 IRP and provides the required reliability and necessary flexibility to adapt to economic, environmental, and regulatory conditions. Major changes from the 2015 IRP include Senate Bill 350, which was signed into law requiring a 50 percent renewable portfolio standard by December 31, 2030; the completion of the Maximum Distribution Renewable Energy Penetration Study (MDRPES); and a natural gas prices and renewable energy costs have been revised downwards compared to the 2014 IRP.

The 2016 IRP incorporates updates to reflect the latest load forecast, fuel price, and projected renewable price forecasts, and other numerous modeling assumptions. This IRP considers a 20-year planning horizon to guide LADWP as it executes major new and replacement projects and programs. The overriding purpose is to provide a framework to assure the future energy needs of LADWP customers are met in a manner that balances the following key objectives: maintaining a high level of electric service reliability; keeping energy rates competitive; and exercising environmental stewardship.

Green LA: An Action Plan to Lead the Nation in Fighting Global Warming

The City of Los Angeles adopted its climate action plan, Green LA: An Action Plan to Lead the Nation in Fighting Global Warming (Green LA), in May 2007. Green LA set the goal of reducing the City's GHG emissions to 35 percent below 1990 levels by 2030. The action plan outlines several actions in the fields of energy, water, waste, and transportation. These actions include improved transportation centered around mobility for people rather than cars, increasing recycling to 70 percent diversion, meeting all additional water use through reclaimed water, and increasing renewable energy to 35 percent by 2020. The action plan also outlines goals to help residents become "energy misers" by distributing compact fluorescent lamps (CFL's) and increasing rebates for energy efficient appliances and retrofits.

Sustainable City pLAn

Additionally, in April 2015, the City released its first Sustainable City Plan (Sustainable City pLAn), which established a set of goals related to fourteen sectors to help transform Los Angeles by 2035. The Sustainable City pLAn is defined as a roadmap for Los Angeles that is environmentally healthy, economically prosperous, and equitable in opportunity for all. Specifically, the Sustainable City pLAn provides a vision for the City's future; pathway to short-term results that lay foundation for long-term outcomes; framework to build out policies; platform for collaboration; set of tools to manage the City; dashboard of sustainability metrics to transparently measure progress; and a pathway for engaging residents.

Existing Buildings Energy & Water Efficiency Program Ordinance

The City also has an Existing Buildings Energy & Water Efficiency (EBEWE) Program Ordinance that requires owners of buildings over certain sizes to disclose their buildings' energy and water consumption.

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance were developed in accordance with Appendix F and Appendix G of the CEQA Guidelines. Energy-related impacts would be significant if the Proposed Project would:

- Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation (Threshold 4.5-1)
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency (Threshold 4.5-2)

METHODOLOGY

Total energy consumption was calculated for existing (2017), future (2040) without Downtown Plan, and future (2040) with Downtown Plan conditions. Future energy use without the Downtown Plan is provided for informational purposes, but the determination of significance is based on comparison of future conditions with the Downtown Plan to existing conditions. Electricity and natural gas consumption estimates were calculated using CalEEMod. Refer to the Methodology subsection of Section 4.2, *Air Quality*, for modeling assumptions and Appendix I for modeling results. Petroleum consumption was identified by calculating the direct energy consumption of the Downtown Plan Area using daily vehicle miles traveled (VMT), fleet mix, and average fuel economy. Daily VMT within the Downtown Plan Area were retrieved from the traffic study prepared by Fehr & Peers and fleet mix was derived from CalEEMod. Average fuel economy is forecast to continue to increase, particularly if the fleet-wide goal of 35 mpg by

year 2020 proposed under the Energy Independence and Security Act is met.[2] Therefore, applying the 2017-based average fuel economy to future year (2040) VMT provides a conservative evaluation of energy consumption as the energy use of vehicles in 2040 is likely to be lower than current fuel use. There are no state standards established requiring future decreases in per capita energy use.

PROJECT IMPACTS

Threshold 4.5-1	Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation

Impact 4.5-1

Downtown Plan: Development accommodated by the Downtown Plan would increase demand for energy beyond existing conditions. However, the Downtown Plan would not conflict with state and/or local plans for renewable energy or energy efficiency. The Downtown Plan would result in decreases in per capita transportation-related energy use, electricity, and natural gas in the Downtown Plan Area and neither future construction nor operation of new development would result in energy used in an inefficient, unnecessary or wasteful manner, during construction or operation of reasonably anticipated development. This impact would be ***less than significant.***

New Zoning Code: The New Zoning Code would not result in an increase in energy consumption or use energy in an inefficient, unnecessary, or wasteful manner at construction or operations. Additionally, the content of the New Zoning Code would not repeal, amend, or conflict with existing conservation policies intended to avoid these effects. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area. Therefore, any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The impact would be ***less than significant.***

Downtown Plan Impact

Long-term operation of development accommodated by the Downtown Plan would require permanent grid connections for electricity and natural gas service to power internal and exterior building lighting, and heating and cooling systems. In addition, the increase in vehicle trips associated with future Downtown Plan Area development would increase fuel consumption within the Downtown Plan Area. Increases in motor vehicle trips are primarily a combined function of population and employment growth. Population growth and growth in vehicle miles travelled (VMT) would occur in the region regardless of whether the Downtown Plan is implemented. As a result, energy consumption as it relates to vehicles would increase beyond the 2017 baseline under any scenario.

Table 4.5-5 shows daily VMT and estimated fuel consumption translated into energy use (mmBtu) in the Downtown Plan Area under existing (2017), future (2040) without Downtown Plan, and future (2040) with Downtown Plan conditions. With respect to transportation energy use, as shown in **Table 4.5-5**, future total daily energy consumption under implementation of the Downtown Plan is expected to increase; however, per capita energy consumption is anticipated to decrease from 0.51 to 0.24 mmBtu per capita, a decrease of 27 percent. This change can be attributed to the fact that implementation of the Downtown Plan would

[2] The analysis contained herein does not consider the effects of future fuel efficiency improvements, including those outlined in the Energy Independence and Security Act.

lower per capita VMT due to the location of jobs and housing in close proximity to each other and creation of substantial opportunities to use such transportation modes as transit, bicycling, and walking.

TABLE 4.5-5 DIRECT TRANSPORTATION ENERGY USE

Year	Overall Daily VMT	Overall Annual VMT[1]	Overall Daily Energy Use (mmBtu)	Overall Annual Energy Use (mmBtu)	Daily Per Capita Energy Use (mmBtu)
Baseline	5,767,020	2.0 billion	38,898	13,497,776	0.51
Future (2040) without Downtown Plan	7,372,396	2.6 billion	50,830	17,637,950	0.45
Future (2040) with Downtown Plan	8,841,606	3.1 billion	59,637	20,693,880	0.24
Change from Existing Conditions under Downtown Plan	**+3,074,586**	**+1.1 billion**	**+20,739**	**+7,196,104**	**-0.27**

NOTES:
Transportation energy consumption was derived from the Downtown Plan Area VMT (see **Table 4.5-1**), default fleet mix from CalEEMod (see Appendix I), average fuel economy from the United States Department of Transportation – Federal Highway Administration, and energy unit data from EIA.
1 Annual VMT is calculated by multiplying daily VMT by 347 days, to account for reduced travel on weekends, in accordance with industry standards.
SOURCE: United States Department of Transportation – Federal Highway Administration 2016; EIA 2018; Fehr & Peers 2018.

Table 4.5-6 shows estimated annual electricity consumption in the Downtown Plan Area under existing (2017), future (2040) without Downtown Plan, and future (2040) with Downtown Plan conditions. Future total annual electricity consumption under implementation of the Downtown Plan is expected to increase; however, per capita electricity consumption is anticipated to decrease from 27.2 to 18.7 MWh per capita, a decrease of 31 percent. It is important to note that future energy consumption estimates only take into compliance with existing energy efficiency standards (i.e., 2016 Title 24). Additionally, while the Future with Downtown Plan scenario would have greater overall electricity consumption than the Future without Downtown Plan scenario because the Downtown Plan would accommodate more than twice the population as the existing Downtown Plan (Central City and Central City North Community Plans), the per capita emissions of the Downtown Plan would be much lower. Similar to current plans, reasonably anticipated future development anticipated to occur with the implementation of the Downtown Plan would be subject to Title 24, Part 6 of the California Administrative Code, the Energy Efficiency Standards for Residential and Nonresidential Buildings, which requires local jurisdictions to use energy efficient appliances, weatherization techniques, and efficient cooling and heating systems to reduce energy demand stemming from new development. In addition, future development would also be required to comply with the City of Los Angeles' Green Building Code Energy Efficiency requirements. Although the analysis contained herein does not account for future improvements in energy efficiency, development accommodated by the Downtown Plan would be expected to consume less energy than existing developments as building standards become more stringent.

Table 4.5-7 shows estimated annual natural gas consumption in the Downtown Plan Area under existing (2017), future (2040) without Downtown Plan, and future (2040) with Downtown Plan conditions. Future total annual natural gas consumption under implementation of the Downtown Plan is expected to increase; however, per capita natural gas consumption is anticipated to decrease from 16.7 to 13.6 mmBtu per capita, a decrease of 3.1 mmBtu per capita, or 19 percent. It is important to note that future energy consumption estimates, included in **Table 4.5-7**, only take into account compliance with existing energy efficiency standards (i.e., 2016 Title 24). Development accommodated by the Downtown Plan would be expected to consume less energy than existing developments as energy conservation standards become more stringent so the estimates provided here are conservative.

TABLE 4.5-6 DOWNTOWN PLAN AREA ELECTRICITY CONSUMPTION

Year	Overall Electricity Consumption (MWh)[1]	Proportion of Statewide Consumption	Per Capita Electricity Consumption (MWh)
Baseline (2017)	2,069,837	0.72%	27.2
Future (2040) without Downtown Plan	3,564,844	1.25%	31.8
Future (2040) with Downtown Plan	4,700,589	1.65%	18.7
Change from Existing Conditions under Downtown Plan	**+2,630,752**		**-8.5**

NOTE: The per capita consumption for electricity is determined by dividing electricity consumption data from CalEEMod by the existing Downtown Plan Area population, as detailed in Section 4.12, *Population*, *Housing and Employment*.
SOURCE: CEC 2017c, City of Los Angeles 2018.

TABLE 4.5-7 DOWNTOWN PLAN AREA NATURAL GAS CONSUMPTION

Year	Overall Natural Gas Consumption (billion Btu)	Proportion of Statewide Consumption	Per Capita Natural Gas Consumption (mmBtu)[1]
Baseline (2017)	1,271	0.10%	16.7
Future (2040) without Downtown Plan	3,369	0.26%	30.1
Future (2040) with Downtown Plan	3,418	0.27%	13.6
Change from Existing Conditions under Downtown Plan	**+2,147**		**-3.1**

NOTE: The per capita consumption for natural gas is determined by dividing electricity consumption data from CalEEMod by the existing Downtown Plan Area population, as detailed in Section 4.12, *Population*, *Housing and Employment*.
[1] Total annual natural gas consumption is expressed in billion Btu, while per capita annual natural gas consumption is expressed in million Btu
SOURCES: CEC 2017e; City of Los Angeles 2018.

Construction and maintenance of reasonably anticipated development from the Downtown Plan would result in short-term consumption of energy from the use of construction equipment and processes. In addition, roadway and transit construction materials, such as asphalt, concrete, surface treatments, steel, rail ballast, as well as building materials, require energy to be produced, and would likely be used in projects that involve new construction or replacement of older materials, as well as construction of future infill and transit oriented development (TOD) projects/developments envisioned by the Downtown Plan. Construction energy demand is not calculated because lot acreage, size of buildings, and construction durations for development under the Downtown Plan is currently unknown and estimates would be speculative. However, nothing in the Downtown Plan would foreseeably increase construction and operations energy demand. The California Green Building Standards Code (CalGreen) includes specific requirements related to recycling, construction materials and energy efficiency standards, which would apply to construction of roadway and transit improvement projects in addition to future infill and TOD envisioned by the Downtown Plan and would help to minimize waste and energy consumption. All construction and maintenance accommodated by the Downtown Plan would be required to comply with relevant provisions of CalGreen.

Downtown Plan Implementation Programs

The Downtown Plan includes the following policies aimed at improving energy conservation, energy efficiency, and utilization of renewable energy sources:

LU 11.2. Encourage efficient building techniques and sustainable materials to guide lasting development that minimizes the adverse effects on the environment.

LU 15.6. Encourage sustainable building design and construction standards that can increase building energy and water efficiency.

LU 16.1. Implement strategies such as expanding shade cover and more efficient water use to lessen the urban heat island effect and increase reliance on renewable energy sources.

LU 16.8. Encourage the implementation of renewable energy source target programs, including the Los Angeles Department of Water and Power 2016 Final Power Integrated Resource Plan, to improve environmental resilience.

Consistency with Energy Conservation and Renewable Energy Policies

As previously discussed, the Downtown Plan would result in decreases in per capita transportation-related energy use, electricity, and natural gas in the Downtown Plan Area and would not result in energy used in an unnecessary or wasteful manner. Although implementation of the Downtown Plan would result in greater net energy consumption than 2017 baseline conditions, the Downtown Plan would not result in the inefficient, wasteful, or unnecessary consumption of energy if it is consistent with existing relevant energy conservation policies. Accordingly, inconsistencies between the Downtown Plan and adopted plans and policies related to energy conservation have not been identified. The discussion below further examines consistency with adopted plans and policies related to energy conservation.

SCAG monitors regulations related to fuel efficiency standards and alternative fuel vehicles. The Downtown Plan is a land use plan and would not include regulations related to fuel efficiency or alternative fuel vehicles. However, the Downtown Plan would reduce per capita VMT and the associated use of fuels, by increasing access to transit and promote the use of active transportation modes by accommodating compact development and mix of land uses in close proximity to transit. Therefore, the plan would not conflict, but would instead support the goals of these regulations. (e.g., *Energy Policy and Conservation Act* and *CAFE Standards, EPAct, Energy Independence and Security Act of 2007, AB 1493: Reduction of Greenhouse Gas Emissions, AB 1007: State Alternative Fuels Plan*).The 1975 *Warren-Alquist Act* established the California Energy Resource Conservation and Development Commission, now known as the California Energy Commission (CEC), and established a State policy to reduce wasteful, uneconomical and unnecessary uses of energy. The Downtown Plan would be subject to California's Energy Efficiency Standards in the California Code of Regulations, Title 24, Part 6, which requires local jurisdictions to enforce energy efficient appliances, construction materials and building systems for new development. In addition, the City of Los Angeles' Green Building Code would require new development in the Plan Area to comply with its Energy Efficiency requirements. As demonstrated in **Tables 4.5-5** through **4.5-7** above, the Downtown Plan would result in lower per capita energy use in comparison to the 2017 baseline conditions. Therefore, the Downtown Plan would not result in wasteful, inefficient, or unnecessary use of energy and would not be inconsistent with applicable *Warren-Alquist Act* policies.

SB 1078, as accelerated by SB 350, establishes a renewable portfolio standard for electricity supply, and requires that retail sellers of electricity, including investor-owned utilities and community choice aggregators, provide 33 percent of their supply from renewable sources by 2020. In addition, the 2017 Integrated Energy Policy Report (IEPR) includes a set of strategies to address California's future energy needs. Key topics covered in the report include electricity resource and supply plans; electricity and natural

gas demand forecasts; natural gas outlooks; transportation energy demand forecasts; energy efficiency savings; integrated resource planning; a barriers study; climate adaptation and resilience; renewable gas; distributed energy resources; strategic transmission investment plans; and existing power plan reliability issues. The proposed Downtown Plan would not conflict with these policies. Refer to Section 4.7, *Greenhouse Gas Emissions/Climate Change*, for a discussion of greenhouse gas emissions reductions related to the Downtown Plan.

In addition, future development projects accommodated by the Downtown Plan are expected to promote energy efficiency as they support implementation of the SCAQMD 2016 Air Quality Management Plan transportation control measures, including transportation demand management, transportation system management, commuter and public transit; rail, bike and pedestrian programs, among others (refer to Section 4.2, *Air Quality*).

The Downtown Plan would be consistent with the Air Quality and Conservation Elements of the Los Angeles General Plan, which encourages the use of renewable energy, energy conservation and energy efficiency techniques in all new building design, orientation and construction and support of alternative transportation and fuels. As described above, the Downtown Plan includes policies intended to improve the efficiency and effectiveness of the transportation system, thus reducing fuel consumption and enhancing opportunities for the use of transit and other alternative modes of transportation through the development of new pedestrian and bicycle facilities and promotion of mixed use and infill development.

In summary, the Downtown Plan would not result in wasteful or inefficient energy consumption and is consistent with applicable policies regarding energy conservation and renewable energy. Therefore, the Downtown Plan would have a ***less than significant*** impact with respect to energy consumption.

New Zoning Code Impact

The New Zoning Code would not result in an increase in energy consumption or the wasteful use of energy. The New Zoning Code would provide a variety of permitted densities, ranging from no maximum density to a maximum of one unit per lot. This wide range of density options allows for areas of intensive urban development as well as areas of limited density, such as single-family neighborhoods. As such, due to the modular structure of the New Zoning Code, it is not known where or to what extent future development and associated energy consumption may occur as application of the New Zoning Code would be driven by the policy intent and vision of future community plan updates and amendments. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA.

The New Zoning Code does not include any standards or provisions that would directly result in increased energy consumption or wasteful energy use. Furthermore, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development policies, such as those within the CBC and the LAMC as discussed in Regulatory Setting, intended to avoid these effects. The New Zoning Code has landscaping standards which could decrease energy consumption by increasing the amount of surface area in the City that is shaded by tree canopy. All new construction of a certain threshold, including construction of buildings and surface parking lots, will be required to include the planting of trees. The impact would be ***less than significant.***

Mitigation Measures

Significant impacts have not been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

Threshold 4.5-2	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

Impact 4.5-2

Downtown Plan: The Downtown Plan would not conflict with applicable federal, state, and local energy conservation policies aimed at decreasing reliance on fossil fuels and increasing reliance on renewable energy sources. This impact would be ***less than significant***.

New Zoning Code: The New Zoning Code would not result in increased reliance on fossil fuels or decrease reliance on renewable energy sources. Additionally, the content of the New Zoning Code would not repeal, amend, or conflict with existing conservation policies intended to avoid these effects. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area. Therefore, any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This impact would be ***less than significant***.

Downtown Plan Impact

As discussed under Threshold 4.5-1, inconsistencies between the Downtown Plan and adopted plans and policies related to decreasing reliance on fossil fuels and increasing reliance on renewable energy sources have not been identified. SB 1078, as accelerated most recently by SB 100, established an RPS for electricity supply, and requires that retail sellers of electricity, including investor-owned utilities and community choice aggregators, provide 33 percent of their supply from renewable sources by 2020, 60 percent by 2030, and 100 percent by 2045. To meet this state requirement, as well as the local desire to achieve 100 percent renewable energy, the LADWP's 2016 IRP expresses plans to increase the LADWP's RPS to 55 percent by 2030 and to 65 percent by 2036 along with the sale of LADWP's 21-percent share in the coal-fired Navajo Generation Station. Many of these strategies are aimed at reducing greenhouse gas emissions, but also result in improved energy efficiency and an increased integration of renewable energy sources. The Downtown Plan would not conflict with these policies or objectives. Refer to Section 4.7, *Greenhouse Gas Emissions/Climate Change*, for a discussion of greenhouse gas emissions reductions related to the Downtown Plan.

The Downtown Plan would also be consistent with the City of Los Angeles General Plan Air Quality and Conservation Elements, which encourages the use of renewable energy, energy conservation and energy efficiency techniques in all new building design, orientation and construction and support of alternative transportation and fuels. As described under Threshold 4.5-1, the Downtown Plan includes policies intended to improve the efficiency and effectiveness of the transportation system and provide options for alternative transportation. In summary, the Downtown Plan would not result in an increased reliance on fossil fuels and a decreased reliance on renewable energy sources and is consistent with applicable policies regarding energy conservation and renewable energy. Therefore, the Downtown Plan's impact with respect to energy source reliance would be ***less than significant***.

New Zoning Code Impact

The New Zoning Code does not include any standards or provisions that would conflict with applicable local energy conservation policies aimed at decreasing reliance on fossil fuels and increasing reliance on renewable energy sources. Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development policies, such as those within Title 24 and other State energy plans as discussed in Regulatory Setting, intended to avoid these effects.

The New Zoning Code would allow for a variety of new Form, Use, Development Standards, and Density Districts that could be applied near transit to reduce vehicular traffic. For example, Development Standards District 5 has no minimum parking requirements which, if applied outside of the Downtown Plan Area, has the potential to reduce reliance on fossil fuels.

The New Zoning Code would not result in an increased reliance on fossil fuels or decrease reliance on renewable energy sources. Additionally, due to the modular nature of the New Zoning Code, it is not known where or to what extent future development may occur and if it would result in an increased reliance on fossil fuels or decrease reliance on renewable energy sources as application of the New Zoning Code would be driven by the policy intent and vision of future community plan updates and amendments. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific energy conservation policy conflicts. The impact would be ***less than significant.***

Mitigation Measures

Significant impacts have not been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

CUMULATIVE IMPACTS

Locally, energy resources are provided by various oil companies, LAWDP, and SoCal Gas, but the issue of energy is global in nature and the state as well as regional and local governments have adopted policies aimed at energy conservation. The service areas for energy providers are varied, with LADWP primarily serving the City, SoCal Gas serving a 23,000 square mile region covering much of central and southern California, and oil companies serving customers all over the world. No single geographic scope can address the full extent of issues related to energy resources so the cumulative analysis contained herein considers energy demand in the City of Los Angeles and the southern California region served by SoCal Gas in the context of statewide energy demand and state mandates related to energy conservation.

As discussed above, cumulative development in Los Angeles and throughout southern California would continue to increase energy use to meet the City's and region's growing population; however, implementation of future community plans is expected to generally improve the efficiency of energy use in the City, while adherence to existing state regulations such as CalGreen and the Low Carbon Fuel Standard would ensure the incorporation of energy efficient measures in the design and operation of future developments throughout the region. Thus, cumulative impacts related to energy use arising from cumulative development in Los Angeles and throughout the region would be less than significant.

As discussed under Impact 4.5-1, implementation of the Downtown Plan would generally improve the efficiency of energy use in the Downtown Plan Area on a per capita basis and would not contribute to a cumulative impact related to the wasteful, unnecessary, or inefficient use of energy. Furthermore, development emphasis on compact land use and growth patterns that facilitate transit and non-motorized transportation are anticipated to result in less energy consumption. As mentioned in Section 4.7, *Greenhouse Gas Emissions*, SCAG's 2016-2040 RTP/SCS was developed to provide a blueprint to integrate land use and transportation strategies to help achieve a coordinated and balanced regional transportation system as well as reduce energy use and associated GHG emissions within the region. The Downtown Plan would accommodate concentrated, mixed-use development adjacent to transit corridors in order to conserve resources, protect existing residential neighborhoods, and reduce energy use through the

increase in active transportation and use of transit. Another goal of SCAG's 2016-2040 RTP/SCS is to actively encourage and create incentives for energy efficiency, where possible. The Downtown Plan would replace existing antiquated buildings with new, CALGreen compliant buildings, which are more energy efficient than the existing buildings in the Plan area. While implementation of the Downtown Plan would result in increased demand for energy and natural gas, the impact to the City's and region's energy resources would be less than significant. The Downtown Plan would support energy efficient practices and would not result in wasteful or inefficient use of energy.

The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would increase the wasteful, unnecessary, or inefficient use of energy or otherwise contribute to cumulative impacts to energy resources.

Based on the above, the incremental effect of the Downtown Plan and New Zoning Code on energy resources would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

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4.6 GEOLOGY AND SOILS

This section provides an overview of geology and soils and evaluates the impacts associated with the proposed project. Topics addressed include suitability of soil for development; geologic faults; and direct and indirect seismic hazards such as floods, erosion, subsidence, liquefaction, and landslides. This section was prepared utilizing documents and maps published by the United States Geological Survey (USGS), California Department of Conservation, California Geological Survey (CGS), and the City of Los Angeles. Generally, this section evaluates whether the Downtown Plan or New Zoning Code would substantially increase the exposure of people or structures to adverse effects related to seismic activity, unstable geologic materials, or erosion, or cause impacts to paleontological resources or unique geological features compared to existing conditions.

ENVIRONMENTAL SETTING

GEOLOGY

Citywide Geology

The landforms and topography of Los Angeles consist of mountains and hills that trend east to west (Traverse Ranges province) or north-northwest to south-southeast (Peninsular Ranges province), which meet at the southern slopes of the Santa Monica and San Gabriel Mountains. The east to west ranges are the Santa Monica, San Gabriel, and Santa Susana Mountains, and the north-northwest to south-southeast ranges and hills are the Palos Verse, Baldwin, and Beverly Hills. Between and along the slopes of these mountains and hills are gently sloping valleys. The San Fernando Valley lies between the Santa Monica, Santa Susana, and Verdugo Mountains and is a closed basin within the Traverse Ranges. The broad Los Angeles Basin extends south from the Santa Monica Mountains, west from the Elysian-Repetto Hills, and north from the Palos Verdes Hills to the Pacific Ocean. The Beverly and Baldwin Hills separate the Los Angeles Basin into inland and coastal plains.

Elevations in the City range from 5,074 feet at Sister Elsie Peak in the San Gabriel Mountains to nearly mean sea level in the southwestern part of the City. Terrain in the City is approximately 75 percent alluvial plain and 25 percent rugged canyons and hills (City of Los Angeles 2017a).

Areas of the City within the Transverse Ranges include gneiss, granitic rocks, and sedimentary rocks' volcanic rocks in the Santa Monica Mountains; and alluvial sediments in canyon bottoms and valleys with broad alluvial fans at the mouths of steep canyons. Areas of the City within the Peninsular Ranges include schist and sedimentary rocks, as well as alluvium in canyon bottom and basin areas. Seventeen soil types have been identified within the City. The five most prevalent soil types in the City include: Placentia sandy loam (18.1 percent); Fresno sand (15.9 percent); Santiago silt loam (10.8 percent); Fresno fine sandy loam (10.6 percent); and San Joaquin block adobe (10.3 percent) (City of Los Angeles 2017a).

Downtown Plan Area Geology

The Downtown Plan Area lies at an average elevation of 250 feet above mean sea level and is relatively flat with zero to five percent slopes, largely lacking any geologic or topographic features such as hilltops, ridges, hills slopes, rock outcrops, and water bodies (USGS 2017). Several moderately hilly slopes are located in the northwest corner of the Downtown Plan Area, primarily bordered by Main Street on the East and the Interstate 110 freeway on the west.

A majority of the land surface in the Downtown Plan Area is urbanized and developed with a range of residential, civic, commercial, hybrid industrial, cultural, and open space uses, most of which are paved which limits the extent of exposed surface soils. Geologic units in the central Los Angeles region include Tertiary sedimentary bedrock formations overlain by older and younger surficial sediments, primarily alluvium and older alluvium consisting of gravel and sand (City of Los Angeles 1996). The sediments in these alluvial fans can range in size from small particle clays to larger rocks up to 64 mm in diameter (DOC 1998, 1998a, 1998b). Coarser sediments are typically deposited in mountain areas and finer sediments are deposited further downstream to lower-lying, flat areas. Newer deposits are normally unconsolidated and poorly cemented with thin, ill-developed soils while older deposits tend to be better developed, with much less amounts of silt and clay (City of Los Angeles 1995). Alluvium occupies most of the Downtown Plan Area to the east of Alameda and southern half of the Plan Area to the west of Alameda. Older alluvium is found in patches trending southwest along the western boundary of the Downtown Plan Area. **Figure 4.6-1** shows Downtown Plan Area geologic conditions.

Faulting and Seismicity

Citywide Faults

Los Angeles is located in a seismically active region of Southern California and is generally bounded by fault systems. Major active faults in the region include the San Andreas, Whittier-Elsinore, Newport-Inglewood, Hollywood, and Raymond Fault zones. In addition to these known faults, movement along buried blind thrust faults that have no obvious surface features can also occur.

Numerous faults in the Los Angeles area are categorized as active, potentially active, and inactive. A fault is classified as *active* if it has moved during Holocene time (during the last 11,000 years). A fault is classified as *potentially active* if it has experienced movement within Quaternary time (during the last 1.8 million years). Faults that have not moved in the last 1.8 million years are generally considered *inactive*. Surface displacement can be recognized by the presence of cliffs in alluvium, terraces, offset stream courses, fault troughs and saddles, the alignment of depressions, sag ponds, and the existence of steep mountain fronts.

Earthquakes along several active and potentially active faults in the Southern California region could affect existing and future development throughout the southern California region. The major faults in the region are summarized below and shown on **Figure 4.6-2**.

San Andreas Fault Zone—This fault zone runs southeast to northwest and is located approximately 34 miles to the north of the Downtown Plan Area at the nearest point (DOC 2010). The fault zone extends from the Gulf of California northward to the Cape Mendocino area where it continues northward along the ocean floor. The length of the fault and its active seismic history indicates that it has a very high potential for large-scale movement in the near future (Magnitude 8.0+ on Richter scale), and should be considered important in land use planning for most cities in California.

Sierra Madre Fault System—Located approximately ten miles north of the Downtown Plan Area, at the base of the San Gabriel Mountains, this fault system forms a prominent 50-mile long east/west structural zone on the south side of the San Gabriel Mountains (DOC 2010). It consists of a complex system of dips and slips and has a left lateral reverse component. The Sierra Madre Fault system has been responsible for uplift of the San Gabriel Mountains by faulting in response to tectonic compression. In many places, the faults have placed basement bedrock over alluvium where they dip northerly below the steep topographic front of the San Gabriel Mountains. This fault zone has an expected maximum capability of a moment magnitude (Mw) 7.0 earthquake (SCEDC 2013).

Whittier-Elsinore Fault Zone—This fault zone is located along the southern base of the Puente Hills, approximately 10.5 miles east-southeast of the Downtown Plan Area (DOC 2010). This northwest-trending fault runs from Whittier Narrows southeast across the Santa Ana River, past Lake Elsinore, into western Imperial County and then into Mexico. This fault zone has an expected maximum capability of a magnitude 6.6 earthquake.

San Gabriel Fault—The eastern portion of this fault is considered potentially active, and the portion of the fault by the Castaic Area of Los Angeles County is considered active. This fault is located approximately 15 miles north of the Downtown Plan Area at the closest point (DOC 2010). This fault extends from Frazier Park to Mount Baldy Village, a distance of approximately 84 miles. Due to the length of its surface trace, the San Gabriel Fault is believed capable of generating a magnitude 7.8 earthquake.

Verdugo Fault—Located approximately 5.5 miles north of the Plan Area, this active fault bounds the south flank of the Verdugo Mountains, and appears to merge with the Eagle Rock-San Rafael Fault System in the vicinity of the Verdugo Wash. Low magnitude earthquakes (less than 3.0) which have been attributed to activity along the Verdugo Fault are occasionally recorded in the Burbank-Glendale area. No direct evidence of ground displacement has been observed associated with these low-magnitude earthquakes. The Verdugo Fault has a high potential for future activity and is capable of generating a magnitude 6.4 earthquake.

Santa Monica-Hollywood-Raymond Fault System—This fault system is located approximately three miles northwest of the Plan Area at the nearest point (DOC 2010). This west-trending system of oblique, reverse, and left-lateral faults separates the Transverse Ranges geomorphic province from the Peninsular Ranges geomorphic province (Hernandez and Treiman, 2014). The fault system is considered active, having shown movement during the Holocene period, and could generate a moderate seismic event (magnitude 6.6).

Newport-Inglewood Fault Zone—Located approximately six miles west-southwest of the Plan Area, this active fault zone could generate a 7.0+ magnitude earthquake within the next 50 to 100 years. This fault zone is reflected at the surface by a line of geomorphically young hills and mesas formed by the folding and faulting of a thick sequence of Pleistocene age sediments and Tertiary age sedimentary rocks. This zone also contains the Overland Fault, which extends from the northwest flank of the Baldwin Hills to North Santa Monica Boulevard in the vicinity of Overland Avenue.

East Montebello Fault – This fault is located approximately ten miles east of the Plan Area, just north of the Whittier Narrows (DOC 2010). This fault trends northwest running from the City of Alhambra southeast to the Whittier Narrows and has an expected maximum capability of a magnitude 6.7-7.0 earthquake. The northern half of the fault zone is designated as Late Quaternary, having formed within the past 700,000 years. The southern half of the fault is designated as a Holocene fault having experienced movement during the past 11,700 years.

Other faults in Los Angeles include the Overland Avenue Fault and the Charnock Fault in West Los Angeles; the Chatsworth Fault, the Northridge Hills Fault, the Simi-Santa Rosa Fault Zone, and the Missions Hills Fault Zone in north Los Angeles and northern San Fernando Valley; and the Palos Verdes Fault and Cabrillo Fault in southwest Los Angeles near the Pacific Ocean coast (DOC 2010). In addition, several unnamed Pre-Quaternary faults are located throughout the City, concentrated near the Santa Susana and Santa Monica Mountains and the base of the San Gabriel Mountains (DOC 2010). **Figure 4.6-2** shows regional and local faults in the City.

Figure 4.6-1 Downtown Plan Area Geology

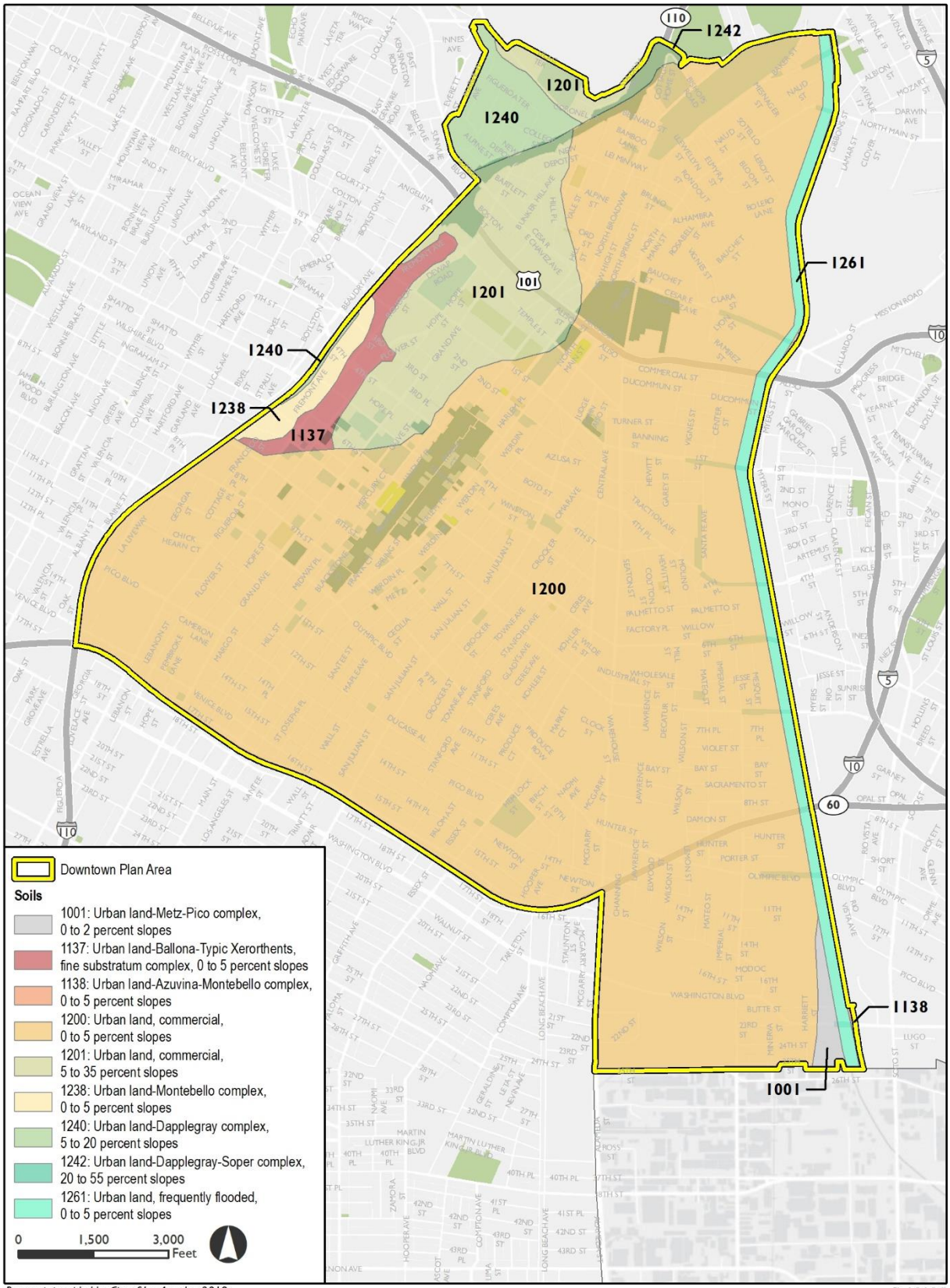
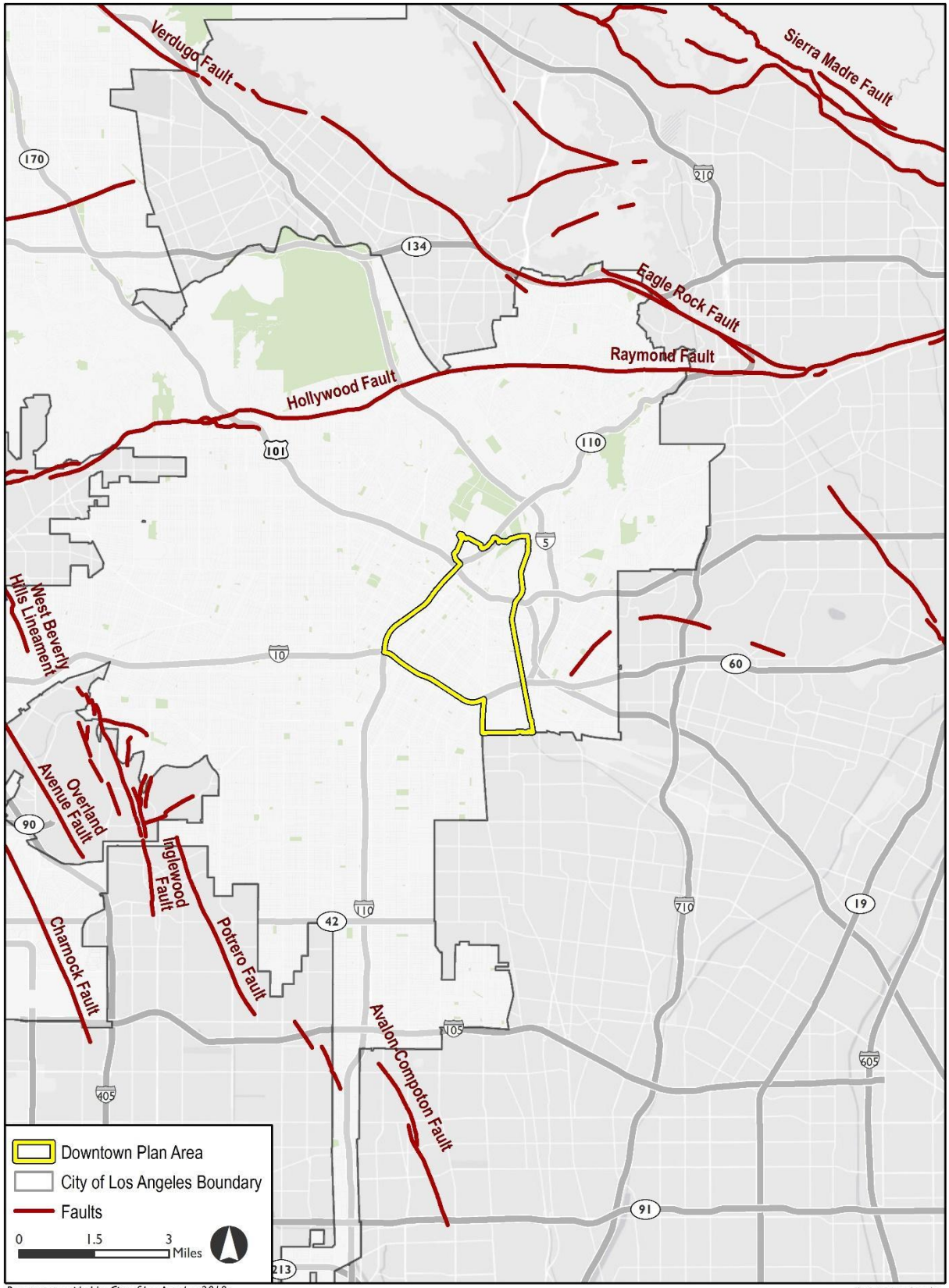


Figure 4.6-2 Local Faults



Basemap provided by City of Los Angeles, 2018;
Additional data provided by Department of Conservation, California Geological Survey, 2010.

Fig 4.6-2 Local Faults_

Downtown Plan Area Faults

No known active faults are located in the Downtown Plan Area. However, an unnamed Late Quaternary fault located near the Downtown Plan Area is considered potentially active because it has experienced movement in the past 700,000 years. This fault is a concealed fault located approximately one mile east of the Downtown Plan Area, just south of Highland Park (DOC 2010). The fault primarily trends east west running from Boyle Heights east toward Montebello, but arcs to the north in City Terrace (DOC 2010). This fault has an expected maximum capability of a magnitude 6.7 earthquake. Though no recent seismic activity has been recorded along this fault, a major earthquake occurring along this fault would be capable of generating seismic hazards and strong groundshaking effects in the Downtown Plan Area.

Several Pre-Quaternary Faults are also located immediately north of the northern boundary of the Downtown Plan Area in and around the vicinity of Elysian Park. However, these faults have not experienced movement within the past 1.6 million years and are considered inactive. Of the local faults, the probability of earthquake activity is considered the highest along the East Montebello Fault, with possible ground rupture. None of the nearby local faults is associated with an Alquist-Priolo Earthquake Fault Zone (CGS 2017). Thus, no fault rupture hazard is anticipated along the fault traces that pass through or near the Downtown Plan Area.

Recent Seismic Activity

Historically, earthquakes have caused substantial groundshaking in the Southern California region and include the following: the 1933 Long Beach earthquake (magnitude 6.4 on Richter scale), along the Newport-Inglewood Fault Zone; the 1971 San Fernando earthquake (magnitude 6.7), along the San Fernando-Sierra Madre Fault; the 1987 Whittier Narrows earthquake (magnitude 5.9), along the Elysian Park Thrust Fault; the 1988 Pasadena earthquake (magnitude 5.0); the 1990 earthquake north of Pomona (magnitude 5.3); the 1991 Sierra Madre earthquake (magnitude 5.8); the 1992 Landers area earthquake (magnitude 7.4); and the 1994 Northridge earthquake (magnitude 6.7), along the Oakridge Fault. In addition, the 2008 Chino Hills earthquake (magnitude 5.5) was the strongest earthquake felt in the greater Los Angeles region since the 1994 Northridge earthquake.

Seismic Hazards

Hazards associated with earthquakes include primary hazards, such as surface rupture and groundshaking, as well as secondary hazards, such as liquefaction, lateral spreading, ground lurching, tsunamis, and dam inundation. These hazards are described below.

Surface Rupture

Surface rupture represents the breakage of ground along the surface trace of a fault, which is caused by the intersection of the fault surface area ruptured in an earthquake with Earth's surface. Fault displacement occurs when material on one side of a fault moves relative to the material on the other side of the fault. This can have particularly adverse consequences when buildings are located within the rupture zone. It is not feasible, from a structural or economic perspective, to design and build structures that can accommodate rapid displacement involved with surface rupture. Amounts of surface displacement can range from a few inches to tens of feet during a rupture event.

The Alquist-Priolo Earthquake Fault Zoning Act regulates development near active faults to mitigate the hazard of surface fault rupture. Essentially, this Act prohibits the location of most structures for human occupancy across the trace of active faults and establishes Earthquake Fault Zones and requires geologic/seismic studies of all proposed developments within a delineated zone. The Earthquake Fault

Zones are delineated and defined by the State Geologist and identify areas where potential surface rupture along a fault could occur.

Citywide Surface Rupture

The City contains areas within the following Alquist-Priolo Earthquake Fault Zones: Newport-Inglewood Fault Zone; Sierra Madre Fault Zone; and Santa Monica-Hollywood-Raymond Fault Zone, as shown in **Figure 4.6-3** (City of Los Angeles 1996).

Downtown Plan Area Surface Rupture

As previously discussed, no Alquist-Priolo Earthquake Fault Zones are located in the Downtown Plan Area.

Groundshaking

The major cause of structural damage from earthquakes is groundshaking. The intensity of ground motion expected at a particular site depends upon the magnitude of the earthquake, the distance to the epicenter, and the geology of the area between the epicenter and the property. Greater movement can be expected at sites located on poorly consolidated material, such as alluvium, within close proximity to the causative fault, or in response to a seismic event of great magnitude.

Citywide Groundshaking

Earthquake scenario maps have been developed that depict the expected ground motions and effects of large earthquakes in the City. Ground shaking faults were developed for the Newport-Inglewood Fault, Palos Verde Fault, Puente Hills Fault, San Andreas Fault, and Santa Monica Fault using different scenarios of magnitude, depth, and epicenter locations (City of Los Angeles 2017a). The fault scenarios involved a variation of magnitudes from 6.8 to 7.8. All were expected to produce a range of ground shaking at sites throughout the region from moderate to severe, depending on the distance from the earthquake, rock, and soil conditions.

Downtown Plan Area Groundshaking

Groundshaking levels in the Downtown Plan Area would be similar to those described under "Citywide Groundshaking."

Liquefaction

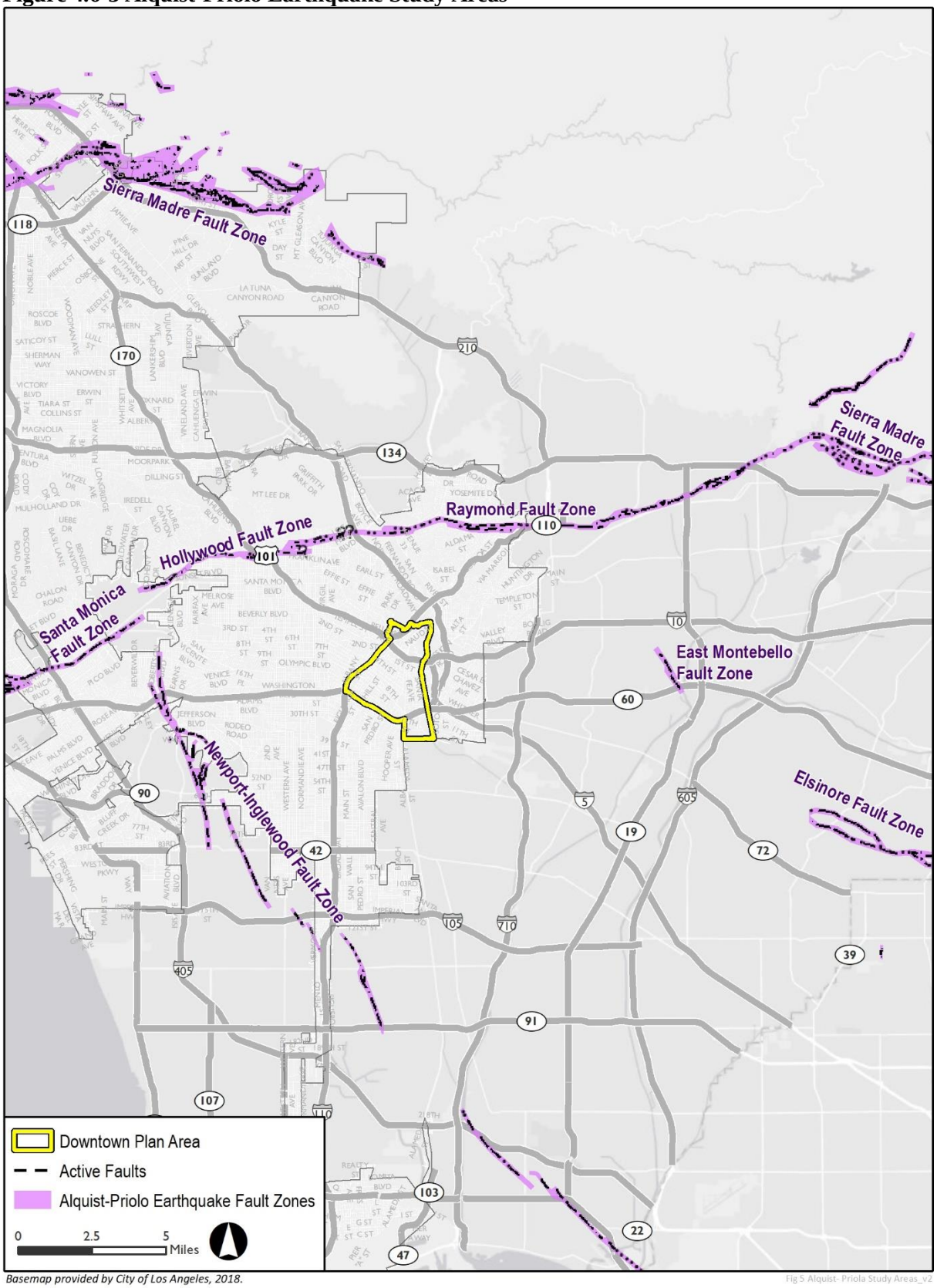
Liquefaction is a phenomenon in which the strength and stiffness of a soil is reduced by earthquake shaking or other rapid loading. Liquefaction occurs in saturated soils, in which the water exerts a pressure on the soil particles that influences how tightly the particles themselves are pressed together. This is caused by a sudden temporary increase in pore water pressure due to seismic densification or other displacement of submerged granular soils. Significant factors that affect liquefaction include water level, soil type, particle size and gradation, relative density, confirming pressure, and the intensity and duration of shaking.

Liquefaction more often occurs in earthquake-prone areas underlain by young alluvium where the groundwater table is within 30 feet of the ground surface. In addition to the necessary soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to induce liquefaction.

Citywide Liquefaction

Liquefaction zones exist throughout the City. Areas susceptible to liquefaction include areas north and south of the San Fernando Valley, in central Los Angeles, and in the Harbor and West Los Angeles areas, and in East Los Angeles (City of Los Angeles 1996).

Figure 4.6-3 Alquist-Priolo Earthquake Study Areas



Downtown Plan Area Liquefaction

The Downtown Plan Area has varying potential for liquefaction. According to the Seismic Hazard Zone maps for the Hollywood and Los Angeles Quadrangles, scattered liquefaction zones are present along the western boundary of the Downtown Plan Area running from 6th Street north to Cesar E. Chavez Avenue and in the northeastern portion between Broadway and Alameda Street. A liquefaction zone is located in the northern-third portion of the Downtown Plan Area, bounded by I-5 to the east, North Broadway to the north, I-110 to the west, and East Temple Street to the south. Portions of the Downtown Plan Area that are subject to earthquake-induced liquefaction are shown on **Figure 4.6-4**.

Lateral Spreading

Lateral spreading involves the lateral displacement of surficial blocks of sediment (e.g., alluvium, terrace sands) as a result of liquefaction in a subsurface layer. The initial gradient of a particular site that fails in lateral spreading can be small since the soil mass usually moves on a liquefied layer of loose, saturated granular material.

Ground Lurching

Certain soils have been observed to move in a wave-like manner in response to intense seismic groundshaking, forming ridges or cracks on the ground surface. Areas underlain by thick accumulations of colluvium and alluvium appear to be more susceptible to ground lurching than bedrock. Under strong seismic ground motion conditions, lurching can be expected within loose, cohensionless soils, or in clay-rich soils with a high moisture content. Generally, only lightly loaded structures, such as pavement, fences, pipelines, and walkways, are damaged by ground lurching; more heavily loaded structures appear to resist such deformation.

Tsunamis

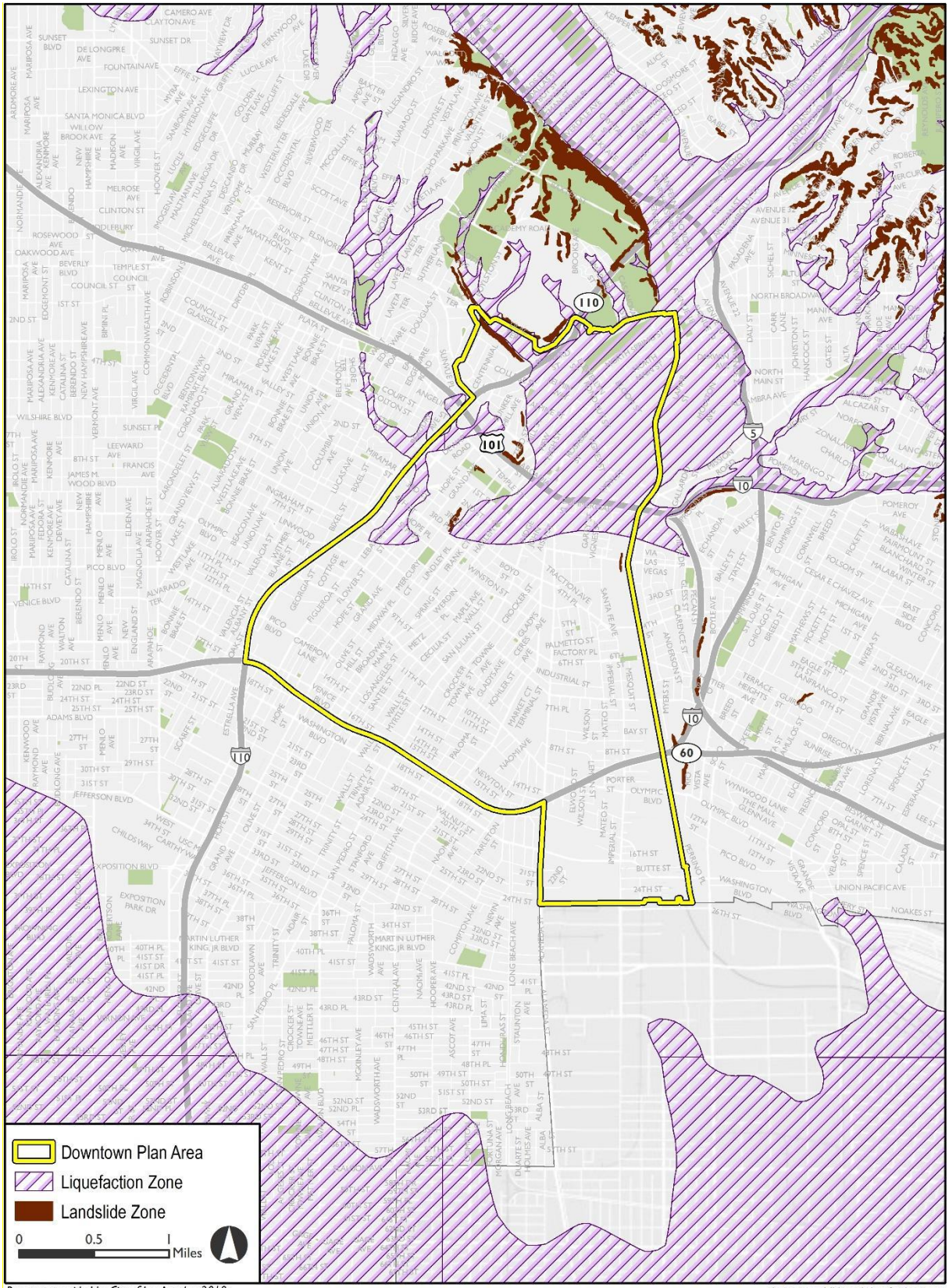
Tsunamis occur when large areas of the submerged continental shelf or slope are rapidly displaced vertically. Tsunami inundation zones in Los Angeles are limited to areas along the coast in Venice, Marina del Rey, and San Pedro (California Department of Conservation 2020). The Downtown Plan Area is located approximately 12.5 miles from the Pacific Ocean and is not located within an Inundation Map for flood risk (CGS 2016). There is no potential for tsunami damage in the Downtown Plan Area.

Dam Inundation

Citywide Dam Inundation

As discussed in Section 4.9, *Hydrology and Water Quality*, dam failure events are infrequent and usually coincide with events that cause them, such as earthquakes, landslides and excessive rainfall and snowmelt, but may also occur from water storage facility failure. The City of Los Angeles has 12 dams located within City boundaries, including Eagle Rock, Elysian, Encino, Hansen Recreation Lake, Lopez, Los Angeles Reservoir, Lower Franklin #2, Mulholland, Riviera Reservoir, Santa Ynez Canyon, Silver Lake, and Stone Canyon. Dams outside of the City boundaries may have potential to cause inundation within the City as well. These dams include: 10th and Western, Big Tujunga, Devils Gate, Diederich Reservoir, Glen Oaks 968, Green Verdugo, Greystone, Laguna Basin, Pacoima, Palos Verdes Reservoir, Sepulveda, and Upper Franklin. Over one third of the land area and population in the City is potentially threatened by dam failure (City of Los Angeles 2017a).

Figure 4.6-4 Landslide and Liquefaction Zones in and near the Downtown Plan Area



Basemap provided by City of Los Angeles, 2018;
Additional data provided by Department of Conservation, California Geological Survey, 2017.

Fig 4.6-3 Landslide and Liquefaction Zones

Downtown Plan Area Dam Inundation

As discussed in Section 4.9, *Hydrology and Water Quality*, dam failure from three regional dams could potentially create flooding in the majority of the Downtown Plan Area. These include the Sepulveda Dam on the Los Angeles River, approximately 14.5 miles northwest of the Downtown Plan Area, the Hansen Dam on the Tujunga Wash, approximately 15 miles northwest of the Downtown Plan Area, and the Elysian Reservoir, located approximately 0.5 mile north of the Downtown Plan Area (Los Angeles County Enterprise Geographic Information Systems 2017).

Soil Hazards

Hazards associated with soils include erosion, shrink/swell potential (expansive soils), landslides, and subsidence, as described below. Most of the City is urbanized and the majority of the land surface is covered in structures and pavement, which limits the extent of exposed surface soils.

Citywide Soil Hazards

As discussed above, terrain in the City is approximately 75 percent alluvial plain, which increases the potential for movement during seismic activity. In addition, the Santa Monica Mountains bisect the City and areas like Beverly Hills and Baldwin Hills cross other portions of the City, creating varying levels of topography. Development in these hillsides and slope base areas of the City contain unstable soils which have the potential to lead to landslides. As such, under natural conditions and during seismic activity, slopes and soil could give way and result in hazards.

Downtown Plan Area Soil Hazards

Alluvium underlies the majority of urban land in the Downtown Plan Area. A vein of older, finer alluvium substratum is located along the northwestern boundary of the Downtown Plan Area and trends southwest between Figueroa Street and Hope Street towards West 8th Street. These finer sediments may include large amounts of sand and sandy slit which are very porous and move very easily during seismic activity (NRCS 2016). Though most of the Downtown area is flat, the northwestern portion has considerably steeper slopes, which increases the potential for movement of the underlying alluvial soils during seismic activity or other geologic events.

Soil Erosion

Erosion refers to the removal of soil by water or wind. The effects of erosion are intensified with an increase in slope (as water moves faster, it gains momentum to carry more debris), the narrowing of runoff channels (which increases the velocity of water), and by the removal of groundcover, which leaves the soil exposed.

Citywide Soil Erosion

The City of Los Angeles ranges from the areas such as Downtown and the San Fernando Valley that are almost entirely urbanized and paved to more undeveloped mountains and hillside areas where underlying soils are exposed. The City's mountains and hill areas are also more susceptible to soil erosion due to the increase in slope compared to the flatland areas of the City. As such, soil erosion in the City varies by location. Similar to the Downtown Plan Area, existing stormwater infrastructure throughout the City minimizes erosion potential.

Downtown Plan Area Erosion

In the Downtown Plan Area, there is a low potential for soil erosion as the ground surface is almost entirely paved and the underlying soils are not exposed to the elements. This impermeable surface cover decreases

the infiltration of water into the underlying soils, which could increase the amount and velocity of runoff, and potentially erosion, in downstream locations. However, runoff in the Downtown Plan Area flows to the Los Angeles River along the eastern boundary of the Downtown Plan Area, which is concrete-lined. This existing, concrete-armored stormwater infrastructure minimizes the erosion potential in and downstream of the Plan Area.

Shrink/Swell (Expansive Soils)

Soils that volumetrically increase (swell) or expand when exposed to water and contract when dry (shrink) are considered expansive soils. A soil's potential to shrink and swell depends on the amount and types of clay in the soil. Montmorillonite and bentonite clays are more responsive to changes in water content than other types of clay. Further, the higher the clay content, the more the soil will swell when wet and shrink when dry. Highly expansive soils can cause structural damage to foundations and roads without proper structural engineering and are generally less suitable or desirable for development than non-expansive soils because of the necessity for detailed geologic investigations and costlier grading applications.

The Los Angeles Building Code (LABC) incorporates CBC requirements for slab-on-ground building foundations located on expansive soils. If expansive soils are detected based on a preliminary soil report, the CBC requires preparation of a soil investigation prior to construction and incorporation of appropriate corrective actions to prevent structural damage, to be determined on a project-by-project basis. If a building or structure is assigned to a specific seismic design category, a geotechnical investigation will be conducted and a geotechnical report will be submitted prior to construction and incorporation of appropriate corrective actions to prevent structural damage. Whether or not a geotechnical investigation is warranted will be determined on a project-by-project basis.

Citywide Shrink/Swell

As discussed above, the five most prominent soil types in the City are sandy loams, silt loams, sand, and black adobe, which contain claylike materials. Additionally, much of Los Angeles is underlain with alluvium, which generally consists of fine particles of silt and clay with larger particles like sand and gravel. As such, some soils in the City are generally susceptible to ground shaking and are considered expansive soils (City of Los Angeles 1996).

Downtown Plan Area Shrink/Swell

The extent of expansive soils in the Downtown Plan Area is not currently mapped.

Landslides

The geologic character of an area determines its potential for landslides. Steep slopes, the extent of erosion, and the rock composition of a hillside can aid in predicting the probability of slope failure. Common triggering mechanisms of slope failure include undercutting slopes by erosion or grading; saturation of marginally stable slopes by rainfall or irrigation; and shaking of marginally stable slopes during earthquakes.

Citywide Landslides

Steep slopes and hillsides throughout the City are susceptible to landslides. These areas include the Santa Monica Mountains, the Santa Susana Mountains north of the San Fernando Valley, hills in northeast Los Angeles, the west San Gabriel Mountains east of Interstate 5, and northeast Los Angeles near the communities of Eagle Rock and Highland Park (City of Los Angeles 1996).

Downtown Plan Area Landslides

According to the Hollywood and Los Angeles Seismic Hazard Maps, landslide zones in the Downtown Plan Area are primarily located in the northwestern portion of the Downtown Plan Area. These include the hills surrounding Dodger Stadium and the steeper slopes along Grand Avenue between 3rd Street and 5th Street. Additional areas with landslide potential are near the 101 Freeway overpass near Grand Avenue. Potential landslide zones in the Downtown Plan Area are shown on **Figure 4.6-4**.

Subsidence

Subsidence occurs at great depths below the surface when subsurface pressure is reduced by the withdrawal of fluids (e.g., groundwater, natural gas, or oil) resulting in sinking of the ground.

Citywide Subsidence

The City of Los Angeles may be susceptible to subsidence from groundwater withdrawal as a result of drought conditions and declining groundwater levels. According to the California Department of Water Resources Drought Response Report, the City of Los Angeles is located in an area with average to below average estimated potential for future land subsidence, but several areas of cumulative subsidence are monitored throughout the southern portions of the City (DWR 2014).

Subsidence can occur due to the withdrawal of natural gas or oil. There are 5,130 oil and gas wells in the City (City of Los Angeles 2018a). Of the total 5,130 wells, approximately 3,133 are plugged and abandoned, 930 are buried, 780 are active, and 287 are idle. Oil fields in the City are shown on **Figure 4.6-5**.

Downtown Plan Area Subsidence

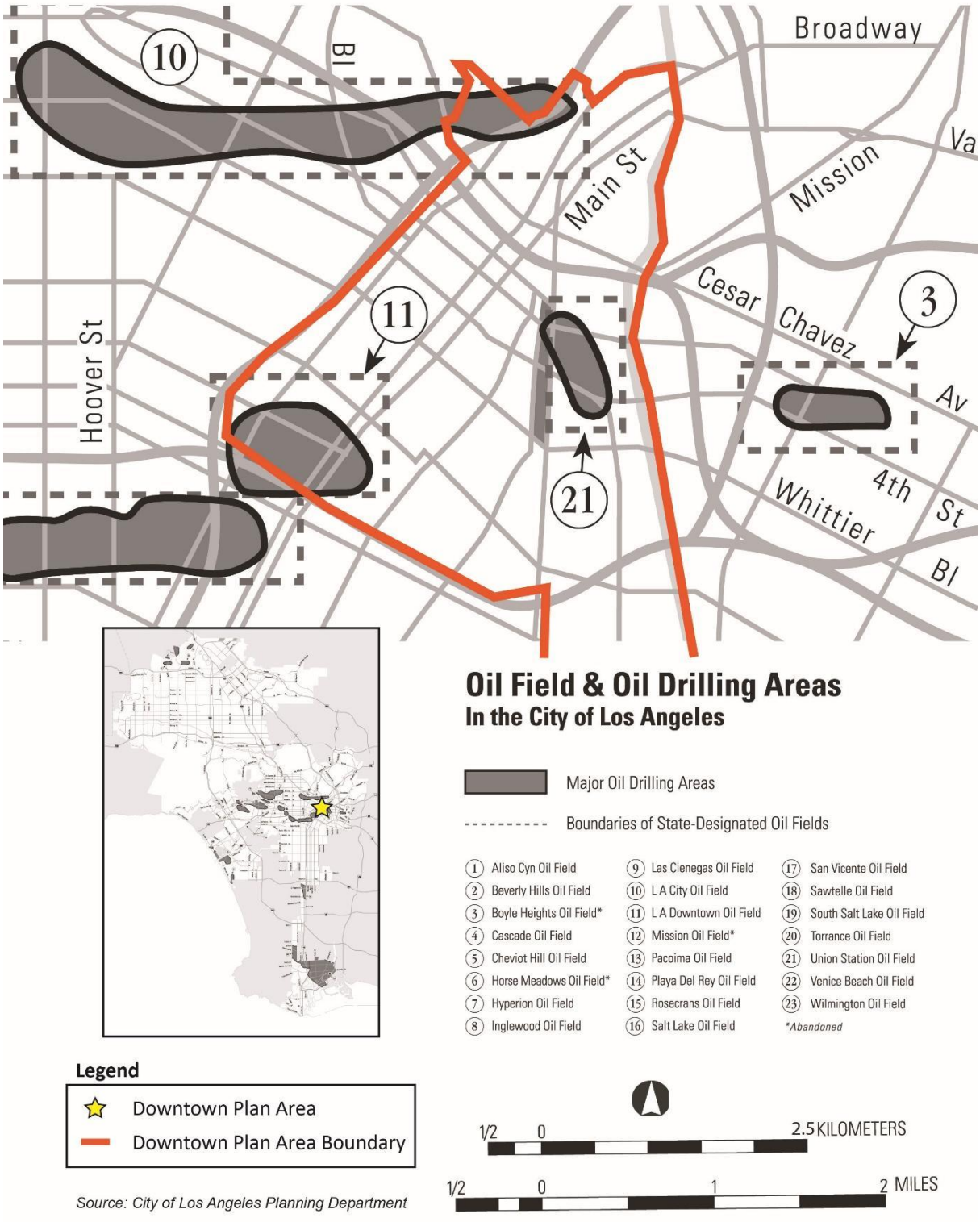
As shown on **Figure 4.6-5**, the LA Downtown Oil Field is located in the southwest portion of the Downtown Plan Area and the Union Station Oil Field is located in the eastern portion. In addition, the easternmost portion of the LA City Oil Field lies along the northern edge of the Downtown Plan Area.

PALEONTOLOGICAL RESOURCES

Citywide Paleontological Geologic Setting

The Los Angeles basin is a northwest trending coastal plain bounded to the north by the Santa Monica Mountains and the Elysian, Repetto, and Puente Hills and bounded to the east by the Santa Ana Mountains (Norris and Webb 1990). It is bounded to the southeast by the San Joaquin Hills and the southwest by the Palos Verdes Hills, the most prominent feature in the basin reaching 1,300 feet in elevation. The basin is about 50 miles long and 20 miles wide and is mostly covered by alluvial fan deposits derived from the surrounding higher elevations as well as fluvial deposits of the ancestral Los Angeles River. Locally, the basin contains more than 32,000 feet of strata ranging from Miocene to Recent in age. Structurally, the basin can be divided into four primary structural blocks: the northwest, southwest, central, and northeastern blocks. Each of these informal basin subdivisions are separated by major zones of faulting or flexure in the basement rocks, resulting in contrasting stratigraphy. The Downtown Plan Area is located on the central structural block, which is characterized by an alluviated lowland plain that rises into the bordering highlands that were relatively uplifted as a result of Quaternary deformation. The central block is bounded by higher elevations such as the Santa Ana Mountains to the east, the San Joaquin Hills to the southeast, low lying hills along the Newport-Inglewood zone to the southwest, the Santa Monica Mountains to the northwest, and the Coyote and Puente Hills to the northeast (Yerkes et al. 1965; Tsutsumi et al. 2001).

Figure 4.6-5 Subsidence Risk Areas



The Los Angeles Basin has undergone many major evolutionary phases, resulting in five distinctive rock assemblages. These assemblages reflect a pre-depositional basement rock formation phase, a pre-basin phase during which Upper Cretaceous to Lower Miocene rocks were deposited, a basin-inception phase during which time Middle Miocene rocks were deposited, a subsidence and depositional phase during which Upper Miocene to Lower Pleistocene rocks were deposited, and finally, a disruption phase. During the disruption phase, as many as 13 successive marine platforms have been cut into the Pleistocene strata resulting in deformed and locally overturned deposits (Yerkes et al. 1965).

Downtown Plan Area Paleontological Geologic Setting

The Downtown Plan Area is mapped at a scale of 1:24,000 by Dibblee and Ehrenspeck (1989, 1991), among others (**Figure 4.6-6)**. According to these maps, the Downtown Plan Area is underlain by the Monterey Formation, the Yorba Member of the Puente Formation, the Repetto Member of the Fernando Formation, and Quaternary older and younger alluvium. The geology and paleontology of these geologic units is discussed below.

The Monterey Formation

The Monterey Formation is exposed in the northern Downtown Plan Area and locally consists of white-weathering, thinly bedded and platy siliceous shale (Tmsh) and tan to light gray, semi-friable arkosic sandstone (Tmss). The Monterey Formation is extensive and outcrops along coastal California from north of San Francisco to south of Los Angeles. It is named after exposures of diatomaceous shale and siltstone in the vicinity of Monterey and is easily recognized by its pale buff to white color (Berndmeyer et al. 2012, Norris and Webb 1990). The Monterey Formation is as much as one mile thick and can span several square miles but is typically about a half a mile thick. Its lithology varies greatly but is generally dominated by finely laminated diatomaceous sediments with scarce terrigenous material. Locally, the Monterey Formation overlies and may grade into the Puente Formation (Bramlette 1946; Morton and Miller 2006).

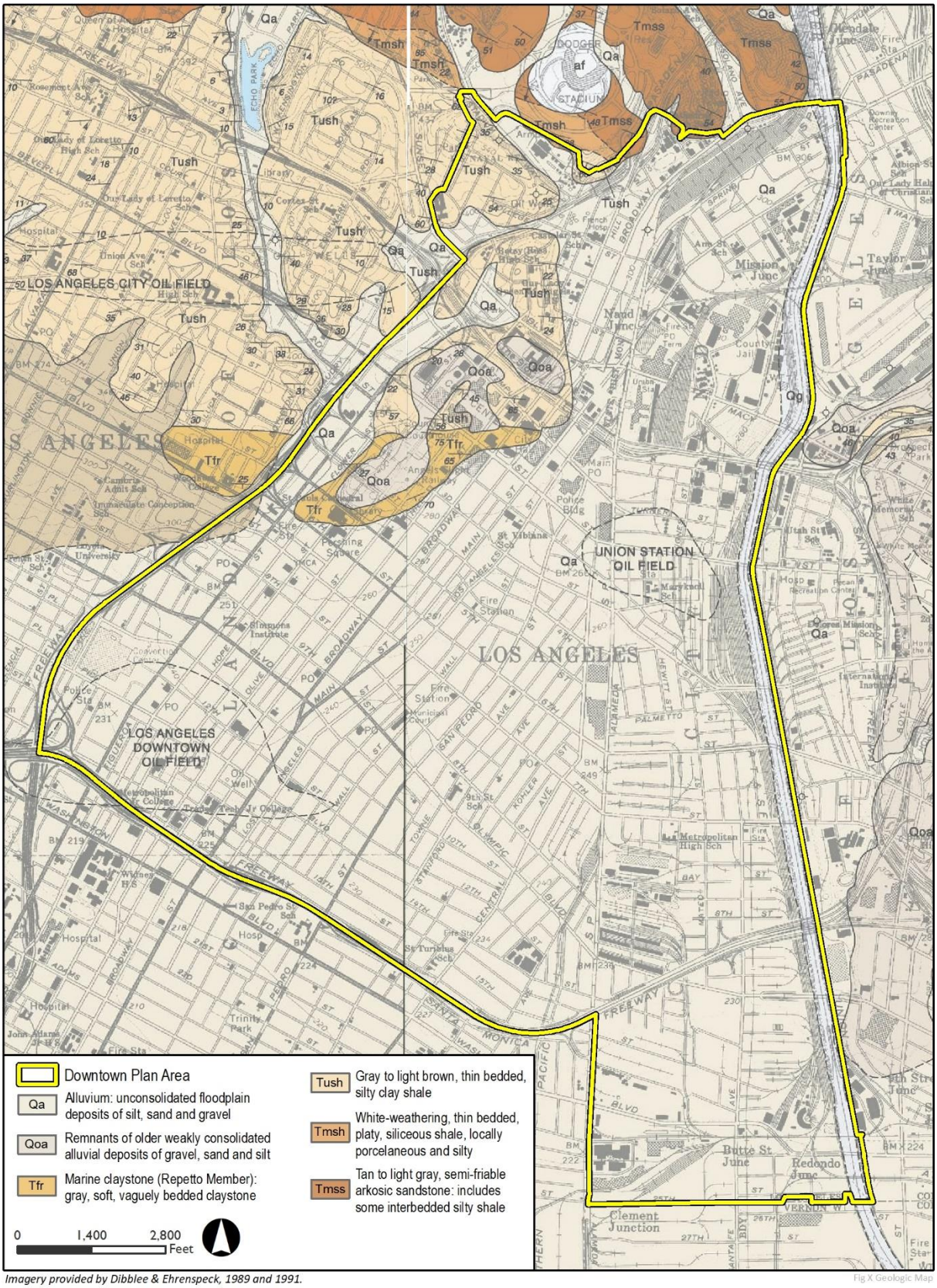
The middle to late Miocene Monterey Formation is well known for producing marine vertebrates, plants, invertebrates, and microfossils from more than 1200 localities in California. Museum collections document dozens of vertebrate localities yielding large sea turtles, dolphins, whales, pinnipeds, sharks, fish, desmostylians, birds, and many other fauna (UCMP 2017; Murphey et al. 2007) In addition, numerous species of scientifically important invertebrates, foraminifera, and plants, such as kelps and other large soft-bodied seaweeds have been recovered from the Monterey Formation. Typically, the fossil specimens within the Monterey Formation have been recovered from its diatomite and shale deposits, but the limestone and sandstone beds have also yielded abundant remains (Murphey et al. 2007).

The Puente Formation

The late Miocene to early Pliocene Yorba Member of the Puente Formation (Tush) is exposed within the northern Downtown Plan Area. Locally, this unit consists of gray to light brown, thinly bedded shale. The Puente Formation was named by Eldridge and Arnold (1907) for exposures in the Puente Hills, where the unit reaches a maximum thickness of 4,000 meters. The Yorba Member is a fine-grained deep basin deposit characterized by abundant diatomite and is generally considered to be coeval with the late Miocene part of the Monterey Formation. As such, it has been designated by Dibblee as the Yorba Shale Member of the Monterey Formation (Morton and Miller 2006).

Numerous vertebrate localities have been documented from within the Puente Formation yielding specimens of marine and terrestrial fauna including whale, shark, bony fish, mastodon, rhinoceros, horse, rabbit, and rodent (Paleobiology Database 2017). In addition, several invertebrate, plant, and microfossil localities have been discovered within the Puente Formation and include specimens of insect, mollusk, sponge, algae, and foraminifera (Huddleston and Takeuchi 2006; UCMP online database 2017).

Figure 4.6-6 Geologic Map of the Downtown Plan Area



The Fernando Formation

The Repetto member of the Pliocene Fernando Formation (Tfr) is exposed in the north and northwestern Downtown Plan Area and locally consists of a gray, vaguely bedded marine claystone. The Fernando Formation was named by Eldridge and Arnold (1907) for its type section on the north side of the San Fernando Valley in Los Angeles County (Morton and Miller 2006). The unit is as much as 1,825 meters thick in the Puente Hills area and was deposited in a deep marine environment (Morton 2004). Locally, the Repetto Member contains interbeds if siltstone and shale representative of periods of submarine fan deposition. The Fernando Formation overlies the Puente Formation in the vicinity of the Downtown Plan Area and the top of the member is estimated to be 2.5 million years old (Tsutsumi et al. 2001).

The Fernando Formation has yielded numerous vertebrate, invertebrate, and microfossil specimens throughout southern California including specimens of bird, tapir, camel, whale, mollusk, and foraminifera from within Los Angeles County (Beyer et al. 2009; UCMP online database 2017). In addition, a search of the current Cooper Center specimen catalog indicates that at least two vertebrate localities yielding ray-finned fish and dolphin have been identified within the Fernando Formation in Orange County.

Quaternary Alluvium

Quaternary older alluvium (Qoa) is exposed in the northwest Downtown Plan Area and consists of Pleistocene age weakly consolidated alluvial sand, silt, and gravel. However, the majority of the Downtown Plan Area is underlain by Quaternary alluvium (Qa) of Holocene age locally consisting of unconsolidated sand, silt, and gravel typical of an alluvial floodplain. Holocene alluvial deposits at the surface are too young to preserve fossil resources but at unknown depths, sediments may transition from too young to support fossils, to early Holocene or late Pleistocene in age in which scientifically significant fossils could occur. Alluvial sediments of early Holocene and Pleistocene age have a well-documented record of abundant and diverse vertebrate fauna throughout California, especially in the Los Angeles basin. Fossil specimens of whale, sea lion, horse, ground sloth, bison, camel, mammoth, dog, pocket gopher, turtle, ray, bony fish, shark, and bird have been reported (Agenbroad 2003; Bell et al. 2004; Hay 1927; Jefferson 1985, 1989, 1991; Maguire and Holroyd 2016; Merriam 1911; Reynolds et al. 1991; Parkman 2005; Savage 1951; Savage et al. 1954; Scott and Cox 2008; Springer et al. 2009; Stirton 1951; Tomiya et al. 2011; Wilkerson et al. 2011; Winters 1954; UCMP 2017). Existing information (DWR 1961) discusses the general range of geologic unit thicknesses in various regions of the Los Angeles Basin; however, specific information on the depth at which Holocene units mapped at the surface become old enough to support paleontological resources is not available. While the precise depth of these high sensitivity sediments is unknown, it may be as few as five feet (Maguire and Holroyd 2016; Savage 1951).

Paleontological Sensitivity

The Society for Vertebrate Paleontology (SVP) broadly defines significant paleontological resources as follows (SVP 2010, page 11):

> "Fossils and fossiliferous deposits consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years)."

Significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, diagnostically important, or are common but have the potential to provide valuable scientific information for evaluating evolutionary patterns and processes, or which could improve our understanding of paleochronology, paleoecology, paleophylogeography or depositional histories. New

or unique specimens can provide new insights into evolutionary history; however, additional specimens of even well represented lineages can be equally important for studying evolutionary pattern and process, evolutionary rates and paleophylogeography. Even unidentifiable material can provide useful data for dating geologic units if radiocarbon dating is possible. As such, common fossils (especially vertebrates) may be scientifically important, and therefore considered highly significant.

The SVP (2010) describes sedimentary rock units as having high, low, undetermined, or no potential for containing significant nonrenewable paleontological resources. These criteria are based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. Significant paleontological resources are fossils or assemblages of fossils, which are unique, unusual, rare, uncommon, diagnostically or stratigraphically important, and those which add to an existing body of knowledge in specific areas, stratigraphically, taxonomically, or regionally (Reynolds 1990). While these standards were specifically written to protect vertebrate paleontological resources, all fields of paleontology have adopted these guidelines. Paleontological sensitivity was evaluated according to the following SVP (2010) categories:

High Potential (sensitivity)

Rock units from which significant vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a high potential for containing significant non-renewable fossiliferous resources. These units include but are not limited to, sedimentary formations and some volcanic formations which contain significant nonrenewable paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, or botanical and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas which contain potentially datable organic remains older than Recent, including deposits associated with nests or middens, and areas that may contain new vertebrate deposits, traces, or trackways are also classified as significant.

Low Potential (sensitivity)

Sedimentary rock units that are potentially fossiliferous, but have not yielded fossils in the past or contain common and/or widespread invertebrate fossils of well documented and understood taphonomic, phylogenetic species and habitat ecology. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding significant fossils prior to the start of construction. Generally, these units will be poorly represented by specimens in institutional collections and will not require protection or salvage operations. However, as excavation for construction gets underway significant and unanticipated paleontological resources could be encountered and require a change of classification from Low to High Potential and, thus, require monitoring and mitigation if the resources are found to be significant.

Undetermined Potential (sensitivity)

Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials. Field surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed.

No Potential

Rock units of metamorphic or igneous origin are commonly classified as having no potential for containing significant paleontological resources.

Citywide Paleontological Resources

Paleontological resources in the City are mostly located near local mountains and in coastal areas of the City. The City of Los Angeles is approximately 76 percent developed and approximately 24 percent undeveloped (1.4 percent vacant and 22.4 percent open space) (City of Los Angeles 1996). Paleontological resource sensitivity in the City ranges from surface sediments with unknown fossil potential in the more urbanized areas of the City (San Fernando Valley and Central/South Los Angeles) to areas with bedrock and older surface sediments where fossils are likely to be found. Bedrock and older surface sediments include areas near the Santa Monica Mountains, Simi Hills, Santa Susana Mountains, Verdugo Hills, Griffith Park, and coastal areas in the western and southern areas of the City (City of Los Angeles 1996).

Fossils in the City have been located mostly in sedimentary rocks that has been uplifted, eroded, or otherwise exposed. The main paleontological resource site in the City is the La Brea Tar Pits, within and surrounding Hancock Park. Most resources in this area of the City are from the Pleistocene age and date as far back as 40,000 years (City of Los Angeles 2001).

Downtown Plan Area Paleontological Resources

The geologic units underlying the Downtown Plan Area have a paleontological resource potential ranging from low to high in accordance with criteria set forth by SVP (2010). The Monterey, Puente, and Fernando formations and Quaternary older alluvium have a high paleontological resource potential because they have proven to yield scientifically significant vertebrate fauna. The Holocene-age young alluvial-fan deposits mapped within the Downtown Plan Area have been determined to have a low to high paleontological resource potential, increasing with depth. Although these sediments are generally too young to preserve fossilized remains, they may shallowly overlie older sensitive Pleistocene alluvial deposits. Sensitivity ratings for the soils underlying the Downtown Plan Area are shown in **Figure 4.6-7**.

REGULATORY FRAMEWORK

FEDERAL STANDARDS

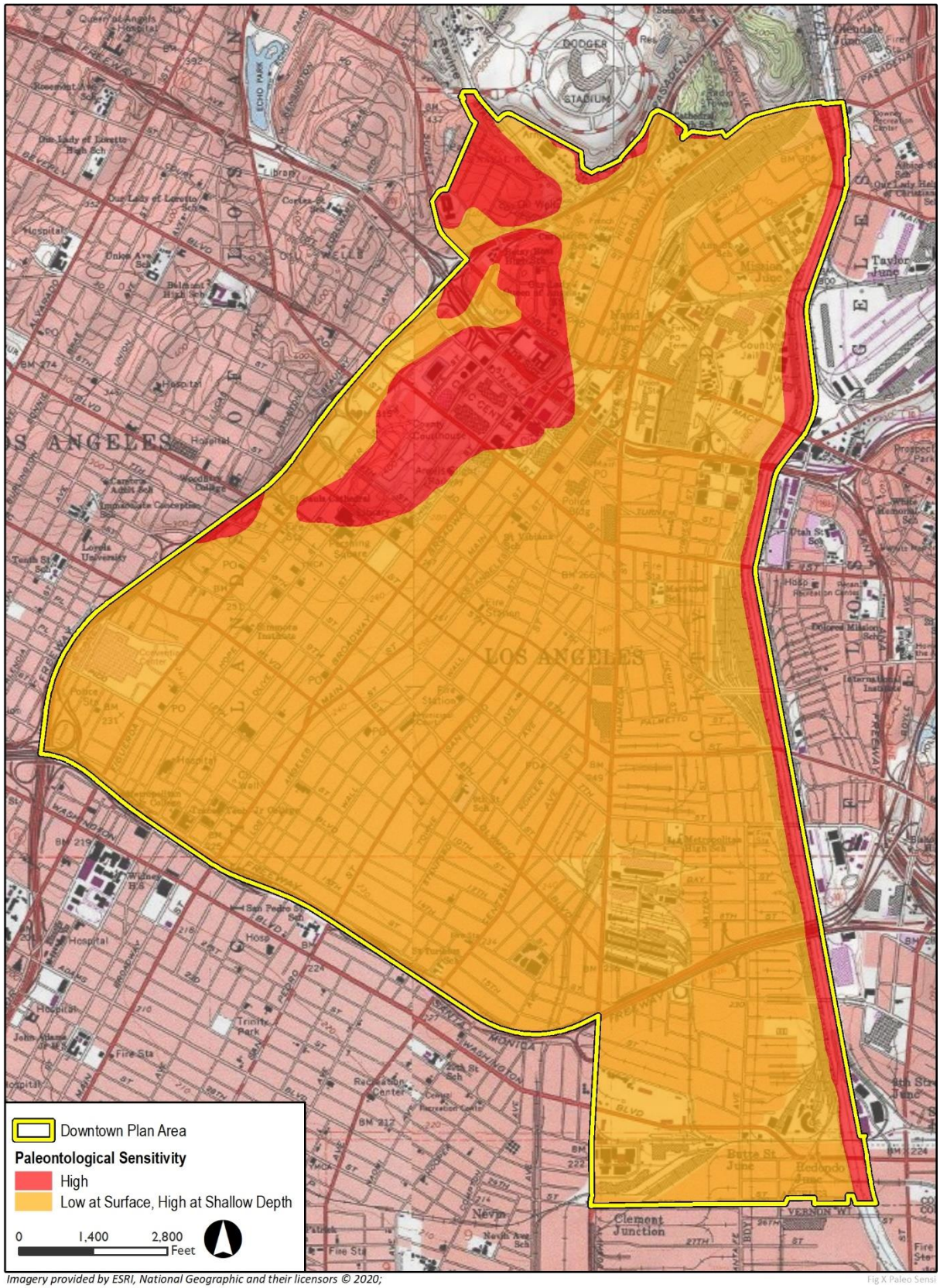
International Building Code

The International Building Code (IBC) is published by the International Code Council (ICC). The scope of this code covers major aspects of construction and design of structures and buildings. The IBC has replaced the Uniform Building Code (UBC) as the basis for the California Building Code (CBC) and contains provisions for structural engineering design. The 2015 IBC addresses the design and installation of structures and building systems through requirements that emphasize performance. The IBC includes codes governing structural as well as fire- and life-safety provisions covering seismic, wind, accessibility, egress, occupancy, and roofs.

U.S. Code Title 42

Federal laws codified in the U.S. Code Title 42, Chapter 86 (Earthquake Hazard Reduction Act of 1977) were enacted to reduce the risks to life and property from earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program. Implementation of these requirements are regulated, monitored, and enforced at the state and local level. Key regulations and standards are summarized below.

Figure 4.6-7 Paleontological Sensitivity of the Downtown Plan Area



Imagery provided by ESRI, National Geographic and their licensors © 2020;
Additional data provided by Dibblee & Ehrenspeck, 1989 and 1991.

National Pollutant Discharge Elimination System (NPDES) Construction General Permit

NPDES was created by the Clean Water Act in 1972. Construction activities that disturb one or more acres of land surface are subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (NPDES General Construction Permit) (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board (SWRCB). Compliance with the permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require development of a stormwater pollution prevention plan (SWPPP), which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms is also required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary.

In the City of Los Angeles, SWPPP requirements are enforced through the City's Building and Safety Department plan review and approval process. During the review process, development project plans are reviewed for compliance with the stormwater requirements. Plans and specifications are reviewed to ensure that the appropriate Best Management Practices (BMPs) are incorporated to address stormwater pollution prevention goals as they relate to erosion and sediment movement on the project site. Sediment and erosion control measures can include both stabilization and structural practices. Stabilization practices, which refer to methods of covering or maintaining existing soil cover, can include seeding, vegetation and tree preservation, and contouring of project design. Such measures prevent initial disturbance of soil that can enable subsequent potential erosion during construction activities. Structural practices involve the use of devices to divert, store, or limit runoff that can transport sediment offsite and can include use of silt fences, earth dikes, sedimentation basins, and sediment traps. These measures obstruct runoff flows to reduce erosion and other soil transport.

STATE STANDARDS

California Building Code

The CBC, Title 24, Part 2 provides building codes and standards for design and construction of structures in California. The 2013 CBC is based on the 2012 IBC with the addition of more extensive structural seismic provisions. The CBC applies to all occupancies in the state, except where stricter standards have been adopted by local agencies. Chapter 16 of the CBC contains definitions of seismic sources and the procedure used to calculate seismic forces on structures. Chapter 18 includes requirements for foundation and soil investigations; excavation, grading, and fill; allowable load-bearing values of soils; and the design of footings, foundations and slope clearances, retaining walls, and pier pile driven, and cat-in-place foundation support systems. Chapter 33 includes requirements for safeguards as worksites to ensure stable excavations and cut or fill slopes.

Appendix J of the CBC applies to grading, excavation, and earthwork construction, and prohibits grading from occurring without first having obtained a permit from the building official. A geotechnical report must be prepared and include the following:

- The nature and distribution of existing soils,
- Conclusions and recommendations for grading procedures,
- Soil design criteria for any structure of embankments required to accomplish the proposed grading, and
- Where necessary, slope stability studies, and recommendations and conclusions regarding site geology.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 was passed into law following the destructive February 9, 1971 Mw 6.6 San Fernando earthquake. The Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. This Act requires the State Geologist to establish regulatory zones known as "Earthquake Fault Zones" around the surface traces of active faults and to issue appropriate maps. Before a project can be permitted within an Alquist-Priolo Earthquake Fault Zone, the City of Los Angeles requires a geologic investigation to demonstrate that the proposed building(s) will not be constructed across active faults. If an active fault is found, structures for human occupancy must be set back from the fault by approximately 50 feet. This Act groups faults into categories of active, potentially active, and inactive. Historic and Holocene age faults are considered active, Late Quaternary and Quaternary age faults are considered potentially active, and pre-Quaternary age faults are considered inactive.

Seismic Safety Act

The California Seismic Safety Commission was established by the Seismic Safety Act in 1975 with the intent of providing oversight, review, and recommendations to the Governor and State Legislature regarding seismic issues. The commission's name was changed to Alfred E. Alquist Seismic Safety Commission in 2006. Since then, the Commission has adopted several documents based on recorded earthquakes, such as the 1994 Northridge earthquake, 1933 Long Beach earthquake, the 1971 Sylmar earthquake, etc. Some of these documents are listed as follows:

- Research and Implementation Plan for Earthquake Risk Reduction in California 1995 to 2000, report dated December 1994;
- Seismic Safety in California's Schools, 2004, "Findings and Recommendations on Seismic Safety Policies and Requirements for Public, Private, and Charter Schools," report dated December 1994;
- Findings and Recommendations on Hospital Seismic Safety, report dated November 2001;
- Commercial Property Owner's Guide to Earthquakes Safety, report dated October 2006; and
- California Earthquake Loss Reduction Plan 2007–2011, report dated July 2007.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 was passed into law following the destructive October 17, 1989 Mw 6.9 Loma Prieta earthquake. The Act directs the California Geological Survey (CGS) to delineate Seismic Hazard Zones. The purpose of the Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. Cities, counties, and State agencies are directed to use seismic hazard zone maps developed by CGS in their land-use planning and permitting processes. The Act requires Cities and counties to regulate development projects that involve structures for human occupancy, excluding single-family dwellings that are less that two stories and are not part of a development of four of more dwellings. Cities and counties must ensure that geologic and soil conditions are investigated and appropriate mitigation measures, if any, are incorporated into development plans. The State Mining and Geology Board provides additional regulations and policies to assist municipalities in preparing the Safety Element of their General Plan and encourages land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety. Under PRC Section 2697, cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard. The requirement for a report may be waived if the city finds that no undue seismic hazard exists, based on information resulting from

studies conducted on sites in the immediate vicinity of the project and of similar soil composition to the project site. Each city or county shall submit one copy of each geotechnical report, including mitigation measures, to the State Geologist within 30 days of its approval.

California Division of Oil, Gas, and Geothermal Resources (CalGEM)

CalGEM regulates production of oil and gas, as well as geothermal resources, within the State of California. CalGEM requirements in preparation of environmental documents under CEQA are defined in CCR, Title14, Division 2, Chapter 2. Staff also assists operators in avoiding or reducing environmental impacts from the development of oil, gas, and geothermal resources in California, including subsidence. PRC Sections 3315, et seq. CalGEM regulations, which are defined in CCR, Title 14, Division 2, Chapter 4, include well design and construction standards, surface production equipment and pipeline requirements, and well abandonment procedures and guidelines to ensure effectiveness in preventing migration of oil and gas from a producing zone to shallower zones, including potable groundwater zones, as well as subsidence.

California Penal Code Section 622½

California Penal Code Section 622½ provides the following: "Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor."

California Penal Code Section 623

California Penal Code Section 623 provides the following: "Except as otherwise provided in Section 599c, any person who, without the prior written permission of the owner of a cave, intentionally and knowingly does any of the following acts is guilty of a misdemeanor punishable by imprisonment in the county jail not exceeding one year, or by a fine not exceeding one thousand dollars ($1,000), or by both such fine and imprisonment: (1) breaks, breaks off, cracks, carves upon, paints, writes or otherwise marks upon or in any manner destroys, mutilates, injures, defaces, mars, or harms any natural material found in any cave. (2) disturbs or alters any archaeological evidence of prior occupation in any cave. (3) kills, harms, or removes any animal or plant life found in any cave. (4) burns any material which produces any smoke or gas which is harmful to any plant or animal found in any cave. (5) removes any material found in any cave. (6) breaks, forces, tampers with, removes or otherwise disturbs any lock, gate, door, or any other structure or obstruction designed to prevent entrance to any cave, whether or not entrance is gained.

PRC Sections 5097.5

PRC Section 5097.5 provides protection for cultural and paleontological resources, where Section 5097.5(a) states, in part, that:

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

California Code of Regulations, Title 14, Section 4307 and Section 1427

Title 14, Section 4307 states that "no person shall remove, injure, deface or destroy any object of paleontological, archaeological, or historical interest or value." Section 1427 "recognizes that California's archaeological resources are endangered by urban development and population growth and by natural forces….Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archaeological or historical interest or value, whether situated on private lands or within any public park of place, is guilty of a misdemeanor. It is a misdemeanor to alter any archaeological evidence found in any cave, or to remove any materials from a cave."

LOCAL STANDARDS

Los Angeles Municipal Code (LAMC)

The City of Los Angeles relies on Municipal Code Chapter IX, Article 1, *Building Code*, (the LABC), which incorporates the CBC, to provide geotechnical hazard prevention regulations. In general, the LAMC includes requirements for construction and ground disturbance that could affect geologic risks, as well as standards for building foundations, earthquake/seismic structural designs, and development within landslide susceptible areas. Division 18 of Article 1, in adopting the CBC, provides guidance for development located on expansive soils; Division 70 provides general construction, grading and site excavation requirements and restricts issuance of grading permits for development in landslide areas; and Division 88 establishes standards for structural seismic resistance for existing buildings (City of Los Angeles 2017b). Division 70 further includes provisions for managing and reducing erosion during construction activities, especially as it relates to controlling stormwater pollution from sediments. Specifically, per the LAMC, requires project applicants to incorporate any best management practices necessary to control stormwater pollution in accordance with the "Development Best Management Practices Handbook, Part A Construction Activities" as adopted by the Board of Public Works.

The Los Angeles Department of Building and Safety (LADBS) has the authority to withhold building permit issuance if a project cannot mitigate potential hazards to the project or which are associated with the project. Throughout the permitting, design, and construction phases of a building project, LADBS engineers and inspectors confirm that the requirements of the LAMC pertaining specifically to geoseismic and soils conditions are being implemented by project architects, engineers, and contractors.

The LAMC is currently undergoing a comprehensive update to all Zoning Code sections as part of the re:code LA effort. re:code LA, which started in 2013 and will continue through 2020, will update the Zoning Code to make the Code more streamlined, visual, and easy to use. The existing Zoning Code regulations are not being repealed as part of this Project. The existing Zoning Code will continue to be located in Chapter 1 of the Los Angeles Municipal Code, while the New Zoning Code will be located in a new Chapter 1A of the Los Angeles Municipal Code. Relevant components of re:code LA are described in detail in Section 3, *Project Description*.

City of Los Angeles General Plan Safety and Conservation Elements

Both the Safety Element and the Conservation Element of the City's current General Plan provides goals and objectives to limit exposure to potential natural hazards, including seismic hazards and other geologic conditions. The Safety Element provides a contextual framework for understanding the relationship between hazard mitigation, response to a natural disaster, and initial recovery from a natural disaster. The policies of the Safety Element reflect the comprehensive scope of the City's Emergency Operations Organization, which is tasked with integrating the City's emergency operations into a single operation. The intent of the Conservation Element is the conservation and preservation of natural resources. Policies of the Conservation Element address the effect of erosion on such natural resources as beaches, watersheds, and

watercourses. These policies and actions encourage all development to comply with all applicable state and federal regulations including the Alquist-Priolo Earthquake Fault & Zoning Act, and the State Mapping Act. Relevant objectives and policies of the Safety and Conservation elements related to geology and soils are listed below.

Relevant objectives and policies of the Safety Element include the following:

> Policy 1.1.6 State and federal regulations. Assure compliance with applicable state and federal planning and development regulations, e.g., Alquist-Priolo Earthquake Fault Zoning Act, State Mapping Act and Cobey-Alquist Flood Plain Management Act. [All EOO natural hazard enforcement and implementation programs relative to non-City regulations implement this policy.]

Policies in the Conservation Element include the preservation of resources of paleontological significance.

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the State CEQA Guidelines the Proposed Project would have a significant impact related to geology and soils if it would:

- Directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving: (Threshold 4.6-1)
  - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?
  - ii) Strong seismic ground shaking
  - iii) Seismic-related ground failure, including liquefaction
  - iv) Landslides
- Result in substantial soil erosion or the loss of topsoil (Threshold 4.6-2)
- Be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction or collapse (Threshold 4.6-3)
- Be located on expansive soil, as defined in **Table 18-1-B** of the Uniform Building Code (1994), creating substantial risks to life or property (Threshold 4.6-4)
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater (Threshold 4.6-5)
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (Threshold 4.6-6)

METHODOLOGY

Baseline information for the analysis was compiled from a review of data and reports published by state agencies, environmental documents for projects in the vicinity, as well as information compiled and evaluated by the City of Los Angeles related to local topography, geologic and soil conditions, and seismic hazards. The result of the effort is a general and qualitative analysis of the types of geologic hazards that could be expected relative to the implementation of the Downtown Plan.

The identification of impacts is based on the potential for reasonably anticipated development from the Downtown Plan to create or exacerbate geologic or seismic hazards based on review of available information regarding the types of geologic and seismic hazards present citywide and in the Downtown Plan Area specifically as well as the types of reasonably anticipated development. The analysis focuses on whether or not new development would increase the potential for a particular hazard. Applicable regulations, such as the CBC, LABC, and NPDES General Construction Permit, are considered for the analysis of each potential impact.

In 2015, the California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD)*, held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of a project. However, if a project exacerbates a condition in the existing environment, the lead agency is required to analyze the impact of that exacerbated condition on the environment, which may include future residents and users within the Downtown Plan Area. The decision from *CBIA v. BAAQMD* will inform the analysis of Appendix G thresholds provided above.

The analysis of paleontological resources and unique geological features identifies the likelihood of ground disturbing activities to encounter rock units with potential for containing significant paleontological resources, which is considered high in quaternary alluvial fan deposits exhibiting a composition conducive to the preservation of fossil resources. Paleontological resources in the Downtown Plan Area were evaluated qualitatively based on general information about Downtown Plan Area conditions. In the absence of an inventory of unique geological resources, the potential for such resources to be present and impacted is generally assessed.

PROJECT IMPACTS

Threshold 4.6-1	Directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42 ii) Strong seismic ground shaking iii) Seismic-related ground failure, including liquefaction iv) Landslides

Impact 4.6-1 **Downtown Plan:** Reasonably anticipated development from the Downtown Plan may result in exposure of people or structures to such geologic hazards as rupture of known earthquake fault, seismic ground shaking, ground failure, liquefaction, and landslides. However, development in the Downtown Plan Area would consist almost exclusively of redevelopment of properties, which would replace older structure with new structures that comply with currently applicable seismic regulations and building standards, as required by the City Municipal Code. In this way, new development may actually improve seismic safety. Moreover, although new development would be exposed to existing geologic hazards, it would not increase the potential for such hazards or create new hazards. Thus, there would be ***no impact*** related to increased exposure to seismic hazards.

New Zoning Code: The New Zoning Code does not include any standards which increase the exposure of people to faulting and seismic hazardous conditions and the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid these effects. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. ***No impact*** would occur.

Downtown Plan Impact

In light of the California Supreme Court ruling in *CBIA v. BAAQMD*, which held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of a project, the potential for substantial adverse effects on people or structures from the rupture of a known earthquake, strong seismic ground shaking, seismic-related ground failure (including liquefaction) or landslides, which would result from an existing environmental condition, would not be an impact under CEQA unless the Downtown Plan exacerbated the existing environmental condition.

The type of development that would occur under the Downtown Plan is typical of urban environments and would not involve mining operations, deep excavation into the Earth, or boring of large areas creating unstable seismic conditions or stresses in the Earth's crust that would result in the rupture of a fault. The Downtown Plan would increase development potential, thereby potentially increasing the number of people and structures exposed to seismic ground shaking or seismic related ground failure (including liquefaction or landslides); however, it would not cause or accelerate existing geologic hazards, including altering the underlying soil or groundwater characteristics that govern liquefaction or landslide potential and replacement of older structures with new structures that comply with current seismic standards would generally improve seismic safety. While the future development would not increase the risk of an earthquake, construction can have the effect of changing soil conditions that may increase the potential for landslide or liquefaction. However, with compliance with existing regulatory standards, including Chapter 18 of the CBC and all other excavation and grading requirements in the CBC and LABC, future development under the Downtown Plan would not change the soil conditions that would increase the risk to structures or persons from future seismic related ground failure, including landslides or liquefaction. Therefore, the Downtown Plan would have ***no impact*** with respect to the rupture of a known earthquake fault, strong seismic ground shaking or seismic-related ground failure (including liquefaction) or landslides.

The following information about the risk of rupture of known earthquake fault, strong seismic ground shaking, and seismic-related ground failure (including liquefaction) or landslides from existing conditions and that risk to existing or future residents in the Downtown Plan Area is for informational purposes.

No Earthquake Fault Zones or identified faults cross through the Downtown Plan Area; therefore, neither residents nor future structures would be exposed to increased risk from potential fault rupture, and the Downtown Plan Area development would not be subject to buffering requirements of the Alquist-Priolo Earthquake Fault Zoning Act.

The Downtown Plan Area is located in a region of high potential for seismic activity, similar to most of Southern California. Several potentially active fault systems could generate substantial damage to Downtown Plan Area structures. All of Los Angeles is generally subject to large magnitude earthquakes and is located within Seismic Zone 4, designated as having the highest national seismic potential (UBC 1997). However, relative to other areas in Southern California, the Downtown Plan Area is currently designated as having an average expected ground shaking potential from earthquakes, according to the California Department of Conservation's (DOC) California Earthquake Shaking Potential Map (DOC 2016). Reasonably anticipated development from the Downtown Plan would involve new construction, including larger, taller buildings, more dense development, and a larger daytime population compared to

current conditions. As such, additional structures and people could be exposed to the potential effects of seismic ground shaking from regionally generated earthquakes. However, reasonably anticipated development from the Downtown Plan would not increase the potential for earthquakes or otherwise exacerbate ground shaking potential in the Downtown Plan Area. Moreover, in many cases, new development would replace older buildings subject to seismic damage with structures built to current seismic standards, which would decrease the risk of damage to people and structures.

Continued implementation of City regulations and requirements on all new development would minimize ground shaking hazards through requiring implementation of current geotechnical practices and compliance with CBC requirements, which include specific structural seismic safety provisions. As required by CBC Chapter 16 for the construction of new buildings or structures, specific engineering design and construction measures would be implemented to minimize the potential for adverse impacts to human life and property caused by seismically induced ground shaking. Chapter 33 of the CBC requires all new development to comply with specific geologic design parameters and geotechnical recommendations, which would be incorporated into individual development projects to minimize the potential for adverse impacts. In addition, Policy 1.1.6 of the Safety Element of the City General Plan encourages development to comply with applicable state and federal planning and development regulations, including the Alquist-Priolo Earthquake Fault Zoning Act and the Seismic Hazards Mapping Act. Compliance with applicable regulations and policies would minimize the risk of exposure to hazards associated with seismic ground shaking.

As previously discussed and shown on **Figure 4.6-4**, areas of potential liquefaction in the Downtown Plan Area include much of the northern portion of the Downtown Plan Area. Development in this portion of the Downtown Plan Area could be susceptible to liquefaction risk, especially given that the Downtown Plan would allow for increased density of development throughout the Plan Area. However, construction in liquefaction zones would not increase liquefaction potential and new structures would be built to current/improved future building, structural and seismic codes per the requirements of the CBC. Construction would comply with existing regulations, as included in Chapter 18 of the CBC, to ensure that building foundations are properly anchored and stabilized to withstand damage from potential liquefaction. All new construction in liquefaction-prone areas would be required to prepare a geotechnical report. Additionally, for properties with mapped maximum considered earthquake spectral response, as determined by Section 1613 of the CBC, a liquefaction potential study of the property is required. Required compliance with the recommendations identified in the project-specific geotechnical evaluation, the LABC, and any specific requirements established by Los Angeles Department of Public Works (LADPW) and/or the City's Engineer would ensure that future development would not be exposed to substantial risks associated with liquefaction.

Strong ground motion can worsen existing unstable slope conditions, particularly if improper construction has already destabilized the underlying soil structure on hillslopes. Future reasonably anticipated development from the Downtown Plan, if not properly designed and constructed, could potentially destabilize hillslopes and result in an increased risk of landslide. Seismically-induced landslides can overrun structures, people or property, sever utility lines, and block roads, thereby hindering rescue operations after an earthquake. Slope stability depends on many factors and their interrelationships. Rock type and pore water pressure are arguably the most important factors, as well as slope steepness due to natural or human-made undercutting. Where slopes have failed before, they may fail again. The Downtown Plan Area is mostly flat, and landslide hazards are minimal. However, as shown in **Figure 4.6-4**, the Hollywood and Los Angeles Seismic Hazard Maps indicate that scattered landslide zones are located in the northwestern portion of the Downtown Plan Area. These include the hills surrounding Dodger Stadium and the steeper slopes along Grand Avenue between 3rd Street and 5th Street. Additional areas with landslide potential are near the 101 Freeway overpass near Grand Avenue. The new Downtown Plan land use designations would accommodate development of high density residential, and government support/public

services uses in these areas, and would be subject to potential landslide risk. However, compliance with CBC standards would require an assessment of landslide hazards and the incorporation of design measures into structures to mitigate these hazards. Also, any development on steep terrain would require site-specific slope stability design to ensure adherence to the standards contained in Appendix Chapter A33, Excavation and Grading, of the CBC, as well as California Division of Occupational Safety and Health (DOSH, CAL/OSHA) requirements for shoring and stabilization. Any development in areas susceptible to landslides would be required to implement site-specific measures that would generally reduce landslide potential and, as such, would not increase landslide hazards on adjacent properties.

Compliance with applicable regulations, as described above, for all new Downtown Plan Area development would achieve applicable seismic safety standards. In addition, future Downtown Plan Area development would not increase the potential for seismic related geological hazards and, in some cases, may reduce the potential for property damage and/or safety concerns by replacing older structures with new structures built to current seismic standards. Thus, ***no impact*** would occur.

New Zoning Code Impact

Earthquake fault zones and areas susceptible to liquefaction, lateral spreading, seismic ground shaking, and landslides exist throughout the City. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, geologic risk impacts to people or structures cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze if the zoning applied would expose people to faulting and seismic hazardous conditions.

The New Zoning Code does not include any standards or provisions that would increase the exposure of people to faulting and seismic hazardous conditions. Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development regulations, such as those in the CBC and the LAMC as discussed in Regulatory Setting, intended to avoid these effects. Therefore, ***no impact*** would occur.

Mitigation Measures

None required for either the Downtown Plan or the New Zoning Code.

Threshold 4.6-2	Result in substantial soil erosion or the loss of topsoil

Impact 4.6-2

Downtown Plan: Reasonably anticipated development from the Downtown Plan would not result in substantial soil erosion and loss of topsoil because it would be required to comply with state and local applicable regulations and standards. The impact would be ***less than significant.***

New Zoning Code: The New Zoning Code does not include any standards that would result in increased soil erosion or loss of topsoil and the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid these effects. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The impact would be ***less than significant***.

Downtown Plan Impact

As discussed in the Environmental Setting above, most of the Downtown Plan Area's topography is relatively flat, with several moderately hilly slopes located along the northwest corner of the Downtown Plan Area. Soils with smaller grain size and lower cohesion, such as sandy silt, have moderate erosion potential. Loose and disturbed soils are more prone to erosion by wind and water. Reasonably anticipated development from the Downtown Plan would involve construction activities such as stockpiling, grading, excavation, paving, and other earth-disturbing activities.

As discussed under federal, state and local requirements, construction activities that disturb one or more acres of land surface are subject to the NPDES General Construction Permit process, which would require development of a SWPPP that outlines project-specific BMPs to control erosion, sediment release, and otherwise reduce the potential for discharge of pollutants from construction into stormwater. Typical BMPs include, but are not limited to, installation of silt fences, erosion control blankets, and anti-tracking pads at site exits to prevent off-site transport of soil material.

Because the Downtown Plan Area is almost entirely built out, the potential for erosion is primarily limited to temporary effects of possible topsoil loss at project construction sites. For construction activities, Section D of LAMC Article 4.4, *Stormwater and Urban Runoff Pollution Control*, requires owners or developers to implement stormwater pollution control requirements for construction activities depicted in the project plans, which are subject to approval by the Department of Building and Safety; the Director of the Department may require additional and/or alternative site-specific BMPs or conditions, if needed. The BMPs would be in accordance with the provisions contained in the "Planning and Land Development Handbook For Low Impact Development (LID), Part B Planning Activities" and would be designed to capture and treat runoff from construction sites such as through stabilization of construction entrance roadways and on-site retention of eroded sediments and pollutants. The City and PRC Section 2697 require the preparation of a site-specific geotechnical report to evaluate soils issues. For sites where grading activities would occur on one or more acre, construction activities would be subject to the statewide General Construction Permit required by the State Water Resources Control Board in compliance with the federal NPDES program, which would require preparation and implementation of a SWPPP that includes additional site-specific BMPs to reduce potential stormwater pollution from onsite erosion. Construction activities would also be required to comply with CBC Chapter 70 standards, which are designed to ensure implementation of appropriate measures during grading and construction to control erosion and storm water pollution. Therefore, erosion from demolition and construction activities associated with future development within the Downtown Plan Area would be controlled through implementation of the

requirements and BMPs contained in existing regulations, including the NPDES Construction General Permit and LAMC.

While new reasonably expected construction activities from the Downtown Plan may slightly increase the potential for construction related soil erosion, consistent enforcement of CBC requirements and NPDES permit conditions, enacted through the LAMC requirements, would minimize runoff and pollution from construction sites, and ensure compliance with the Regional Water Quality Control Board (RWQCB) Water Quality Control Plan and its regulations. Further, BMPs for post-construction erosion and sediment control would remain in effect, which would improve future erosion conditions. Compliance with the regulations discussed above would reduce the risk of soil erosion from construction activities such that there would be no substantial change in risk compared to current conditions with existing development. Impacts related to soil loss would be ***less than significant***.

New Zoning Code Impact

As discussed in Existing Conditions, soil erosion potential in the City varies by location but is predominantly concentrated in the City's mountain and hillside areas. The New Zoning Code would provide options for a range of densities and intensities that could be applied elsewhere in the City through future community plan updates or amendments. However, due to the modular nature of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time therefore, impacts cannot be identified. Additionally, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative.

The New Zoning Code does not include any standards or provisions that would result in increased soil erosion or loss of topsoil. Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development regulations, such as those within the CBC and the LAMC as discussed in Regulatory Setting, intended to avoid these effects.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific soil erosion and loss of topsoil. A ***less than significant*** impact would occur.

Mitigation Measures

None required for either the Downtown Plan or the New Zoning Code.

Threshold 4.6-3	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse

Impact 4.6-3 **Downtown Plan:** Reasonably anticipated development from the Downtown Plan would be subject to existing requirements, regulations and policies provided in the LABC, which would ensure that reasonably anticipated development from the Downtown Plan would not increase or otherwise alter the potential for impacts related to on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse compared to existing conditions. ***No impact*** would occur.

New Zoning Code: The New Zoning Code does not include standards that would result in unstable geologic units or soils. Additionally, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid these effects. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any impacts from the future use of the New Zoning Code on soil stability outside the Downtown Plan Area would be speculative. ***No impact*** would occur.

Downtown Plan Impact

See also discussion of landslides and liquefaction in Impact 4.6-1. Lateral spreading occurs as a result of liquefaction; accordingly, liquefaction-prone areas would also be susceptible to lateral spreading. **Figure 4.6-4** shows that the majority of liquefaction risk in the Downtown Plan Area is located in the top third portion of the Downtown Plan Area. This area would, likewise, have the greatest susceptibility to lateral spreading. Further, portions of the Downtown Plan Area have been identified as potentially susceptible to subsidence due to local oil field drilling. In the Central Los Angeles region, the potential for subsidence is greatest in the southwestern portion Area (Los Angeles Downtown Oil Field) and the central-eastern portion of the Downtown Plan Area (Union Station Oil Field), as shown in **Figure 4.6-5** (City of Los Angeles 1995).

As previously discussed and shown in **Figure 4.6-4**, areas of potential liquefaction in the Downtown Plan Area include scattered segments along the western boundary running from 6th Street north to Cesar E. Chavez Avenue and northern-third section to the east of Broadway. The Downtown Plan would establish Transit Core, Community Center, Public Facilities, Villages, and central City Planning / City of Los Angeles accommodate development of high density mixed-use commercial, residential, office, and public services uses in these areas. These new developments could be located in areas susceptible to liquefaction risk. However, new reasonably anticipated development from the Downtown Plan would not increase the potential for liquefaction or otherwise increase the potential for exposure to liquefaction-related damage. In addition, by replacing older structures with new structures built to current standards, future projects involving redevelopment of properties would reduce the potential for liquefaction-related damage. Future development in the Downtown Plan Area would be designed to withstand potential liquefaction hazards. Under the provisions of LABC, all new construction would be required to first assess the potential for liquefaction at the building site, and then provide design recommendations to mitigate the site's liquefaction potential. Construction in liquefaction zones would be built to current/improved future building, structural and seismic codes per the requirements of the CBC. Construction would comply with existing regulations, as included in Chapter 18 of the CBC, to ensure that building foundations are properly anchored and stabilized to withstand damage from potential liquefaction.

In addition to being susceptible to potential liquefaction, as mentioned previously, areas of development that would be located in existing landslide or subsidence risk (collapse) zones include those with Transit Core, Villages, Public Facilities, Community Center, and Medium Neighborhood Residential land use designations under the Downtown Plan. However, construction would primarily involve infill development of uses that already exist in those areas and future development would be required to comply with Division 18, *Soils and Foundations,* of the LABC, which adopted Chapter 18 of the CBC by reference. Therefore, future development would be required to comply with the CBC regarding the minimum standards for structural design and site development. The CBC, which is based on the UBC, has been modified for California conditions with more detailed and/or more stringent regulations. The CBC requires that "classification of the soil at each building site shall be determined when required by the building official" and that "the classification shall be based on observation and any necessary test of the materials disclosed by borings or excavations." Section 91.1803 and Section 91.1804 of the LAMC reference the CBC standards for excavation, grading, and earthwork construction; fills and embankments; expansive soils;

foundation investigations; and liquefaction potential and soils strength loss. Thus, an acceptable degree of soil stability can be achieved for soil materials by the CBC-required incorporation of soil treatment programs (replacement, grouting, compaction, drainage control, etc.) in the excavation and construction plans to address site-specific soil conditions. In addition to the CBC regulations, State Oil and Gas laws (including but not limited to, Public Resources Code Sections 3315, et seq., extensively regulate the operation of oil and gas wells to ensure that subsidence does not occur to threaten people or property. Adherence to these requirements would achieve accepted safety standards relative to unstable geologic units or soils. In addition, although reasonably anticipated development from the Downtown Plan would potentially be subject to these hazards, it would not increase the potential for landslides (non-seismic related), liquefaction (non-seismic related) lateral spreading, subsidence, or collapse. Therefore, ***no impact*** would occur.

New Zoning Code Impact

Impacts related to liquefaction as a result of earthquake-induced ground failure are addressed under Impact 4.6-1; therefore, this discussion focuses on impacts related to unstable soils as a result of non-earthquake-induced liquefaction, landslides, subsidence, or collapse. As discussed, areas prone to liquefaction and landslide are located throughout the City. Certain areas of the City may also be susceptible to subsidence/collapse as a result of groundwater and oil withdrawal.

The New Zoning Code would provide options for a range of densities and intensities that could be applied through future community plan updates or amendments. However, due to the modular nature of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative.

The New Zoning Code does not include any standards or provisions that would result in unstable geologic units or soils. Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development regulations, such as those within the CBC and the LAMC as discussed in Regulatory Setting, intended to avoid these effects.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific soil hazards. ***No impact*** would occur.

Mitigation Measures

None required for either the Downtown Plan or the New Zoning Code.

Threshold 4.6-4	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property

Impact 4.6-4

Downtown Plan: Reasonably anticipated development from the Downtown Plan may involve new development in areas with expansive soils, but would not create substantial risk to people or structures as all future development would be subject to applicable standards of the CBC. ***No impact*** would occur.

New Zoning Code: The New Zoning Code does not include any standards that would create risks as a result of expansive soils. Additionally, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid these effects. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. ***No impact*** would occur.

Downtown Plan Impact

As discussed in Section 4.6.2, *Environmental Setting*, a majority of the land surface in the Downtown Plan Area is covered in structures and pavement, which limits the extent of exposed surface soils, and a majority of urban land that underlies the Downtown Plan Area consist primarily of alluvium. A vein of older, finer alluvium substratum is located at the northwestern boundary of the Downtown Plan Area and trends southwest between Figueroa Street and Hope Street towards West 8th Street. These finer sediments may include large amounts of sand and sandy, silt which are porous and move easily during seismic activity (NRCS 2010). The alluvium could also contain clays in addition to sand and silt, which are generally considered to have high potential to be expansive. However, LABC regulations would require underlying soils for each individual development site in the Downtown Plan Area to be evaluated for the presence of expansive soils and remediated as necessary to reduce potential damage risk.

Reasonably anticipated development from the Downtown Plan may be exposed to risks associated with expansive soils, but would not increase soil expansiveness or increase exposure of existing development in the Downtown Plan Area to such hazards. All future development would be required to comply with applicable provisions of the CBC with regard to soil hazard-related design and in adherence to Policy 1.1.6 of the Safety Element of the City General Plan, which assures compliance with applicable local, state, and federal planning and development regulations to minimize risks from natural hazards. The CBC requires a site-specific soil investigation for any new development that identifies potentially unsuitable soil conditions in a preliminary soil report. Because development under the Downtown Plan would not increase the potential for soil expansion and would comply with applicable LABC regulations, there would be no change in the exposure of people or existing structures to risks associated with expansive soils. ***No impact*** would occur.

New Zoning Code Impact

As discussed in Existing Conditions, much of the City of Los Angeles is underlain with alluvium, which generally consists of fine particles of silt and clay with larger particles like sand and gravel. As such, some soils in the City are considered expansive soils. The New Zoning Code does not include any standards or provisions that would create risks as a result of expansive soils. Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development regulations, such as those within the CBC and the LAMC as discussed in Regulatory Setting, intended to avoid these effects.

The New Zoning Code would provide options for a range of densities and intensities that could be applied through future community plan updates or amendments. However, due to the modular nature of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific soil conditions. ***No impact*** would occur.

Mitigation Measures

None required for either the Downtown Plan or the New Zoning Code.

Threshold 4.6.5	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater

Impact 4.6-5

Downtown Plan: The entire Downtown Plan Area is served by the City's sewer system. Use of septic systems or other alternative wastewater disposal systems would not be needed in the Downtown Plan Area**.** ***No impact*** would occur**.**

New Zoning Code: The New Zoning Code does not include any standards that would result in soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems. Additionally, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid these effects. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This impact would be ***less than significant***.

Downtown Plan Impact

The Downtown Plan Area is currently almost entirely built out with established utility infrastructure and associated services. Sewer services are provided by the Los Angeles Sanitation Department. Reasonably anticipated development from the Downtown Plan would be required to connect to the existing sewer system. Therefore, development under the Downtown Plan would not require the use of septic tanks and ***no impact*** would occur.

New Zoning Code Impact

There are approximately 13,000 septic systems in the City (City of Los Angeles 2018b). In coordination with the City of Los Angeles Bureau of Engineering, City of Los Angeles Department of Building and Safety, and the Regional Water Quality Control Board, the City of Los Angeles Bureau of Sanitation assists septic system owners and operators in permitting new construction, alteration, or replacement. The New Zoning Code does not include standards or provisions that would impact the capacity of soil to adequately support the use of septic tanks or alternative wastewater disposal systems. Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied

development policies, such as those within the CBC and the LAMC as discussed in Regulatory Setting, intended to avoid these effects.

The New Zoning Code would provide options for a range of densities and intensities that could be applied through future community plan updates or amendments. However, due to the modular nature of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts related to septic tanks cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific soils incapable of supporting the use of septic tanks. A ***less than significant*** impact would occur.

Mitigation Measures

None required for either the Downtown Plan or the New Zoning Code.

Threshold 4.6-6	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

Impact 4.6-6

Downtown Plan: Implementation of the Downtown Plan could cause a substantial adverse change in or disturb a unique paleontological or a unique geologic feature. Impacts to paleontological resources would be ***less than significant with mitigation***.

New Zoning Code: Paleontological resources exist citywide. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Projects which involve excavation further than five feet below the ground may impact paleontological resources, however, due to the modular nature of the New Zoning Code, it is not known where or to what extent projects which excavate to this depth will be built. This would be a ***less than significant*** impact.

Downtown Plan Impact

As described under Existing Conditions, the majority of the superficial sediments in the Downtown Plan Area are Quaternary alluvium that is defined as low paleontological sensitivity at the surface. However, these sediments increase in age with depth, and subsurface sediments may have high paleontological sensitivity as few as five feet below ground surface. Therefore, paleontological resources may be present in fossil-bearing sediments in relatively shallow depths below much of the Downtown Plan Area. Ground disturbing activities that include excavation greater than five feet below ground surface have the potential to damage or destroy an unknown quantity of paleontological resources in this area. In addition, there is an area along the eastern edge of the Downtown Plan Area (along the river), and in the northwestern portion of the Downtown Plan Area that has high paleontological sensitivity. Ground-disturbing activities in geologic units in the Downtown Plan Area that are defined as having high paleontological sensitivity at the surface, including the Monterey, Puente, and Fernando formations and Quaternary older alluvium have the potential to damage or destroy an unknown quantity of paleontological resources.

In general, the potential for a specific development to result in negative impacts to paleontological resources is directly proportional to the amount of ground disturbance associated with the development; thus, the higher the amount of ground disturbances within geological units with a known paleontological sensitivity, the greater the potential for adverse impacts to paleontological resources. Development involving major building foundation construction (i.e. high rises) and subsurface parking would have a high potential for major excavation that could impact subsurface resources. The area of high sensitivity along the eastern edge of the Downtown Plan Area is primarily confined to the Los Angeles County River. Because development in or immediately adjacent to the river bed would not occur, development in this portion of the Downtown Plan Area has low potential to disturb resources. Nevertheless, there is potential for ground disturbing activities for future development throughout the Downtown Plan Area, including the area with high paleontological sensitivity in the northwestern portion of the Downtown Plan Area. Therefore, activities resulting from any reasonably anticipated development from the Downtown Plan, which includes construction-related and earth-disturbing actions, could damage or destroy fossils in these geologic units, resulting in a ***potentially significant*** impact.

New Zoning Code Impact

As described under Existing Conditions, paleontological resource sensitivity varies throughout the City. Some areas in the City have higher levels of sensitivity, however, due to the modular structure of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, the risks of impacting paleontological resources cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze if the zoning applied would disturb paleontological resources.

As discussed above, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific impacts to paleontological resources. ***Less than significant*** impacts to paleontological resources would occur.

Mitigation Measures

Downtown Plan

The following measure is required to address potential impacts to paleontological resources.

4.6-6(a) Paleontological Resources

For all discretionary projects that are excavating earth for two or more subterranean levels within previously undisturbed land or below previously excavated depths within native soils, a determination shall be made using all reasonable methods to determine the potential that paleontological resources are present on the project site, including through searches of databases and records, and surveys. If there is a medium to high potential that paleontological resources are located on the project site and it is possible that these resources will be impacted, monitoring will be conducted for all excavation, grading or other ground disturbance activities to identify any resources and avoid potential impacts to such resources as follows:

- **Paleontological Worker Environmental Awareness Program (WEAP).** Prior to the start of construction, the paleontological monitor shall conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. In the event of a fossil discovery by construction personnel, all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be contacted to evaluate the find before restarting work in the area. If it is determined that the fossil(s) is(are) scientifically significant, the paleontological monitor shall complete the next two steps.
- **Fossil Salvage.** The Qualified Paleontologist or designated paleontological monitor shall recover intact fossils. Typically fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case the paleontologist shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. Any fossils shall be handled and deposited consistent with a mitigation plan prepared by the paleontological monitor.
- **Paleontological Resource Construction Monitoring.** Additional ground disturbing construction activities (including grading, trenching, foundation work and other excavations) in undisturbed sediments, below five feet, with high paleontological sensitivity shall be monitored on a full-time basis by a Qualified Paleontologist or designated paleontological monitor during initial ground disturbance. If the paleontological monitor determines that full-time monitoring is no longer warranted, he or she may recommend that monitoring be reduced to periodic spot-checking or cease entirely. Monitoring shall be reinstated if any new or unforeseen deeper ground disturbances are required.

4.6-6(b) Treatment of Paleontological Resources

For discretionary projects, the City shall require that all paleontological resources identified on a project site be assessed and treated. A report shall be prepared according to current professional standards that describes the resource, how it was assessed, and disposition.

4.6-6(c) Notification of Intent to Excavate Language

For all projects not subject to 4.6-6(a) that are seeking excavation or grading permits, the Department of Building and Safety shall issue the following notice and obtain an acknowledgement of receipt of the notice from applicants:

- California Penal Code Section 622.5 provides the following: "Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor."

- PRC Section 5097.5 provides protection for cultural and paleontological resources, where Section 5097.5(a) states, in part, that: "No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands."

- California Code of Regulations, Title 14, Section 4307 states that "no person shall remove, injure, deface or destroy any object of paleontological, archaeological, or historical interest or value." Section 1427 "recognizes that California's archaeological resources are endangered by urban development and population growth and by natural forces….Every person, not the owner

thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archaeological or historical interest or value, whether situated on private lands or within any public park of place, is guilty of a misdemeanor. It is a misdemeanor to alter any archaeological evidence found in any cave, or to remove any materials from a cave."

- Best practices to ensure unique geological and paleontological resources are not damaged include but are not limited to the following steps:
    - Prior to excavation and grading activities a qualified paleontologist prepares a resource assessment using records from the Natural History Museum of Los Angeles County.
    - If in the assessment, the soil is identified as potentially containing paleontological resources, a qualified paleontologist monitors excavation and grading activities in soils that have not been previously disturbed, to identify, record, and evaluate the significance of any paleontological finds during construction.
    - If paleontological resources are uncovered (in either a previously disturbed or undisturbed area), all work ceases in the area of the find until a qualified paleontologist has evaluated the find in accordance with federal, state, and local guidelines.
    - If fossils are discovered, a qualified paleontologist shall recover them. Typically fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case the paleontologist would have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. Handline and disposition of fossils is done at the direction and guidance of a qualified paleontologist.
    - Personnel of the project would not collect or move any paleontological materials or associated materials.
    - If cleared by the qualified paleontologist, construction activity would continue unimpeded on other portions of the project site.
    - Construction activities in the area where resources were found would commence once the identified resources are properly assessed and processed by a qualified paleontologist and if construction activities were cleared by the qualified paleontologist.

New Zoning Code

Significant impacts have not been identified; therefore, mitigation is not required for the New Zoning Code.

Significance After Mitigation

Downtown Plan

Implementation of Mitigation Measures 4.6-1(a), 4.6-1(b) and 4.6-1(c) would reduce impacts to paleontological resources to a less than significant level by ensuring that potential resources are identified and either further avoided or recovered.

New Zoning Code

Not applicable.

CUMULATIVE IMPACTS

The geographic area to analyze cumulatively considerable geologic impacts includes the entire City of Los Angeles.

Exposure to Seismic Hazards

Continued growth throughout Los Angeles would cumulatively expose more people to existing seismic hazards. However, new development would not increase the potential for earthquakes or associated hazards (surface rupture, liquefaction, landsliding). Seismic conditions are site-specific and do not have additive effects so changes to seismic conditions from development at one site would not affect seismic conditions at another development site. Compliance with applicable CBC requirements would ensure that new development conforms to current seismic standards and that it would not expose current residents or existing property to increased hazards (such as from an increase in landslide potential). As discussed under Impact 4.6-1, development in the Downtown Plan Area similarly would not increase the potential for seismic hazards. All development throughout the Downtown Plan Area would continue to comply with applicable provisions of the CBC and other applicable regulations. By replacing older development with new structures built to current safety standards, implementation of the Downtown Plan would cumulatively reduce the potential for seismic hazards to affect people or property.

The New Zoning Code would only apply to the Downtown Plan Area at this time so analysis of any impacts related to future community plan updates would be speculative. Nevertheless, the New Zoning Code does not include any provisions that would increase the potential for earthquakes or related events. Based on these facts, neither the Downtown Plan nor the New Zoning Code would contribute to any cumulative impacts related to seismic hazards.

The Proposed Project would have ***no cumulative impact*** related to seismic hazards.

Soil Erosion

Continued growth in Los Angeles would involve grading and excavation that could temporarily but cumulatively increase the potential for soil erosion throughout the City. However, new development would be subject to applicable requirements of the NPDES General Construction Permit and Section D of LAMC Article 4.4, Stormwater and Urban Runoff Pollution Control. Compliance with these requirements would generally address cumulative impacts related to soil erosion. Future development in the Downtown Plan Area would be subject to the same federal and local requirements. As discussed under Impact 4.6-2, this would reduce impacts related to Downtown Plan Area soil disturbance to a less than significant level.

The New Zoning Code would only apply to the Downtown Plan Area at this time so analysis of any impacts related to future community plan updates would be speculative. Nevertheless, the New Zoning Code does not include any provisions that would increase the potential for soil erosion beyond what could otherwise occur. Based on these facts, neither the Downtown Plan nor the New Zoning Code would contribute to any cumulative impacts related to soil erosion.

The Proposed Project would have ***no cumulative impact*** related to soil erosion.

Unstable geologic units

Continued growth throughout Los Angeles would cumulatively expose more people to existing hazards associated with unstable geologic units (e.g., liquefaction, landsliding). However, new development would not increase the potential for geologic instability. Soil and geologic conditions are site-specific and do not have additive effects. As such, changes to geologic conditions from development at one site would not

affect geologic conditions at another development site. Compliance with applicable CBC requirements would ensure that new development conforms to current standards related to geologic stability and that it would not expose current residents or existing property to increased hazards. As discussed under Impact 4.6-3, development in the Downtown Plan Area similarly would not increase the potential for geologic hazards. All development throughout the Downtown Plan Area would continue to comply with applicable provisions of the CBC and other applicable regulations. By replacing older development with new structures built to current standards, implementation of the Downtown Plan would cumulatively reduce the potential for hazards related to geologic instability to affect people or property.

The New Zoning Code would only apply to the Downtown Plan Area at this time so analysis of any impacts related to future community plan updates would be speculative. Nevertheless, the New Zoning Code does not include any provisions that would increase geologic instability. Based on these facts, neither the Downtown Plan nor the New Zoning Code would contribute to any cumulative impacts related to unstable geologic units.

The Proposed Project would have ***no cumulative impact*** related to unstable geologic units.

Expansive Soils

Continued development throughout Los Angeles would cumulatively increase the potential for exposure to expansive soil-related issues. However, neither citywide development nor, as discussed under Impact 4.6-4, development in the Downtown Plan area specifically would increase the potential for soil expansion or otherwise increase exposure of existing people or property to hazards associated with expansive soils.

The New Zoning Code would only apply to the Downtown Plan Area at this time so analysis of any impacts related to future community plan updates would be speculative. Nevertheless, the New Zoning Code does not include any provisions that would increase the potential for soil expansion. Based on these facts, neither the Downtown Plan nor the New Zoning Code would contribute to any cumulative impacts related to expansive soils.

The Proposed Project would have ***less than significant cumulative impacts*** related to expansive soils.

Septic tanks/alternative wastewater treatment

Most of Los Angeles is served by sewer systems, though certain areas continue to utilize alternative wastewater treatment systems. Continued growth in the City could incrementally increase the number of residences using such wastewater treatment systems; however, because the Downtown Plan Area is completely served by sewers, Downtown Plan Area development would not contribute to any cumulative impacts related to alternative wastewater treatment.

The New Zoning Code would only apply to the Downtown Plan Area at this time. Analysis of any impacts related to future community plan updates would be speculative, but the New Zoning Code does not include any provisions that would contribute to any cumulative impacts in this regard. Thus, neither the Downtown Plan nor the New Zoning Code would contribute to any cumulative impacts related to alternative wastewater treatment.

The Proposed Project would have ***no cumulative impact*** related to septic tanks/alternative wastewater treatment.

Paleontological Resources

Cumulative development throughout Los Angeles could potentially disturb known and currently unknown paleontological resources that could be present throughout the City. The nature and magnitude of such

impacts would depend on the nature and location of individual future developments so it would be speculative to try to predict the specific level of cumulative impact that may occur as the City continues to develop. Nevertheless, it is anticipated that citywide development would have the potential to disturb paleontological resources. Potentially significant cumulative paleontological resource impacts could, however, be mitigated to below a level of significance through resource avoidance or recovery on a case-by-case basis.

As discussed under Impact 4.6-6, the Downtown Plan could potentially disturb paleontological resources that may be present in the Downtown Plan Area. However, mitigation measure 4.6-1(a), (b), (c) is expected to reduce to a less than significant level.

The New Zoning Code would only apply to the Downtown Plan Area at this time. Therefore, it would be speculative to predict what impact, if any, the New Zoning Code may have in other areas of the City. Nevertheless, it is not anticipated that any aspect of the New Zoning Code would result in the loss of paleontological resources. Based on this information, neither the Downtown Plan nor the New Zoning Code would substantially contribute to any significant cumulative impact to paleontological resources.

The Proposed Project would have ***less than significant*** cumulative impacts related to paleontological resources.

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4.7 GREENHOUSE GAS EMISSIONS

This section evaluates potential impacts related to greenhouse gas (GHG) emissions. GHGs are emitted by both natural processes and human activities. The accumulation of GHGs in the atmosphere regulates Earth's temperature. The State of California has undertaken initiatives designed to address the effects of GHGs, and to establish targets and emission reduction strategies for GHG emissions in California. The GHG data supporting this section is included as Appendix I to this Draft EIR. The analysis of GHG emissions and climate change is unique under CEQA, largely because of the global nature of climate change. Typical CEQA analyses address local actions that have local – or regional – impacts, whereas climate change analyzes the relationship between local activities and the resulting potential, if any, for global environmental impacts. Based on this, the focus of GHG emission analysis is on cumulative impacts. As provided by the State Natural Resources Agency in the latest update to the CEQA Guidelines: "In determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable *incremental contribution* of the project's emissions to the effect of climate change." (15064.4(b).)

ENVIRONMENTAL SETTING

GLOBAL CLIMATE CHANGE

Earth's natural warming process is known as the "greenhouse effect." Certain atmospheric gases act as an insulating blanket for solar energy to keep the global average temperature in a suitable range for life support. These greenhouse gases (GHGs) keep the average surface temperature of the Earth close to 60 degrees Fahrenheit (°F). Without the natural greenhouse effect, the Earth's surface would be about 61°F cooler (California Environmental Protection Agency [CalEPA] 2006). It is normal for Earth's temperature to fluctuate over extended periods of time. Over the past one hundred years, Earth's average global temperature has generally increased by one degree Fahrenheit. In some regions of the world, the increase has been as much as four degrees Fahrenheit.

Scientists studying the particularly rapid rise in global temperatures during the late twentieth century believe that natural variability alone does not account for that rise. Rather, human activity spawned by the industrial revolution has likely resulted in increased emissions of carbon dioxide and other forms of GHGs, primarily from the burning of fossil fuels (i.e., during motorized transport, electricity generation, consumption of natural gas, industrial activity, manufacturing, etc.) and deforestation, as well as agricultural activity and the decomposition of solid waste (C2ES 2011).

GHG Components and Effects

The California Global Warming Solutions Act of 2006 (discussed in the following pages) defined GHGs to include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulfur hexafluoride (SF_6), and nitrogen trifluoride. Black carbon also contributes to global warming, but it is a solid particle or aerosol, not a gas. A general description of each GHG discussed in this report is provided in **Table 4.7-1** (Description of Identified Greenhouse Gases). CO_2 is the most abundant GHG. Other GHGs are less abundant, but have higher global warming potential (discussed below) than CO_2. Thus, emissions of other GHGs are frequently expressed in the equivalent mass of CO_2, denoted as CO_2e. Forest fires, decomposition, industrial processes, landfills, and consumption of fossil fuels for power generation, transportation, heating, and cooking are the primary sources of GHG emissions.

Global Warming Potential

Global Warming Potential (GWP) is one type of simplified index based upon radiative properties that is used to estimate the potential future impacts of emissions of different gases upon the climate system in a relative sense. GWP is based on a number of factors, including the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of CO_2. A summary of the atmospheric lifetime and GWP of selected gases is presented in **Table 4.7-2**.

TABLE 4.7-1 DESCRIPTION OF GREENHOUSE GASES

GHG	General Description
CO_2	Carbon Dioxide. CO_2 is an odorless, colorless GHG, which has both natural and man-made sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing; man made sources of CO_2 are burning coal, oil, natural gas, and wood.
CH_4	Methane. CH_4 is a flammable gas and is the main component of natural gas. When one molecule of CH_4 is burned in the presence of oxygen, one molecule of CO_2 and two molecules of water are released. There are no ill health effects from CH_4. A natural source of CH_4 is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain CH_4, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and cattle.
N_2O	Nitrous Oxide. N_2O is a colorless GHG. High concentrations can cause dizziness, euphoria, and sometimes slight hallucinations. N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used in rocket engines, race cars, and as an aerosol spray propellant.
HFCs	Hydrofluorocarbons. HFCs are synthetic man-made chemicals that are used as a substitute for chlorofluorocarbons (CFCs) for automobile air conditioners and refrigerants. CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at Earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. Because they destroy stratospheric ozone, the production of CFCs was stopped as required by the Montreal Protocol in 1987.
PFCs	Perfluorocarbons. PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane and hexafluoroethane. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.
SF_6	Sulfer Hexafluoride. SF_6 is an inorganic, odorless, colorless, non-toxic, and nonflammable gas. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.
Black Carbon[1]	Black Carbon. Black carbon is the most strongly light-absorbing component of particulate matter emitted from burning fuels such as coal, diesel, and biomass.

SOURCE: Association of Environment Professionals (AEP). 2007. *Alternative Approaches to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents*. June, 2007.

1 Black carbon contributes to global warming, but it is a solid particle or aerosol, not a gas.

TABLE 4.7-2 ATMOSPHERIC LIFETIMES AND GLOBAL WARMING POTENTIALS

GHG	Lifetime (Years)	Global Warming Potential (20-Year)	Global Warming Potential (100-Year)
Carbon Dioxide	100	1	1
Nitrous Oxide	121	264	265
Nitrogen Trifluoride	500	12,800	16,100
Sulfur Hexafluoride	3,200	17,500	23,500
Perfluorocarbons	3,000-50,000	5,000-8,000	7,000-11,000
Black Carbon	days to weeks	270-6,200	100-1,700
Methane	12	84	28
Hydrofluorocarbons	Uncertain	100-11,000	100-12,000

SOURCE: CARB, 2013. *Climate Change Scoping Plan First Update*, October 2013.
"Global Warming Potential" is a relative measure of how much heat a greenhouse gas traps in the atmosphere, as compared to carbon dioxide.

Statewide Climate Change

The California Environmental Protection Agency (CalEPA) published a report titled Scenarios of Climate Change in California: An Overview, *Climate Scenarios report*, in February 2006 that, while not adequate for a CEQA project-specific or cumulative analysis, is generally instructive about the future impacts of global warming on California.

In addition, on December 2, 2009, the California Natural Resources Agency released its California Climate Adaptation Strategy report that details many vulnerabilities arising from climate change with respect to matters such as temperature extremes, sea level rise, wildfires, floods and droughts and precipitation changes. This report responds to the Governor's Executive Order S-13-2008 that called on State agencies to develop California's strategy to identify and prepare for expected climate impacts.

According to these reports, substantial temperature increases arising from increased GHG emissions potentially could result in a variety of impacts to the people, economy, and environment of California. This includes an associated projected increase in extreme conditions, with the severity of the impacts depending upon actual future emissions of GHGs and associated warming. Under the emissions scenarios of the Climate Scenarios report, the impacts of global climate change in California have the potential to include, but are not limited to, the areas of public health, water resources, agriculture, forests and landscapes, and rising sea levels. The potential effects of climate change are detailed in the section below.

CARB has prepared a statewide emissions inventory covering 2000 to 2016, which demonstrates that GHG emissions have decreased by 9.0 percent over that period (CARB 2018a). **Table 4.7-3** shows GHG emissions from 2006 to 2016 in California. The transportation sector represents California's largest source of GHG emissions and contributed 39 percent of total annual emissions. Since 2013, emissions from the transportation sector have increased; however, the long-term direction of transportation-related GHG emissions is declining, with a 11 percent drop over the past ten years.

TABLE 4.7-3 CALIFORNIA GREENHOUSE GAS EMISSIONS INVENTORY

	Annual CO_2e Emissions (Million Metric Tons)										
Sector	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Transportation	189	189	178	170	165	162	161	161	162	166	169
Industrial	93	90	91	88	91	91	91	94	94	92	90
Electric Power	105	114	120	101	90	88	95	90	88	84	69
Commercial and Residential	43	43	44	44	45	46	43	44	37	38	39
Agriculture	35	36	36	33	34	35	36	35	36	34	34
High Global Warming Potential	10	11	12	12	14	15	16	17	18	19	20
Recycling and Waste	8	8	8	8	8	8	8	9	9	9	9
Emissions Total	**483**	**490**	**487**	**457**	**448**	**444**	**450**	**448**	**444**	**441**	**429**

SOURCE: CARB, *California Greenhouse Gas Inventory for 2000-2016 – by Category as Defined in the 2008 Scoping Plan*, 2018.

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources though potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Long-term trends have found that each of the past three decades has been warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The observed global mean surface temperature (GMST) for the decade from 2006 to 2015 was approximately 0.87°C (0.75°C to 0.99°C) higher than the average GMST over the period from 1850 to 1900. Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature (LSAT) obtained from station observations are in agreement that LSAT as well as sea surface temperatures have increased. Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2014 and 2018).

According to California's Fourth Climate Change Assessment, statewide temperatures from 1986 to 2016 were approximately 1°F to 2°F higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include loss in water supply from snow pack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2018). While there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. In addition to statewide projections, California's Fourth Climate Change Assessment includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the state as well as regionally-specific climate change case studies (State of California 2018). Below is a summary of some of the potential effects that could be experienced in California as a result of climate change.

Air Quality

Higher temperatures, which are conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. As temperatures have increased in recent years, the area burned by wildfires throughout the state has increased, and wildfires have been occurring at higher elevations in the Sierra Nevada Mountains (State of California 2018). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality would worsen. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thereby ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air

quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (California Natural Resources Agency 2009).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. For example, many southern California cities have experienced their lowest recorded annual precipitation twice within the past decade; however, in a span of only two years, Los Angeles experienced both its driest and wettest years on record (California Department of Water Resources [DWR] 2008). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. However, the average early spring snowpack in the western United States, including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea level rose over 5.9 inches along the central and southern California coast (State of California 2018). The Sierra snowpack provides the majority of California's water supply by accumulating snow during the state's wet winters and releasing it slowly during the state's dry springs and summers. A warmer climate is predicted to reduce the fraction of precipitation falling as snow and result in less snowfall at lower elevations, thereby reducing the total snowpack (DWR 2008; State of California 2018). The State of California projects that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (State of California 2018).

Hydrology and Sea Level Rise

As discussed above, climate change could potentially affect the amount of snowfall, rainfall, and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. Climate change has the potential to induce substantial sea level rise in the coming century (State of California 2018). The rising sea level increases the likelihood and risk of flooding. The rate of increase of global mean sea levels over the 2001-2010 decade, as observed by satellites, ocean buoys and land gauges, was approximately 3.2 mm per year, which is double the observed 20th century trend of 1.6 mm per year (World Meteorological Organization [WMO] 2013). As a result, global mean sea levels averaged over the last decade were about 8 inches higher than those of 1880 (WMO 2013). Sea levels are rising faster now than in the previous two millennia, and the rise is expected to accelerate, even with robust GHG emission control measures. The most recent IPCC report predicts a mean sea–level rise of 10 to 37 inches by 2100 (IPCC 2018). A rise in sea levels could completely erode 31 to 67 percent of southern California beaches, result in flooding of approximately 370 miles of coastal highways during 100-year storm events, jeopardize California's water supply due to salt water intrusion, and induce groundwater flooding and/or exposure of buried infrastructure (State of California 2018). In addition, increased CO2 emissions can cause oceans to acidify due to the carbonic acid it forms. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture

California has a $50 billion annual agricultural industry that produces over a third of the country's vegetables and two-thirds of the country's fruits and nuts (California Department of Food and Agriculture 2018). Higher CO2 levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent; water demand could increase as hotter conditions lead to the loss of soil moisture; crop-yield could be threatened by water-induced stress and extreme heat waves; and plants

may be susceptible to new and changing pest and disease outbreaks (State of California 2018). In addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006).

Ecosystems and Wildlife

Climate change and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists project that the annual average maximum daily temperatures in California could rise by 4.4 to 5.8°F in the next 50 years and by 5.6 to 8.8°F in the next century (State of California 2018). Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals related to (1) timing of ecological events; (2) geographic distribution and range; (3) species' composition and the incidence of nonnative species within communities; and (4) ecosystem processes, such as carbon cycling and storage (Parmesan 2006; State of California 2018).

Citywide Climate Change

According to Los Angeles' First Annual Report (2015-2016) to their *Sustainable City pLAn*, the City has reduced GHG emissions to 20% below 1990 levels as of 2013, which was the stated goal to achieve by 2017 (Mayor's Sustainability Team 2017). The City is also currently striving to go from 50 percent energy reliant on coal power to coal-free by 2025. The *Sustainable City pLAn* is described in more detail below under, *Regulatory Framework*.

REGULATORY FRAMEWORK

Climate change and GHG emissions are governed by an evolving body of laws, regulations, and case law. Below are summaries of key regulations; however, the discussion below should not be considered exhaustive of this growing body of regulation.

INTERNATIONAL

U.S.-China Climate Agreement

In November 2014, the United States and China made a joint announcement to cooperate on combatting climate change and promoting clean energy. In the U.S., President Obama announced a climate target to reduce GHG emissions by 26 to 28 percent below 2005 levels by 2025. In China, President Xi Jinping announced a climate target to reduce peak CO_2 emissions by 2030 and to increase the renewable energy share across all sectors to 20 percent by 2030. China will need to build an additional 800 to 1,000 gigawatts of nuclear, wind, solar, and other zero emission generation capacity by 2030 to reach this target. Together, the United States and China have agreed to: expand joint clean energy research and development at the U.S.-China Clean Energy Research Center (CERC), advance major carbon capture, use and storage demonstrations, enhance cooperation on HFCs, launch a climate- smart/low-carbon cities initiative, promote trade in green goods, and demonstrate clean energy on the ground.

Paris United Nations Framework Convention on Climate Change

A new international climate change agreement was adopted at the Paris United Nations Framework Convention on Climate Change Conference in December 2015. The prior two climate conferences in Warsaw (2013) and Lima (2014) decided that countries were to submit their proposed emissions reduction targets for the 2015 conference as "intended nationally determined contributions" prior to the Paris

conference. The European Union has committed to an economy-wide, domestic GHG reduction target of 40 percent below 1990 levels by 2030. The United States set its intended nationally determined contribution to reduce its GHG emissions by 26 to 28 percent below its 2005 level by 2025 and to make best efforts to reduce emissions by 28 percent. These targets are set with the goal of limited global temperature rise to well below 2 degrees Celsius and getting to an 80 percent emission reduction by 2050. As of 2017, however, the United States pulled out of the Paris agreement.

North American Climate, Clean Energy, and Environment Partnership Action Plan

The North American Climate, Clean Energy, and Environment Partnership Action Plan was announced by Prime Minister Justin Trudeau, President Barack Obama, and President Enrique Peña Nieto on June 29, 2016, at the North American Leaders Summit in Ottawa, Canada. This Action Plan identifies the deliverables to be achieved and activities to be pursued by the three countries as part of this enduring Partnership. The three leaders declared their common vision in a historic North American Climate, Clean Energy, and Environment Partnership, described in a Leaders' Statement and Action Plan that details the actions our leaders will pursue. These actions include:

- Setting a target to increase clean power to 50 percent of the electricity generated across North America by 2025
- Reducing methane emissions from the oil and gas sector by 40 to 45 percent by 2025
- Strengthening standards for energy efficiency and vehicle emissions, including aligning energy efficiency standards that will amount to over $4 billion per year in annual savings for United States businesses and consumers by 2025
- Strengthening vehicle efficiency, improving fuel quality, and reducing tailpipe pollutants
- Affirming their support for joining and implementing the Paris Agreement this year and committing to work together to address climate issues through the Montreal Protocol, International Civil Aviation Organization, G-20, and other forums
- Celebrating our strong environmental cooperation, including expanding cooperation on early warning systems for natural disasters, supporting habitat for migratory species including Monarchs and birds, and developing action plans to combat wildlife trafficking

FEDERAL

The federal government's stance on climate change regulation is in flux under the current Presidential administration. For example, President Trump has signed an executive order announcing a plan to withdraw the U.S. from the Paris Climate Accord at the earliest possible date (although under the terms of the Paris Climate Accord, the withdrawal process can take no less than four years from the initial date of adoption). The following discussion presents court decisions, legislation, and policies pertaining to GHG emissions that are currently in effect.

Clean Air Act

The U.S. Supreme Court ruled in *Massachusetts v. Environmental Protection Agency, 127 S. Ct. 1438 (2007)*, that CO_2 and other GHGs are pollutants under the Clean Air Act (CAA), which the U.S. Environmental Protection Agency (USEPA) must regulate if it determines they pose an endangerment to public health or welfare. On December 7, 2009, the USEPA issued an "endangerment finding" under the Clean Air Act, concluding that current and projected GHG emissions threaten the public health and welfare of current and future generations and that motor vehicles contribute to GHG pollution (USEPA 2017). These findings provide the basis for adopting new national regulations to mandate GHG emission

reductions under the federal Clean Air Act. The USEPA's endangerment finding paves the way for federal regulation of GHGs.

Under the Consolidated Appropriations Act of 2008 (HR 2764), Congress established mandatory GHG reporting requirements for some emitters of GHGs. In addition, on September 22, 2009, the USEPA issued the Final Mandatory Reporting of Greenhouse Gases Rule. The rule requires annual reporting to the USEPA of GHG emissions from large sources and suppliers of GHGs, including facilities that emit 25,000 metric tons (MT) or more a year of GHGs.

Federal Vehicle Standards

In response to the *Massachusetts v. Environmental Protection Agency* ruling discussed above, the Bush Administration issued an Executive Order on May 14, 2007, directing the USEPA, the Department of Transportation (DOT), and the Department of Energy (DOE) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008.

On October 10, 2008, the National Highway Traffic Safety Administration (NHTSA) released a final environmental impact statement analysing proposed interim standards for passenger cars and light trucks in model years 2011 through 2015. The NHTSA issued a final rule for model year 2011 on March 30, 2009 (NHTSA 2009).

On May 7, 2010, the USEPA and the NHTSA issued a final rule regulating fuel efficiency and GHGs from motor vehicles for cars and light-duty trucks for model years 2012–2016 (USEPA and NHTSA 2010). On May 21, 2010, the President issued a memorandum to the Secretaries of Transportation and Energy, and the Administrators of the USEPA and the NHTSA calling for the establishment of additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure (GPO 2010). In response to this directive, USEPA and NHTSA issued a Supplemental Notice of Intent announcing plans to propose stringent, coordinated federal GHG and fuel economy standards for model year 2017-2025 light-duty vehicles (GPO 2011). The agencies proposed standards projected to achieve 163 grams/mile of CO_2 in model year 2025, on an average industry fleet wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. California has announced its support of this national program (CARB 2011a). The final rule was adopted in October 2012 and NHSTA intends to set standards for model years 2022-2025 in future rule-making (USEPA and NHTSA 2012; NHTSA 2012).

Heavy-Duty Engines and Vehicles Fuel Efficiency Standards

In addition to the regulations applicable to cars and light-duty trucks, on August 9, 2011, the USEPA and the NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks, which apply to vehicles from model years 2014 through 2018 (USEPA and NHTSA 2016). The USEPA and the NHTSA adopted standards for CO_2 emissions and fuel consumption, respectively, tailored to each of three main vehicle categories: (1) combination tractors, (2) heavy-duty pickup trucks and vans, and (3) vocational vehicles. According to the USEPA, this program will reduce GHG emissions and fuel consumption for affected vehicles by 6 percent to 23 percent.

Energy Independence and Security Act

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law (GPO 2007). Among other key measures, the EISA would do the following, which would aid in the reduction of national GHG emissions, both mobile and non-mobile:

Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.[1]

Prescribe or revise standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labelling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

While superseded by NHTSA and USEPA actions described above, EISA also set miles per gallon targets for cars and light trucks and directed the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.

Additional provisions of the EISA address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs."

National Fuel Efficiency Policy

On May 19, 2009, the president announced a new National Fuel Efficiency Policy aimed at increasing fuel economy and reducing GHG pollution. This policy is expected to increase fuel economy by more than five percent by requiring a fleet-wide average of 35.5 miles per gallon by 2016 starting with model year 2012.

Fuel Economy Standards

On September 15, 2009, the USEPA and the Department of Transportation's (DOT) National Highway Traffic Safety Administration (NHTSA) issued a joint proposal to establish a national program consisting of new standards for model year 2012 through 2016 light-duty vehicles that will reduce GHG emissions and improve fuel economy. The proposed standards were to be phased in and require passenger cars and light-duty trucks to comply with a declining emissions standard. In 2012, passenger cars and light-duty trucks were required to meet an average emissions standard of 295 grams of CO_2 per mile and 30.1 miles per gallon. By 2016, the vehicles were required to meet an average standard of 250 grams of CO_2 per mile and 35.5 miles per gallon. The final standards were adopted by the USEPA and DOT on April 1, 2010.

On December 7, 2009, the USEPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA (42 United States Code Section 7521):

Endangerment Finding: The Administrator found that the current and projected concentrations of the six key well-mixed GHGs (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) in the atmosphere threaten the public health and welfare of current and future generations.

Cause or Contribute Finding: The Administrator found that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare.

While these findings do not impose additional requirements on industry or other entities, this action is a prerequisite to finalizing the USEPA's proposed GHG emissions standards for light-duty vehicles, which were jointly proposed by the USEPA and the NHTSA. On April 1, 2010, the USEPA and NHTSA issued final rules requiring that by the 2016 model-year, manufacturers must achieve a combined average vehicle emission level of 250 grams CO_2 per mile, which is equivalent to 35.5 miles per gallon as measured by USEPA standards.

[1] According to the United States Energy Information Administration, 36 billion gallons of fuel represents approximately 26 percent of current gasoline consumption.

Executive Order 13693

Issued on June 10, 2015, Executive Order 13693 — Planning for Federal Sustainability in the Next Decade — revokes multiple prior Executive Orders and memoranda including Executive Order 13514. The goal of Executive Order 13693 is to maintain federal leadership in sustainability and GHG emission reductions. This Executive Order outlines forward-looking goals for federal agencies in the area of energy, climate change, water use, vehicle fleets, construction, and acquisition. Federal agencies shall, where life-cycle cost-effective, beginning in 2016:

- Reduce agency building energy intensity as measured in British Thermal Units per square foot by 2.5 percent annually through 2025;
- Improve data center energy efficiency at agency buildings;
- Ensure a minimum percentage of total building electric and thermal energy shall be from clean energy sources;
- Improve agency water use efficiency and management (including storm water management); and
- Improve agency fleet and vehicle efficiency and management by achieving minimum percentage GHG emission reductions.

Executive Order 13783

Issued on March 28, 2017, Executive Order 13783 — Promoting Energy Independence and Economic Growth — revokes multiple prior Executive Orders and memoranda including Executive Order 13653, the Power Sector Carbon Pollution Standards, Presidential Memorandum – Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment, and Presidential Memorandum – Climate Change and National Security, as well as other federal reports and provisions. Executive Order 13783 represents a reversal on federal climate policy relative to the work of previous administrations and its objective is to reduce the regulatory framework applicable to GHG emissions to spur fossil fuel production. This Executive Order "established a national policy to promote the clean and safe development of our energy resources while reducing unnecessary regulatory burdens" (Federal Register 2017). The order also "directs the USEPA to review existing regulations, orders, guidance documents and policies that potentially burden the development or use of domestically produced energy resources." As of April 2020, the Council on Environmental Quality (CEQ) is considering updating its National Environmental Policy (NEPA) implementing regulations and has issued a Notice of Proposed Rulemaking that incorporates Executive Order 13783 (Council on Environmental Quality 202). How these proposed rule changes will affect GHG emissions cannot be predicted at this time.

Executive Order 13795

Issued on April 28, 2017, Executive Order 13795 — Implementing an America-First Offshore Energy Strategy — directs the "policy of the United States to encourage energy exploration and production, including on the Outer Continental Shelf, in order to maintain the Nation's position as a global energy leader and foster energy security and resilience for the benefit of the American people, while ensuring that any such activity is safe and environmental responsible" (Federal Register 2017). The objective of the order is to expand the opportunity for offshore energy development by removing restrictions on resource exploration and extraction. This Executive Order prioritizes the development of offshore energy resources over the protection of National Marine Sanctuaries and authorizes the review and potential revision or withdrawal of the Bureau of Ocean Energy Management's Proposed Rule entitled "Air Quality Control, Reporting, and Compliance," 81 Federal Register 19718 and any other related rules and guidance. The implications of implementing Executive Order 13795 with regards to the national GHG emissions inventory cannot be reasonably determined at this time.

STATE

Executive Order S-3-05

Executive Order S-3-05, issued in June 2005, established GHG emissions targets for the State, as well as a process to ensure the targets are met. The order directed the Secretary for California EPA to report every two years on the State's progress toward meeting the Governor's GHG emission reduction targets. As a result of this executive order, the California Climate Action Team (CCAT), led by the Secretary of the California Environmental Protection Agency (CalEPA), was formed. The CCAT is made up of representatives from a number of State agencies and was formed to implement global warming emission reduction programs and reporting on the progress made toward meeting state-wide targets established under the Executive Order. The CCAT reported several recommendations and strategies for reducing GHG emissions and reaching the targets established in the Executive Order (CalEPA 2006). The state-wide GHG targets are as follows:

- By 2010, reduce to 2000 emission levels;
- By 2020, reduce to 1990 emission levels; and
- By 2050, reduce to 80 percent below 1990 levels.

However, with the adoption of the California Global Warming Solutions Act of 2006, also known as Assembly Bill (AB) 32, discussed below, the Legislature did not adopt the 2050 horizon-year goal from Executive Order No. S-3-05. In the last legislative session, the Legislature rejected legislation to enact the Executive Order's 2050 goal.[2]

The original mandate for the CCAT was to develop proposed measures to meet the emission reduction targets set forth in E.O. S-3-05. The CAT has since expanded and currently has members from 18 state agencies and departments. The CCAT also has ten working groups, which coordinate policies among their members. The working groups and their major areas of focus are:

- Agriculture: Focusing on opportunities for agriculture to reduce GHG emissions through efficiency improvements and alternative energy projects, while adapting agricultural systems to climate change;
- Biodiversity: Designing policies to protect species and natural habitats from the effects of climate change;
- Energy: Reducing GHG emissions through extensive energy efficiency policies and renewable energy generation;
- Forestry: Coupling GHG mitigation efforts with climate change adaptation related to forest preservation and resilience, waste to energy programs and forest offset protocols;
- Land Use and Infrastructure: Linking land use and infrastructure planning to efforts to reduce GHG from vehicles and adaptation to changing climatic conditions;

[2] The original version of SB 32 as introduced in the Legislature contained a commitment to the 2050 goal, but this commitment was not included in the final version of the bill. See: https://leginfo.legislature.ca.gov/faces/billVersionsCompareClient.xhtml?bill_id=201520160SB32&cversion=20150SB3299INT. In addition, the Supreme Court recently held in Cleveland National Forest Foundation et al. v San Diego Association of Governments (SANDAG)(S223603, July 13, 2017) that SANDAG did not abuse its discretion in declining to adopt the 2050 goal as a measure of significance in an analysis of the consistency of projected 2050 greenhouse gas emissions with the goals in Executive Order S-3-05. Although it stated that "we do not hold that the analysis of greenhouse gas impacts employed by SANDAG in this case will necessarily be sufficient going forward. CEQA requires public agencies like SANDAG to ensure that such analysis stay in step with evolving scientific knowledge and state regulatory schemes."

- Oceans and Coastal: Evaluating the effects of sea level rise and changes in coastal storm patterns on human and natural systems in California;
- Public Health: Evaluating the effects of GHG mitigation policies on public health and adapting public health systems to cope with changing climatic conditions;
- Research: Coordinating research concerning impacts of and responses to climate change in California;
- State Government: Evaluating and implementing strategies to reduce GHG emissions resulting from state government operations; and
- Water: Reducing GHG impacts associated with the state's water systems and exploring strategies to protect water distribution and flood protection infrastructure.

The CAT is responsible for preparing reports that summarize the state's progress in reducing GHG emissions. The CAT Report was published in December 2010. The CAT Report discusses mitigation and adaptation strategies, state research programs, policy development, and future efforts.

Assembly Bill 32 (State-wide GHG Reductions)

The California Global Warming Solutions Act of 2006 (AB 32) was signed into law in September 2006 after considerable study and expert testimony before the Legislature. The law instructs the California Air Resources Board (CARB) to develop and enforce regulations for the reporting and verifying of state-wide GHG emissions. AB 32 directed CARB to set a GHG emission limit based on 1990 levels, to be achieved by 2020. AB 32 set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner (Legislative Council of California 2006a).

The heart of AB 32 is the requirement to reduce state-wide GHG emissions to 1990 levels by 2020. AB 32 required CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions. CARB accomplished the key milestones set forth in AB 32, including the following:

June 30, 2007. Identification of discrete early action GHG emissions reduction measures. On June 21, 2007, CARB satisfied this requirement by approving three early action measures (CARB 2007a). These were later supplemented by adding six other discrete early action measures (CARB 2007b).

January 1, 2008. Identification of the 1990 baseline GHG emissions level and approval of a state-wide limit equivalent to that level and adoption of reporting and verification requirements concerning GHG emissions. On December 6, 2007, CARB approved a state-wide limit on GHG emissions levels for the year 2020 consistent with the determined 1990 baseline (CARB 2007c).

January 1, 2009. Adoption of a scoping plan for achieving GHG emission reductions. On December 11, 2008, CARB adopted *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan), discussed in more detail below (CARB 2008).

January 1, 2010. Adoption and enforcement of regulations to implement the "discrete" actions. Several early action measures have been adopted and became effective on January 1, 2010 (CARB 2007a; CARB 2007b).

January 1, 2011. Adoption of GHG emissions limits and reduction measures by regulation. On October 28, 2010, CARB released its proposed cap-and-trade regulations, which would cover sources of approximately 85 percent of California's GHG emissions (CARB 2011b). CARB's Board ordered its Executive Director to prepare a final regulatory package for cap-and-trade on December 16, 2010 (CARB 2010).

January 1, 2012. GHG emissions limits and reduction measures adopted in 2011 became enforceable.

As noted above, CARB adopted the Scoping Plan in 2008 to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various categories of emissions. CARB determined that achieving the 1990 emission level by 2020 would require an approximately 28.5 percent reduction of GHG emissions in the absence of new laws and regulations (referred to as "business as usual" or "No Action Taken"). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities, and identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. Key elements of the Scoping Plan include the following (CARB 2008):

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a state-wide renewable energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions;
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing state laws and policies, such as California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

In connection with preparation of the supplement to the Functional Equivalent Document, CARB released revised estimates in 2011 of the expected 2020 emission reductions in consideration of the economic recession and the availability of updated information from development of measure specific regulations. Incorporation of revised estimates in consideration of the economic recession reduced the projected 2020 emissions from 596 metric tons of CO_2 equivalent (MT CO_2e) to 545 million MT CO_2e (MMT CO_2e) (CARB 2011c). Under this scenario, achieving the 1990 emissions level in 2020 would require a reduction of GHG emissions of 118 MMT CO_2e, or 21.7 percent. This revised reduction represents a 6.8 percentage point reduction from the 28.5 percent level determined in CARB's 2008 Scoping Plan. The 2020 AB 32 baseline was also updated to account for measures incorporated into the inventory, including Pavley (vehicle model-years 2009 to 2016) and the renewable portfolio standard (12 percent to 20 percent). Inclusion of these measures further reduced the 2020 baseline to 507 MMT CO_2e. As a result, based on both the 2007-09 economic recession and the availability of updated information from development of measure-specific regulations, achieving the 1990 emission level would now require a reduction of GHG emissions of 80 MMT CO_2e or a reduction by approximately 16 percent (down from the 28.5 percent level determined in CARB's 2008 Scoping Plan) by 2020 in the "business as usual" or No Action Taken condition (CARB 2011c; CARB 2011d).

On October 1, 2013, CARB released a discussion draft first update to the Scoping Plan. The discussion draft recalculates 1990 GHG emissions using *Intergovernmental Panel on Climate Change Fourth Assessment Report* released in 2007. Using the AR4 global warming potentials (GWP), the 427 MMT CO_2e 1990 emissions level and 2020 GHG emissions limit would be slightly higher, at 431 MMT CO_2e (CARB 2013). Based on the revised estimates of expected 2020 emissions identified in the 2011 supplement to the Functional Environmental Document and updated 1990 emissions levels identified in the draft first update to the Scoping Plan, achieving the 1990 emission level would require a reduction of 76 MMT CO_2e (down

from 507 MMT CO_2e) or a reduction by approximately 15 percent (down from 28.5 percent) to achieve in 2020 emissions levels in the "business as usual" or No Action Taken condition (CARB 2011c; CARB 2011d; CARB 2013). Two updates to the Scoping Plan have occurred since 2008. The latest update was adopted in December 2017 and is discussed below as it relates to Executive Order B-30-15 and Senate Bill 32.

Senate Bill 1 (SB 1) and Senate Bill 1017 (SB 1017) (Million Solar Roofs)

SB 1 and SB 1017, enacted in August 2006, set a goal to install 3,000 megawatts of new solar capacity by 2017 – with a stated intent to move the state toward a cleaner energy future and help lower the cost of solar systems for consumers. The Million Solar Roofs Program is a ratepayer-financed incentive program aimed at transforming the market for rooftop solar systems by driving down costs over time. It provides up to $3.3 billion in financial incentives that decline over time.

Executive Order B-30-15 and Senate Bill 32

CARB also aims to reduce GHG emissions substantially by 2030. As California moves closer to reaching the 2020 GHG emission reduction goal, state legislation has focused on furthering GHG emission reduction targets. Executive Order B-30-15 was issued on April 2015, establishing a mid-term GHG reduction target for California of 40 percent below 1990 levels by 2030 (discussed in further detail below). In 2016, the Legislature passed Senate Bill (SB) 32 with the companion bill AB 197, which further mandates the 2030 target and provides additional direction to CARB on strategies to reduce GHG emissions. The bill targets reductions from the leading GHG emitters in the state. Transportation is the largest sector of GHG emissions in the state and will be a primary subject for reductions. Through advances in technology and improved public transportation, the state plans to reduce GHG emissions from transportation sources to assist in meeting the 2030 reduction goal.

CARB adopted the 2017 Scoping Plan on December 14, 2017 in response to Executive Order B-30-15 and SB 32, which provides a framework for achieving the 2030 target. To meet reduction targets, the 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies, such as SB 350 and SB 1383 (see below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons of CO_2e (MT CO_2e) by 2030 and two MT CO_2e by 2050 (CARB 2017a). The 2017 Scoping Plan in particular emphasized the importance in the role of local agencies in setting policies to reduce VMT through land use planning:

> Local land use decisions play a particularly critical role in reducing GHG emissions associated with the transportation sector, both at the project level, and in long-term plans, including general plans, local and regional climate action plans, specific plans, transportation plans, and supporting sustainable community strategies developed under SB 375.
>
> While the State can do more to accelerate and incentivize these local decisions, local actions that reduce VMT are also necessary to meet transportation sector-specific goals and achieve the 2030 target under SB 32. Through developing the Scoping Plan, CARB staff is more convinced than ever that, in addition to achieving GHG reductions from cleaner fuels and vehicles, California must also reduce VMT. Stronger SB 375 GHG reduction targets will enable the State to make significant progress toward needed reductions, but alone will not provide the VMT growth reductions needed; there is a gap between what SB 375 can provide and what is needed to meet the State's 2030 and

2050 goals. In its evaluation of the role of the transportation system in meeting the statewide emissions targets, CARB determined that VMT reductions of 7 percent below projected VMT levels in 2030 (which includes currently adopted SB 375 SCSs) are necessary. In 2050, reductions of 15 percent below projected VMT levels are needed. A 7 percent VMT reduction translates to a reduction, on average, of 1.5 miles/person/day from projected levels in 2030. It is recommended that local governments consider policies to reduce VMT to help achieve these reductions, including: land use and community design that reduces VMT; transit oriented development; street design policies that prioritize transit, biking, and walking; and increasing low carbon mobility choices, including improved access to viable and affordable public transportation and active transportation opportunities. It is important that VMT reducing strategies are implemented early because more time is necessary to achieve the full climate, health, social, equity, and economic benefits from these strategies (CARB 2017a).

California's future climate strategy will require increased focus on integrated land use planning to support livable, transit-connected communities, and conservation of agricultural and other lands. Accommodating population and economic growth through travel- and energy-efficient land use provides GHG-efficient growth, reducing GHGs from both transportation and building energy use be further reduced at the project level through implementing energy-efficient cost of transportation impacts continues to evolve. The CEQA Guidelines are being updated to focus the analysis of transportation impacts on VMT. OPR's Technical Advisory includes methods of analysis of transportation impacts, approaches to setting significance thresholds, and includes examples of VMT mitigation under CEQA (CARB 2017a).

Senate Bill 350

Adopted on October 7, 2015, SB 350 supports the reduction of GHG emissions from the electricity sector through a number of measures, including requiring electricity providers to achieve a 50 percent renewables portfolio standard by 2030, a cumulative doubling of statewide energy efficiency savings in electricity and natural gas by retail customers by 2030.

Senate Bill 1383

Approved by the governor in September 2016, SB 1383 requires the CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. The bill requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40% below 2013 levels
- Hydrofluorocarbons – 40% below 2013 levels
- Anthropogenic black carbon – 50% below 2013 levels

The bill also requires CalRecycle, in consultation with the state board, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

Senate Bill 97

Per Senate Bill 97, which was signed into law on August 24, 2007, the California Natural Resources Agency adopted amendments to the State CEQA Guidelines, which address the specific obligations of public agencies when analyzing GHG emissions under CEQA to determine a project's effects on the environment (codified as Public Resources Code [PRC] 21083.05). Specifically, PRC 21083.05 states, "[t]he Office of Planning and Research and the Natural Resources Agency shall periodically update the guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions."

Senate Bill 375

In September 2008, the California Legislature adopted SB 375, which (1) relaxes CEQA requirements for some housing projects that meet goals for reducing GHG emissions and (2) requires the regional governing bodies in each of the state's major metropolitan areas to adopt, as part of their regional transportation plan, sustainable community strategies that will meet the region's target for reducing GHG emissions. SB 375 creates incentives for implementing the sustainable community strategies by allocating federal transportation funds only to projects that are consistent with the emissions reductions. On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. CARB's efforts to update regional targets were completed in parallel with its drafting of the 2017 Scoping Plan. The adoption of updated regional targets implements the 2017 Scoping Plan's ongoing measure of working with regions to update SB 375 Sustainable Communities Strategies targets for 2035 to better align with the 2030 GHG target. For the Southern California Association of Government's (SCAG) region, the 2020 target remains at -8% change in per capita passenger vehicle greenhouse gas emissions relative to 2005. The 2035 target was increased to -18% from the prior -13% (CARB 2018c).

Local governments are then to devise strategies for housing development, road-building and other land uses to shorten travel distances, reduce vehicular travel time and meet the new targets. If regions develop these integrated land use, housing, and transportation plans, residential or mixed-use residential projects that conform to the Sustainable Community Strategy (and therefore contribute to GHG reduction) can have a more streamlined environmental review process.

Renewable Portfolio Standards (SB 1078, SB 107, SB X 1-2, and SB 100)

Established in 2002 under Senate Bill (SB) 1078, and accelerated in 2006 under SB 107, again in 2011 under SB X 1-2, and most recently in September 2018 under SB 100, California's Renewable Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 40 percent by 2024, 50 percent by 2026, 60 percent by 2030, and 100 percent by 2045 (Legislative Council of California 2002; Legislative Council of California 2006b). The 33 percent standard is consistent with the RPS goal established in the Scoping Plan (CARB 2008). As interim measures, the RPS requires 20 percent of retail sales to be sourced from renewable energy by 2013, and 25 percent by 2016. Initially, the RPS provisions applied to investor-owned utilities, community choice aggregators, and electric service providers. SB X 1-2 added, for the first time, publicly-owned utilities to the entities subject to RPS. The expected growth in RPS to meet the standards in effect in 2008 is not reflected in the "business as usual" calculation in the AB 32 Scoping Plan, discussed below. In other words, the Scoping Plan's "business as usual" 2020 does not take credit for implementation of RPS that occurred after its adoption (CARB 2008).

GHG Emissions Standards for Baseload Generation

Senate Bill 1368, which was signed into law on September 29, 2006, prohibits any retail seller of electricity in California from entering into a long-term financial commitment for baseload generation if the GHG emissions are higher than those from a combined-cycle natural gas power plant. This performance standard (i.e., reducing long-term GHG emissions as a result of electrical baseload generation) applies to electricity generated both within and outside of California, and to publicly owned as well as investor-owned electric utilities.

Mobile Source Reductions

Assembly Bill 1493, the "Pavley Standard," required CARB to adopt regulations by January 1, 2005, to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks of model year 2009 through 2016. The bill also required the California Climate Action Registry to develop and adopt protocols for the reporting and certification of GHG emissions reductions from mobile sources for use by CARB in granting emission reduction credits. The bill authorizes CARB to grant emission reduction credits for reductions of GHG emissions prior to the date of enforcement of regulations, using model year 2000 as the baseline for reduction (CARB 2017b).

In 2004, CARB applied to the USEPA for a waiver under the federal Clean Air Act to authorize implementation of these regulations. On June 30, 2009, the USEPA granted the waiver with the following provision: CARB may not hold a manufacturer liable or responsible for any noncompliance caused by emission debits generated by a manufacturer for the 2009 model year. CARB has adopted a new approach to passenger vehicles (cars and light trucks), by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California.

Low Carbon Fuel Standard

Executive Order S-01-07 (January 18, 2007) requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB. CARB identified the Low Carbon Fuel Standard (LCFS) as a Discrete Early Action item under AB 32, and the final resolution (09-31) was issued on April 23, 2009 (CARB 2009). In 2009, CARB approved for adoption the LCFS regulation, which became fully effective in April 2010 and is codified at Title 17, California Code of Regulations (CCR), Sections 95480-95490. The LCFS will reduce GHG emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars Program, a new emissions-control program for model year 2017 through 2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, the new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

CEQA Guidelines Section 15064.3.

CEQA Guidelines Section 15064.3 describes specific considerations for evaluating a project's transportation impacts and states that, generally, vehicle miles traveled is the most appropriate measure of transportation impacts. The section also states provides some guidance for evaluating land use projects stating that generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact and projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.

CEQA Guidelines Section 15064.4.

CEQA Guidelines Section 15064.4 requires that, in performing environmental review under CEQA, an agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. The lead agency has discretion

to determine whether to quantify GHG emissions, and/or rely on a qualitative analysis or performance-based standards.

In determining the significance of a project's GHG emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. The lead agency should consider the following factors, among others, when determining the significance of impacts from GHG emissions on the environment.

- The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (see, e.g., section 15183.5(b)). Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

Lastly, a lead agency may use a model or methodology to estimate GHG resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.

Senate Bill 743 (SB 743)

SB 743, adopted September 27, 2013, encourages land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT), which contribute to GHG emissions, as required by AB 32. Key provisions of SB 743 include reforming aesthetics and parking CEQA analysis for certain urban infill projects and eliminating the measurement of auto delay, including Level of Service (LOS), as a metric that can be used for measuring traffic impacts in transit priority areas. SB 743 requires the Governor's Office of Planning and Research (OPR) to develop revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts of projects within transit priority areas that promote the "…reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." It also allows OPR to develop alternative metrics outside of transit priority areas.

California Green Building Code (California Code of Regulations [CCR], Title 24)

Although not originally aimed at reducing GHG emissions, California Code of Regulations Title 24 Part 6: *California's Energy Efficiency Standards for Residential and Nonresidential Buildings* (Title 24), was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. Since then, Title 24 has been amended to recognize that energy-efficient buildings require less electricity and reduce fuel consumption, which subsequently decreases GHG emissions. The current 2016 Title 24 standards were adopted, among other reasons, to respond to the requirements of AB 32. The goals of the Title 24 standards include achieving a 20 percent reduction of indoor water use and a 50 percent reduction of construction waste. Specifically, new development projects constructed within California after January 1, 2017 are subject to the mandatory planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and environmental quality measures of the California Green Building Standards (CalGreen) Code (California Code of Regulations [CCR], Title 24, Part 11). The outdoor water use standards of the CalGreen Code, which requires a 20 percent reduction in indoor water use, are already addressed by the City's Water Conservation Ordinance.

Cap-and-Trade Program

As mentioned above, the Scoping Plan identifies a cap-and-trade program as one of the strategies the State will employ to reduce GHG emissions that cause climate change. The cap-and-trade program is implemented by CARB and "caps" GHG emissions from the industrial, utility, and transportation fuels sections, which account for roughly 85 percent of the State's GHG emissions. The program works by establishing a hard cap on about 85 percent of total state-wide GHG emissions. The cap starts at expected business-as-usual emissions levels in 2012, and declines two to three percent per year. Originally with a planning horizon of 2020, the recent approval of AB 398 in July 2017 extended the program until 2030. Fewer and fewer GHG emissions allowances are available each year, requiring covered sources to reduce their emissions or pay increasingly higher prices for those allowances. The cap level is set in 2030 to ensure California complies with SB 32's emission reduction target of 40 percent below 1990 GHG emission levels.

The scope of GHG emission sources subject to cap-and-trade in the first compliance period (2013-2014) includes all electricity generated and imported into California (the first deliverer of electricity into the State in the "capped" entity and that one that will have to purchase allowances as appropriate), and large industrial facilities emitting more than 25,000 MT CO_2e per year (e.g., oil refineries and cement manufacturers). The scope of GHG emission sources subjected to cap-and-trade during the second compliance period (2015-2017) expands to include distributors of transportation fuels (including gasoline and diesel), natural gas, and other fuels. The regulated entity will be the fuel provider that distributes the fuel upstream (not the gas station). In total, the cap-and-trade program is expected to include roughly 350 large businesses, representing about 600 facilities. Individuals and small businesses will not be regulated.

Under the program, companies do not have individual or facility-specific reduction requirements. Rather, all companies covered by the regulation are required to turn in allowances[3] in an amount equal to their total GHG emissions during each phase of the program. The program gives companies the flexibility to either trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more will have to turn in more allowances. Companies that can cut their emissions will have to turn in fewer allowances. Furthermore, as the cap declines, total GHG emissions are reduced. On October 20, 2011, CARB's Board adopted the final cap-and-trade regulation. The cap-and-trade program began on January 1, 2012, with an enforceable compliance obligation beginning with the 2013 GHG emissions (CARB 2018b). In July 2017, the Legislature passed legislation to extend the cap-and-trade program to 2030 (Office of the Governor 2017).

[3] "Allowance" means a limited tradable authorization to emit up to one metric ton of carbon dioxide equivalent.

REGIONAL

South Coast Air Quality Management District (SCAQMD) Policies

SCAQMD adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" on April 6, 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the AQMP. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy.

SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds. SCAQMD proposed the use of a percent emission reduction target (e.g., 30 percent) to determine significance for commercial/residential projects that emit greater than 3,000 metric tons per year. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for stationary source/industrial projects where SCAQMD is the lead agency. However, SCAQMD has yet to adopt a GHG significance threshold for land use development or transportation projects and has formed a GHG CEQA Significance Threshold Working Group to further evaluate potential GHG significance thresholds.

The GHG CEQA Significance Threshold Working Group is tasked with providing guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. Members of the working group included government agencies implementing CEQA and representatives from various stakeholder groups that will provide input to the SCAQMD staff on developing CEQA GHG significance thresholds. The Working Group discussed multiple methodologies for determining project significance. These methodologies included categorical exemptions, consistency with regional GHG budgets in approved plans, a numerical threshold, performance standards, and emissions offsets. The GHG CEQA Significance Threshold Working Group has not convened since 2008.

Southern California Association of Governments (SCAG) – 2016-2040 RTP/SCS

SCAG is the Metropolitan Planning Organization [MPO] for the six-county region that includes Los Angeles, Orange, Riverside, Ventura, San Bernardino and Imperial counties. On April 6, 2016, SCAG's Regional Council adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy: Towards a Sustainable Future (2040 RTP/SCS) in response to SB 375. The SCAG 2040 RTP/SCS is an update to the 2035 RTP/SCS that further integrates land use and transportation in certain areas so that the region as a whole can grow smartly and sustainably. The 2040 RTP/SCS includes land use strategies, based on local general plans, as well as input from local governments, to achieve the AB 32 state-mandated reductions in GHG emissions through decreases in regional per capita vehicle miles traveled (VMT). The 2040 RTP/SCS identifies transportation network improvements and encourages more compact, infill, walkable and mixed-use development strategies to accommodate regional growth in population, households, employment, and travel demand.

The Sustainable Communities Strategies chapter of the 2040 RTP/SCS demonstrates the region's ability to attain and exceed the GHG emission reduction targets set forth by the CARB. The Sustainable Communities Strategies chapter outlines the region's plan for integrating the transportation network and related strategies with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. The regional vision of the 2040 RTP/SCS maximizes current voluntary local efforts that support the goals of SB 375. The 2040 RTP/SCS focuses the majority of new housing and job growth in high-quality transit areas and other opportunity areas in existing main streets, downtowns, and commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development. This overall land use development pattern supports and complements the proposed transportation network that emphasizes system preservation, active transportation, and transportation demand management measures.

On June 28, 2016, CARB accepted SCAG's quantification of GHG emission reductions from the 2040 RTP/SCS and the determination that the 2040 RTP/SCS would, if implemented, achieve the region's GHG targets with an 8 percent per capita reduction by 2020 and an 18 percent per capita reduction by 2035. Additionally, it provides that the regional 2040 per capita emissions would be reduced by 21 percent relative to 2005 levels. The 2020 RTP/SCS is currently being completed and should be adopted around April 2020

SCAG's Sustainable Communities Strategy provides specific strategies for successful implementation. These include supporting projects that encourage diverse job opportunities for a variety of skills and education, recreation and culture and a full-range of shopping, entertainment and services all within a relatively short distance; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a "Complete Streets" policy that meets the needs of all users of the streets, roads and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative fueled vehicles.

LOCAL

GreenLA Climate Action Plan

The City of Los Angeles has issued guidance promoting sustainable development to reduce GHG emissions citywide in the form of a Climate Action Plan (CAP). The objective of GreenLA is to reduce GHG emissions 35 percent below 1990 levels by 2030 (City of Los Angeles 2007). GreenLA identifies goals and actions designed to make the City a leader in confronting global climate change. The measures would reduce emissions directly from municipal facilities and operations and create a framework to address citywide GHG emissions. GreenLA lists various focus areas in which to implement GHG reduction strategies. Focus areas include energy, water, transportation, land use, waste, port, airport, and ensuring that changes to the local climate are incorporated into planning and building decisions. City goals for each focus area are identified as follows:

Energy

- Increase the generation of renewable energy;
- Encourage the use of mass transit;
- Develop sustainable construction guidelines;
- Increase citywide energy efficiency; and
- Promote energy conservation.

Water

- Decrease per capita water use to reduce electricity demand associated with water pumping and treatment.

Transportation

- Power the city vehicle fleet with alternative fuels; and
- Promote alternative transportation (e.g., mass transit and rideshare).

Other Goals

- Create a more livable City through land use regulations;
- Increase recycling;

- Reduce emissions generated by activity associated with the Port of Los Angeles and regional airports;
- Create more city parks, promoting the environmental economic sector; and
- Adapt planning and building policies to incorporate climate change policy.

In order to provide detailed information on action items discussed in GreenLA, the City published an implementation document titled ClimateLA (City of Los Angeles 2008). ClimateLA presents the existing GHG inventory for the City, describes enforceable GHG reduction requirements, provides mechanisms to monitor and evaluate progress, and includes mechanisms that allow the plan to be revised in order to meet targets. By 2030, the plan aims to reduce GHG emissions by 35 percent from 1990 levels, which were estimated to be approximately 54.1 million metric tons.

Therefore, the City will need to lower annual GHG emissions to approximately 35.1 million metric tons per year by 2030. To achieve these reductions the City has developed strategies that focus on energy, water use, transportation, land use, waste, open space and greening, and economic factors. To reduce emissions from energy usage, ClimateLA proposes the following goals: increase the amount of renewable energy provided by the Los Angeles Department of Water and Power (LADWP); present a comprehensive set of green building policies to guide and support private sector development; reduce energy consumed by City facilities and utilize solar heating where applicable; and help citizens to use less energy. With regard to waste, ClimateLA sets the goal of reducing or recycling 70 percent of trash by 2015. With regard to open space and greening, ClimateLA includes the following goals: create 35 new parks; revitalize the Los Angeles River to create open space opportunities; plant one million trees throughout the City; identify opportunities to "daylight" streams; identify promising locations for stormwater infiltration to recharge groundwater aquifers; and collaborate with schools to create more parks in neighborhoods.

Sustainable City pLAn (pLAn)

In addition to GreenLA, Mayor Eric Garcetti released Los Angeles's first-ever pLAn on April 8, 2015 (City of Los Angeles 2015). The pLAn is a roadmap to achieving short-term results and sets a path to strengthen and transform the City in future decades. Recognizing the risks posed by climate change, Mayor Garcetti set time-bound outcomes on climate action, most notably to reduce GHG emissions by 45 percent by 2025, 60 percent by 2035, and 80 percent by 2050, all against a 1990 baseline. Through the completion and verification of the GHG inventory update, the City concluded that:

- The City accounted for approximately 36.2 million metric tons of CO2e in 1990;
- The City's most recent inventory shows that emissions fell to 29 million metric tons of CO2e in 2013; and
- Los Angeles' emissions are 20 percent below the 1990 baseline as of 2013, putting Los Angeles nearly halfway to the 2025 pLAn reduction target of 45 percent. In addition, the 20 percent reduction exceeds the 15 percent statewide goal listed in the First Update to the AB 32 Scoping Plan.

Green Building Program

The purpose of the City's Green Building Program is to reduce the use of natural resources, create healthier living environments and minimize the negative impacts of development on local, regional, and global ecosystems. The program consists of a Standard of Sustainability and Standard of Sustainable Excellence. The program addresses five key areas:

- Site: location, site planning, landscaping, storm water management, construction and demolition recycling;

- Water Efficiency: efficient fixtures, wastewater reuse, and efficient irrigation;
- Energy & Atmosphere: energy efficiency, and clean/renewable energy;
- Materials & Resources: materials reuse, efficient building systems, and use of recycled and rapidly renewable materials; and
- Indoor Environmental Quality: improved indoor air quality, increased natural lighting, and improved thermal comfort/control.

The Standard of Sustainability establishes a requirement for non-residential projects at or above 50,000 square feet of floor area, high-rise residential (above six stories) projects at or above 50,000 square feet of floor area, or low-rise residential (six stories or less) of 50 or more dwelling units within buildings of at least 50,000 square feet of floor area to meet the intent of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Certified level. The Standard also applies to existing buildings that meet the minimum thresholds described above when redevelopment construction costs exceed a valuation of 50 percent of the existing building's replacement cost.

The voluntary Standard of Sustainable Excellence establishes an incentive program for projects that register with the LEED program, contract with a certified LEED professional, and can demonstrate how the project will achieve LEED certification at a Silver or higher level. These projects are eligible for priority processing services within the Department of City Planning and expedited services within the Bureau of Engineering. The Department of Building and Safety provides priority plan check processing and Priority Service Planning is offered by the LADWP.

Los Angeles Green Building Code

The City has adopted the Green Building Code to reduce the City's carbon footprint. The Green Building Code is applicable to new buildings and alterations with building valuations over $200,000 (residential and non-residential). The Green Building Code is based on the 2010 California Green Building Standards Code, commonly known as CalGreen that was developed and mandated by the state to attain consistency among the various jurisdictions within the state; reduce the building's energy and water use; and reduce waste (see discussion of CalGreen, above).

Existing Buildings Energy and Water Efficiency (EBEWE) Ordinance

Effective in 2017, the EBEWE Ordinance makes public the annual energy and water consumption of all buildings over 20,000 square feet in the City. Beginning in 2017, privately owned buildings that are 20,000 square feet or more and buildings owned by the City that are 7,500 or more are required to be benchmarked, and owners must disclose annual energy and water consumption. Privately owned buildings that are 100,000 square feet or more must begin benchmarking reporting by December 1, 2017, and smaller buildings must begin reporting over the following two years. This Ordinance is designed to facilitate the comparison of buildings' energy and water consumption, and reduce building operating costs, leading to reduced GHG emissions.

City of Los Angeles General Plan

The City of Los Angeles does not have a General Plan Element specific to Global Warming and GHG emissions. However, the following goals and objectives from the Air Quality Element of the City of Los Angeles General Plan would also serve to reduce GHG emissions:

Goal 2 Less reliance on single-occupant vehicles with fewer commute and non-work trips.

Objective 2.1 Reduce work trips as a step towards attaining trip reduction objectives necessary to achieve regional air quality goals.

Objective 2.2 Increase vehicle occupancy for non-work trips by creating disincentives for single passenger vehicles, and incentives for high occupancy vehicles.

Goal 4 Minimal impact of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.

Objective 4.2 Reduce vehicle trips and vehicle miles traveled associated with land use patterns.

Goal 5 Energy Efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels, and the implementation of conservation measures including passive methods such as site orientation and tree planting.

Objective 5.1 Increase energy efficiency of City facilities and private developments.

Objective 5.2 Have a portion of the City's service fleet be comprised of alternative fuel powered vehicles, subject to availability of funding, and practical feasibility.

Goal 6 Citizen awareness of the linkages between personal behavior and air pollution, and participation in efforts to reduce air pollution.

Objective 6.1 Make air quality education and citizen participation a priority in the City's effort to achieve clean air standards.

Mobility Plan 2035

Mobility Plan 2035, updated in September 2016, serves as the Mobility Element of the General Plan. Mobility Plan 2035 establishes new street designations, classifies each of the City's arterial streets and incorporates a "complete street" policy framework (i.e., the idea that transportation facilities should be designed for all types of users, including pedestrians, cyclists, and trucks, as well as passenger vehicles), thus providing a foundation for future policies and principles promoting residents' interaction with their streets. Discussed in detail in Section 4.10, *Land Use and Planning*, Mobility Plan 2035 also promotes equitable land use decisions that result in fewer vehicle trips by providing greater proximity and access to jobs, destinations, and other neighborhood services.

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

The Proposed Project would have a significant impact with respect to GHGs and climate change if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (Threshold 4.7-1)
- Conflict with an applicable plan, policy or regulation adopted for the purposes of reducing the emissions of greenhouse gases (Threshold 4.7-2)

To answer the Appendix G questions above for the Proposed Project, the City of Los Angeles will rely on the following project-specific threshold of significance to assess the environmental impacts associated with GHG emissions for the Project:

Consistency with AB 32, SB 32, SB 375 (through demonstration of conformance with the 2016–2040 RTP/SCS), the Sustainable City pLAn and GreenLA.

The basis for the project specific threshold is provided as follows. The City has not adopted specific GHG significance thresholds. SCAQMD has not adopted a GHG significance threshold for land use development projects, although it has adopted significance thresholds for industrial-type projects for which it is the lead agency (SCAQMD 2014). Those industrial thresholds are not relevant to the Proposed Project, as the only projects for which the SCAQMD serves as the lead agency are those involving the adoption of air quality rules or regulations, or projects that have not gone through CEQA environmental review via another lead agency. No such projects would occur under implementation of the Proposed Project. In the absence of adopted thresholds for land use development projects based on SCAQMD guidance, the City has the discretion to use a significance threshold relevant to the Proposed Project.

On November 30, 2015, the California Supreme Court issued an opinion on GHG significance thresholds for CEQA in the case *Center for Biological Diversity et al. vs. California Department of Fish and Wildlife*. The following discussion is paraphrased from that case, which assessed the use of GHG significance thresholds.

The Court stated that California air pollution control officials and air quality districts have made several proposals for numerical thresholds. Multiple agencies' efforts at framing GHG significance issues have not yet coalesced into any widely accepted set of numerical thresholds, but have produced a certain level of consensus on the value of AB 32 consistency as a criterion. Neither AB 32 nor that CARB Scoping Plan set out a mandate or method for CEQA analysis of GHG emissions from a proposed project. A 2007 CEQA amendment, however, required the preparation, adoption, and periodic update of guidelines for mitigation of GHG impacts. The resulting state direction was that a lead agency should attempt to describe, calculate or estimate the amount of GHG emissions a project will emit, but recognized that agencies have discretion in how to do so. It goes on to provide that when assessing the significance of GHG emissions, the agency should consider these factors among others: (1) the extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The Court also acknowledged that the scope of global climate change and the fact that GHGs, once released into the atmosphere, are not contained in the local area of their emission means that the impacts to be evaluated are global rather than local. For many air pollutants, the significance of their environmental impact may depend greatly on where they are emitted; for GHG, it does not. For projects that are designed to accommodate long-term growth in California's population and economic activity in a sustainable manner, such as the Downtown Plan and the New Zoning Code, this fact gives rise to an argument that a certain amount of GHG emissions is as inevitable as population growth. Under this view, a significance criterion framed in terms of efficiency and conservation in land use (as compared to a business-as-usual [BAU] pattern of growth) is superior to a simple numerical threshold because CEQA is not intended as a population control measure.

This consideration favors consistency with AB 32's statewide goals as a permissible significance criterion for project GHG emissions. Meeting statewide reduction goals does not preclude all new development. Rather, the Scoping Plan, the State's roadmap for meeting AB 32's target, assumes continued growth and depends on increased efficiency and conservation in land use and transportation from all Californians. To

the extent a project incorporates efficiency and conservation measures sufficient to contribute its portion of the overall GHG reductions necessary for the entire State, one can reasonably argue that its impact is not cumulatively considerable, because it would be helping to solve the cumulative problem of GHG emissions as envisioned by California law. Given the reality of growth, some GHG emissions from new housing and commercial developments are inevitable. The critical CEQA question is the cumulative significance of a project's GHG emissions and, as discussed previously, from a climate change point of view it does not matter where in the State those emissions are produced. Under these circumstances, evaluating the significance of a project's GHG emissions with respect to their effect on the State's efforts to meet its long-term goals is a reasonable threshold.

The Supreme Court in Center for Biological Diversity recognized potential options for analyzing cumulative significance of a project's GHG emissions, including:

- Business-as-usual (BAU) Model. BAU comparison based on the Scoping Plan methodology if supported by substantial evidence that the metric used supports what level of reduction from business as usual a new land use development at the proposed location must contribute to comply with state goals.
- Consistency with AB 32's goal in whole or in part by looking at compliance with regulatory programs designed to reduce GHG; provided the project complies with or exceeds the regulations that were adopted by CARB, or state agencies to comply with Scoping Plan; and provided, the significance analysis only relates to impacts within the area governed by the regulation – e.g., reliance on Title 24 energy efficiency rules that are intended to reduce GHG from building would not address GHG impacts from transportation. And/or showing consistency with local GHG reduction plans, (e.g., climate action plan), to provide a basis for the tiering or streamlining of project-level CEQA analysis, including as consistent with CEQA Guidelines Section 15183.3.
- Relying on numerical thresholds for significance for GHG.

As discussed with in Regulatory Setting, Section 15064.4 was amended in 2019 to incorporate the holding in Center for Biological Diversity case as well as others. That section now directs lead agencies as follows:

> § 15064.4. Determining the Significance of Impacts from Greenhouse Gas Emissions.
>
> (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency shall make a good- faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:
>
> (1) Quantify greenhouse gas emissions resulting from a project; and/or
>
> (2) Rely on a qualitative analysis or performance based standards.
>
> (b) In determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. A lead agency should consider the following factors, among others, when determining the significance of impacts from greenhouse gas emissions on the environment:

(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;

(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, e.g., section 15183.5(b)). Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

(c) A lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.

Based on the above legal standards, the City finds analyzing the Project's GHG emissions through consistency with the state's laws and programs to address climate change, including AB 32, SB 32, SB 375, regional plans to address climate change consistent with state laws and plans, including the 2016-2040 SCS/RTP, and local plans, ordinances and policies to address climate change, including GreenLA and the Sustainable City pLAn, is the appropriate threshold. Calculating and analyzing per-capita GHG emissions, while not a threshold of significance, is a useful indicator as to whether regional GHG impacts are consistent with AB 32 and SB 32. Per-capita GHG emissions reflects on average GHG emissions taking into account population density. As part of its strategy for meeting the 2030 GHG emissions target codified in SB 32, CARB promulgated a community-wide annual goal of 6 metric tons of carbon dioxide equivalent ($MTCO_2e$) per capita by 2030 and 2 $MTCO_2e$ per capita by 2050 to be implemented through a future statewide Climate Action Plan. In accordance with the objectives and requirements of SB 375, the 2016–2040 RTP/SCS assessed regional per-capita GHG emissions from passenger and light duty vehicles. As noted above, CARB established SB 375 targets for passenger vehicles in the SCAG region compared to 2005 emissions: 1) an eight percent reduction in emissions by 2020 and 2) a 13 percent reduction in emissions by 2035. The 2016-2040 RTP/SCS indicates that the SCAG region will achieve an 18 percent reduction in per-capita passenger vehicle GHG emissions by 2035 and a 21 percent reduction in per-capita passenger vehicle GHG emissions by 2040 relative to 2005 levels. With that said, there is no adopted City or CAP per-capital GHG emission target or other numerical criteria adopted as a threshold of significance that would be applicable to the Proposed Project. Using consistency with AB 32's statewide goal for GHG reduction, among the other regulations, standards and policies, rather than a numerical threshold, as a significance criterion is also consistent with the broad guidance provided by Section 15064.4 of the CEQA Guidelines. Section 15064.4, to reflect that there is no iron-clad definition of significance. Section 15064.4 was not intended to restrict agency discretion in choosing a method for assessing GHG emissions, but rather to assist lead agencies in investigating and disclosing all that they reasonably can, regarding a project's GHG emissions impact.

METHODOLOGY

Calculating GHG Emission

GHG emissions result from both direct and indirect sources. Direct emissions include emissions from fuel combustion in vehicles and natural gas combustion from stationary sources. Indirect sources include off-site emissions occurring as a result of electricity and water consumption and solid waste. In addition, construction activities would result in direct and indirect emissions.

As GHGs are evaluated on a regional basis, the following analysis addresses the Downtown Plan Area as it pertains to the region. Mobile source emissions were estimated using VMT data presented in Section 4.15, *Transportation and Traffic*, and vehicle emission rates from CARB's EMFAC2017 model. EMFAC modeling included speed information by vehicle class, which allows the analysis to account for increased congestion in build scenarios.

Area source emissions related to existing and future demand for water, wastewater treatment and conveyance, solid waste disposal, and energy were obtained using the California Emissions Estimator Model (CalEEMod). Note water and wastewater demand in CalEEMod was adjusted to reflect the water demand from the Los Angeles Department of Water and Power's Urban Water Management Plan (2015). GHG emissions result from the energy use to supply, distribute, and treat water and wastewater, as well as from solid waste disposal by landfilling, recycling, or composting as methane and CO_2 gas is emitted in the process. Refer to Section 4.16, *Utilities and Service Systems*, for a detailed estimate of utility use and Section 4.5, *Energy*, for a detailed estimate of energy consumption.

Energy emissions estimates take into account California's Renewable Portfolio Standards (RPS) requiring retail sellers of electric services to increase procurement from eligible renewable energy resources to 60 percent by 2030 per SB 100. CalEEMod currently uses a carbon intensity factor for Los Angeles Department of Water and Power (LADWP) from reporting year 2007 (SCAQMD 2016) and does not take into account utility compliance with RPS standards over time. As of 2010, LADWP achieved its RPS goal of 20 percent of retail sales generated by carbon neutral sources and in 2017 LADWP achieved its RPS goal of 25 percent (LADWP 2013; 2017). Conservatively assuming that the 2007 carbon intensity factor of 0.56 MT per megawatt hour (MWhr) utilized in CalEEMod reflects 20 percent carbon neutral sources, by 2030 the carbon intensity factor of LADWP sourced energy would be 0.53 MT per MWhr and by 2030 it would be 0.28 MT per MWhr. The energy emissions estimates take into account these expected carbon intensity factors for existing emissions and future emissions forecast for 2040 with and without the Downtown Plan.

It is anticipated that future conservation (as a result of increased pressure to conserve and increased prices) will result in more efficient energy use by all sectors resulting in reduced energy demand. As energy providers and water suppliers respond to AB 32 and the Scoping Plan, emission rates associated with power and water delivery are anticipated to decrease. It is anticipated that the state and region will comply with AB 32 and SB 32, but at the present time sector-specific improvements, beyond those associated with RPS identified above, cannot be quantified for this analysis.

GHG emissions would also be generated by construction activity. No specific development projects have been proposed as part of the Downtown Plan, and an annualized quantification of construction emissions would be speculative. In addition, construction-related GHG emissions would be a negligible percentage of total regional emissions when considering the emissions generated by mobile sources. As stated by the 2016-2040 SCAG RTP/SCS Programmatic Environmental Impact Report (PEIR), construction related emissions presented for 2040 account for less than 0.3 percent of annual mobile source emissions (SCAG 2016). A similar percentage is expected for construction emissions related to the Downtown Plan.

Construction emissions are discussed below based on this assumption and amortized over 30 years in accordance with SCAQMD recommendations.

PROJECT IMPACTS

Threshold 4.7-1	Whether the Project is consistent with AB 32, SB 32, SB 375 (through demonstration of conformance with the 2016–2040 RTP/SCS), the Sustainable City pLAn and GreenLA**?**

Impact 4.7-1

Downtown Plan: Implementation of the Downtown Plan would result in a 24 percent increase in total GHG emissions in the Downtown Plan Area by 2040 and a 62 percent decrease in per capita GHG emissions. Although total GHG emissions in the Downtown Plan Area would increase due to the relatively large amount of growth anticipated, the population growth and associated GHG emissions from implementation of the Downtown Plan are within the overall growth projections for the City and thus would not add to overall citywide emissions, but rather would concentrate development in the Downtown Plan Area rather than in other parts of the City. In addition, the Downtown Plan would be consistent with the applicable GHG emission reduction goals, policies, and objectives found in the City's General Plan and SCAG's 2016-2040 RTP/SCS. This impact would be ***less than significant***.

New Zoning Code: The New Zoning would not generate GHG emissions and does not include any standards that would conflict with the applicable GHG emissions reduction goals, policies, and objectives found in the City's General Plan and SCAG's 2016-2040 RTP/SCS. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area. Any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This impact would be ***less than significant***.

Downtown Plan Impact

GHG Emissions Generation

Reasonably anticipated development from the Downtown Plan would generate GHG emissions through individual project construction and operation during the twenty plus year planning horizon of the Downtown Plan. GHG emissions would specifically arise from direct sources such as motor vehicles, natural gas consumption, solid waste handling/treatment, and indirect sources such as electricity generation.

Table 4.7-4 compares current annual GHG emissions for the Downtown Plan Area to 2040 emissions with and without the Downtown Plan. Both total emissions and per capita emissions are shown. The emissions estimates include some known emission control requirements (such as Pavley regulations and RPS), but does not take into account anticipated laws (such as increasingly stringent Title 24 standards, refinery regulations, and the Cap-and-Trade program) that will further reduce future GHG emissions.

Total annual GHG emissions generated in the Downtown Plan Area, based on the 2040 reasonably anticipated development under the Downtown Plan, would be greater than existing emissions by approximately 552,104 metric tons of CO_2 equivalent (MT CO_2e). This represents an increase of about 24 percent as compared to existing conditions, whereas the population of the Downtown Plan Area is projected to grow more than threefold and the number of Downtown Plan Area jobs is projected to grow by about 39 percent. Consequently, despite the overall increase in GHG emissions generated in the Downtown Plan Area, per capita GHG emissions would decrease. As illustrated in **Table 4.7-4**, per capita GHG emissions

are estimated at 29.9 MT CO_2e in 2017 and 11.3 MT CO_2e in 2040 with implementation of the Downtown Plan. This change represents a 62 percent drop in per capita emissions, which can be attributed to a combination of state-mandated GHG emission reduction strategies and the fact that implementation of the Downtown Plan would lower per capita VMT due to the location of jobs and housing in close proximity to each other and creation of substantial opportunities to use such transportation modes as transit, bicycling, and walking. By guiding development near transit corridors and encouraging creative mixed land uses, the Downtown Plan creates an efficient strategy for reasonably foreseeable development in the region, consistent with AB 32, SB 32 and the 2016-2040 RTP/SCS. This reduction in per capita emissions would also contribute to meeting the statewide 2050 goal of 2 MT CO_2e per capita. The per capita reduction in GHG emissions demonstrates compliance with regional, state, and federal efforts to reduce climate impacts from development and transportation. Finally, it should be recognized that although total GHG emissions in the Downtown Plan Area would incrementally increase due to the relatively large amount of growth anticipated in this area of the City, the growth projection for the Downtown Plan Area is within the overall growth projection for the City. Thus, the population growth and associated GHG emissions associated with implementation of the Downtown Plan would not add to overall citywide emissions, but rather would concentrate development in the Downtown Plan Area rather than in other parts of the City. Because of the proximity of jobs and housing and enhanced opportunities for transit use in the Downtown Plan Area, it is anticipated that focusing growth in the Downtown Plan Area would reduce citywide emissions as compared to accommodating more of the projected growth in other parts of the City.

TABLE 4.7-4 DOWNTOWN PLAN AREA GREENHOUSE GAS EMISSIONS

	Annual GHG Emissions (MT CO_2e)					
	Existing (2017)		2040 No Project		2040 With Project	
Source Type	**Total**	**Per Capita[2]**	**Total**	**Per Capita[2]**	**Total**	**Per Capita[2]**
Transportation[1]	835,274	11.0	704,140	6.3	844,465	3.4
Area	625	0.0	1,025	0.0	2,302	0.0
Energy[3]	1,146,932	15.1	1,085,208	9.7	1,403,456	5.6
Waste	194,404	2.6	271,195	2.4	401,542	1.6
Water	87,872	1.2	114,311	1.0	165,444	0.7
Construction Emissions [3]	88	<0.1	75	<0.1	90	<0.1
Total	**2,265,195**	**29.9**	**2,175,954**	**19.4**	**2,817,299**	**11.3**

NOTES: [1]Transportation emissions are based on GHG emission rates from EMFAC2017 that include implementation of the Pavley regulations. All other values were identified for the associated source activity as calculated by CalEEMod Version 2016.3.2.
[2] Per capita values equal emissions divided by population estimates from Section 4.12, *Population and Housing*.
[3] Energy emissions estimates take into account RPS standards requiring retail sellers of electric services to increase procurement from eligible renewable energy resources to 60 percent 2030 per SB 100, as detailed in the Methodology.
[4] Construction related emissions are estimated at 0.3 percent of annual mobile source emissions amortized over 30 years (SCAG 2016).

Regional Perspective

To assess future GHG emission reductions resulting from a development project, the future condition is often compared to a BAU condition – typically the proposed development without the various GHG reduction measures. For a community plan project, BAU is much more difficult to determine and would be entirely speculative to quantify. While the future conditions with the existing community plan identifies what is reasonably foreseeable to occur in the Downtown Plan Area if the Downtown Plan were not to proceed, it is not a complete picture of BAU for the region. The Downtown Plan is a planned response to forecast growth, so if growth does not occur in the Downtown Plan Area, it could occur elsewhere in the City or SCAG region. The Downtown Plan combines sustainable strategies (e.g., proximity to transit, mixed-use, increased density) to respond to state, regional and local policies aimed at reducing GHG emissions. If development were to occur elsewhere in a less sustainable fashion (BAU), regional emissions would be greater. However, for land use plans such as the Downtown Plan, full quantification of BAU is not possible because, at this scale, it is not possible to anticipate where growth would go and how different

it would be as compared to the project in terms of proximity to transit, mix of uses and density. Therefore, a comparison of the Downtown Plan's emissions in the future to emissions under BAU is not possible.

In consideration of the objectives of SB 375 and the goals of the 2016–2040 RTP/SCS, per-capita CO_2 emissions from passenger and light duty vehicles were analyzed. The 2016–2040 RTP/SCS shows regional per-capita GHG emissions from passenger and light duty vehicles being reduced by 21 percent relative to 2005 levels by 2040. The 2016–2040 RTP/SCS determined that the 2005 per-capita CO_2 emissions from passenger and light duty vehicles within the SCAG region were 23.8 pounds per day.

Table 4.7-5 presents the forecast population, total Downtown Plan Area daily CO_2 emissions from passenger and light-duty vehicles, and per-capita CO_2 emissions within the Downtown Area under Existing Conditions, the Future (2040) No Project, and the Downtown Plan (Future [2040] With Project).

TABLE 4.7-5 PROJECT AREA SB 375 PASSENGER VEHICLE PER-CAPITA CO_2 EMISSIONS

	Existing Conditions (2017)	2040 No Project	2040 With Project
Resident Population	76,000	112,000	252,000
Daily CO_2 Emissions (Pounds)	3,476,705	2,670,303	3,202,455
Per Capita Emissions (Pounds)	45.7	23.8	12.7
Comparison to 2005 SCAG Regional Per Capita Emissions Level (Percent Increase or Decrease)	92%	0%	-47%

NOTES: [1]Transportation emissions are based on GHG emission rates for passenger and light duty vehicles from EMFAC2017 and include implementation of the Pavley regulations.
[2] Per capita values equal emissions divided by population estimates from Section 4.12, *Population and Housing*.

As shown in **Table 4.7-5**, implementation of the Downtown Plan would reduce per-capita CO_2 emissions from passenger and light duty vehicles by approximately 33.0 pounds per day relative to Existing Conditions and by approximately 11.1 pounds per day relative to the Future (2040) No Project (comparison to Future (2040) No Project is for information purposes and not for impact analysis). Under the Downtown Plan, per-capita CO_2 emissions would be reduced by approximately 47 percent relative to the 2005 SCAG Regional baseline levels examined under SB 375. The 47 percent reduction by 2040 as compared to 2005 levels resulting from the Downtown Plan exceeds the 21 percent reduction target of the 2016–2040 RTP/SCS, and the CARB established SB 375 targets of a 13 percent reduction by 2035. Therefore, the Downtown Plan is consistent with SB 375.

Based on the plan-level analysis, the Downtown Plan would decrease per-capita emissions in the Downtown Plan Area compared to existing conditions and, therefore, considered in isolation, would contribute to reducing emissions in California below existing emissions and would contribute to AB 32 and SB 32 GHG reduction goals. The Downtown Plan is not occurring in isolation; it is part of a regional strategy (contained in the 2016–2040 RTP/SCS) to direct growth to urban areas in order to achieve the following:

- Undertake modern, efficient construction techniques that result in using less energy and less water as compared to less dense development;
- Create a mix of uses that encourages pedestrian and bicycle activity, reducing vehicle trips; and
- Develop areas in close proximity to transit in order to reduce vehicular trips.

The Downtown Plan would also be consistent with the City's Sustainable City pLAn by accommodating growth while providing transportation options. This strategy would result in lower per capita emissions

than less dense growth and would contribute to the City reaching the 2025 Sustainable City pLAn reduction target of 45 percent.

Finally, it should be recognized that although total GHG emissions in the Downtown Plan Area would incrementally increase due to the relatively large amount of growth anticipated in this area of the City, the growth projection for the Downtown Plan Area is within the overall growth projection for the City. Thus, the population growth and associated GHG emissions associated with implementation of the Downtown Plan would not add to overall citywide emissions, but would concentrate development in the Downtown Plan Area rather than in other parts of the City. Because of the proximity of jobs and housing and enhanced opportunities for transit use in the Downtown Plan Area, it is anticipated that focusing growth in the Downtown Plan Area would reduce citywide emissions as compared to accommodating more of the projected growth in other parts of the City.

Consistency with State and Regional Plans, Policies, and Regulations

The State of California has adopted plans and policies designed to reduce regional and local GHG emissions. SB 375 requires that each MPO prepare an SCS in the RTP that demonstrates how the region will meet greenhouse gas emissions targets. SB 375 establishes a collaborative relationship between MPOs and CARB to establish GHG emissions targets for each region in the state. Under the guidance of the goals and objectives adopted by SCAG's Regional Council, the 2016–2040 RTP/SCS was developed to provide a blueprint to integrate land use and transportation strategies to help achieve a coordinated and balanced regional transportation system. The 2016–2040 RTP/SCS represents the culmination of several years of work involving dozens of public agencies, 191 cities, hundreds of local, county, regional and state officials, the business community, environmental groups, as well as various nonprofit organizations. Adoption of the 2016–2040 RTP/SCS substantiated that the growth forecasts for the SCAG region, taking into account efforts to reduce climate change impacts from GHG emissions, were consistent with the goals of SB 375.

The 2016–2040 RTP includes an SCS, as required by SB 375. The primary goal of the SCS is to provide a vision for future growth in southern California that will decrease per capita GHG emissions from passenger vehicles. However, the strategies contained in the 2016–2040 RTP/SCS will produce benefits for the region far beyond simply reducing GHG emissions. The SCS integrates the transportation network and related strategies with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. The regional vision of the SCS maximizes current voluntary local efforts that support the goals of SB 375. The SCS focuses the majority of new housing and job growth in high-quality transit areas and other opportunity areas on existing main streets, in downtowns, and on commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development. The underlying purpose of the Downtown Plan is to plan for and accommodate foreseeable growth in the Downtown Plan Area, consistent with the growth strategies of the City as provided in the City's General Plan Framework Element, as well as the policies of SB 375 and the SCS. The Downtown Plan would allow for concentrated, mixed-use development adjacent to transit corridors in order to conserve resources, protect existing residential neighborhoods, and improve air quality by reducing the reliance on cars. The Downtown Plan is expected to contribute to reductions in per capita GHG emissions when viewed at the regional level, as detailed above. Thus, the Downtown Plan would be entirely consistent with the SCS and SB 375 goals. As illustrated in **Table 4.7-5**, the Downtown Plan would contribute to reductions in per capita GHG vehicle emissions. As a result and as illustrated in **Table 4.7-6**, the Downtown Plan would be consistent with SCS and SB 375 goals.

As noted previously, CARB recently adopted its 2017 Update to the CARB Scoping Plan, which is designed to assist lead agencies in reducing regional and local GHG emissions. Because implementation of the Downtown Plan would result in a reduction in per capita emissions compared to baseline conditions, the Downtown Plan would contribute to achieving the Scoping Plan per capita targets and would not conflict with the 2017 Scoping Plan. Moreover, the 2017 Scoping Plan emphasized the importance in the role of

local agencies in setting policies to reduce VMT through land use planning stating, "While the State can do more to accelerate and incentivize these local decisions, local actions that reduce VMT are also necessary to meet transportation sector-specific goals and achieve the 2030 target under SB 32" (CARB 2017; page 100). The 2017 Scoping Plan recommends that local agencies adopt policies to reduce VMT through land use and community design, transit oriented development, street design policies that prioritize transit, biking and walking, and by increasing low carbon mobility choices. The type of compact, urban development along public transportation lines that would be developed with implementation of the Downtown Plan would be entirely consistent with policies in the 2017 Scoping Plan. The Downtown Plan promotes concentrated, mixed-use development adjacent to transit stations and corridors in order to conserve resources and create more sustainable development pattern by increasing opportunities for active transportation and reducing the use of cars. Therefore, the Downtown Plan is consistent with the 2017 Scoping Plan and the GHG reduction goals of AB 32 and SB 32.

TABLE 4.7-6 CONSISTENCY ANALYSIS OF THE DOWNTOWN PLAN WITH THE SCAG 2016-2040 RTP/SCS

Objective	Downtown Plan Consistency
6 Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).	**Consistent** As discussed in Section 4.2, *Air Quality*, the Downtown Plan would not conflict with the regional AQMP. As discussed in Section 4.15, *Transportation and Traffic*, the Downtown Plan Area provides access to active transportation options and the Downtown Plan would generally enhance access to bicycle and pedestrian facilities. In addition, the Downtown Plan contains the following policies aimed at improving air quality and encouraging active transportation modes, such as bicycling and walking: LU 10.1 Require active ground floors and street frontages that improve walkability and connectivity, especially between transit stations and nearby destinations. LU 10.3 Incentivize the inclusion of paseos through large sites to improve pedestrian access. LU 10.8 Promote compact development and encourage walking, biking, and transit use by encouraging no or minimal parking, when possible. LU10.9 Encourage underground parking, when provided, to increase the amount of above grade building square footage dedicated to active uses and improve the pedestrian environment. LU 21.2 Foster and reinforce cohesive, pedestrian-friendly, and inviting streetscapes that promote walking, bicycling, and transit use. Encourage the creative infill of landscaped setbacks and inoperative spaces, such as those resulting from inconsistent streetwalls. LU 33.4 Support walkable neighborhoods with an active and livable street life that is shared by all modes, including pedestrians, cyclists, and transit users. LU 33.5 Promote an enhanced public realm and network of pedestrian paths that connect neighboring resources, such as parks to the Los Angeles River. LU 37.6 Encourage active ground floor activities and pedestrian improvements to support walkability.

TABLE 4.7-6 CONSISTENCY ANALYSIS OF THE DOWNTOWN PLAN WITH THE SCAG 2016-2040 RTP/SCS	
Objective	**Downtown Plan Consistency**
	LU 38.2 Promote a mix of residential and commercial uses to reinforce compact and walkable neighborhoods. MC 2.1 Establish a mode share goal of 75 percent for transit, walking, and biking for the year 2040 to improve the sustainability of Downtown's mobility network and increase access for residents, workers, and visitors. MC 3.1 Implement a coordinated Pedestrian-First District that employs expanded use of Leading Pedestrian Intervals, scramble crosswalks, and right turns limitations on red, and other interventions to improve pedestrian safety and encourage pedestrian activity.
7 Actively encourage and create incentives for energy efficiency, where possible.	**Consistent** As discussed in Section 4.5, *Energy*, the Downtown Plan would be consistent with the City of Los Angeles General Plan, which encourages the use of renewable energy, energy conservation, and energy efficiency techniques in all new building design, orientation and construction, and support of alternative transportation and fuels. In addition, the Downtown Plan contains the following policies aimed at improving energy conservation, energy efficiency, and utilization of renewable energy sources, which would contribute to GHG emission reductions: LU 11.2 Encourage efficient building techniques and sustainable materials to guide lasting development that minimizes the adverse effects on the environment. LU 15.6 Encourage sustainable building design and construction standards that can increase building energy and water efficiency. LU 16.1 Implement strategies such as expanding shade cover and more efficient water use to lessen the urban heat island effect and increase reliance on renewable energy sources. LU 16.8 Encourage the implementation of renewable energy source target programs, including the Los Angeles Department of Water and Power *2016 Final Power Integrated Resource Plan (IRP)*, to improve environmental resilience.

Consistency with Local Plans, Policies, and Regulations

The City of Los Angeles GreenLA Climate Action Plan

The City of Los Angeles enacted its GreenLA CAP in 2007 to outline strategies for reducing the City's emissions of GHG and consequent effects on climate change. The CAP's primary long-term objective is to establish a framework for implementing GHG emissions reduction efforts that would achieve a goal of reducing citywide emissions to 35 percent below 1990 levels by 2030. With regard to planning, elements of the CAP designed to aid in regional GHG reductions include promotion of high-density housing close to major transportation arteries, implementation of TOD, and expanding availability of City land for housing, mixed-use development, parks, and open space. The proposed Downtown Plan would add substantial multi-family housing to the Downtown Plan Area and incorporate transit-oriented development (TOD). Furthermore, implementation of the Downtown Plan would encourage pedestrian-friendly, mixed-use neighborhoods that would require less use of passenger vehicles. The Downtown Plan promotes a

sustainable Downtown and would allow for a more dense, integrated land use and transportation environment that would encourage the use of active transportation. The Downtown Plan encourages sustainable and transit oriented development with form regulations that prioritize pedestrian walkability, with no minimum parking requirements. Together, these regulations encourage increased use of transit resources and support a shift in travel mode. The combination of these strategies is consistent with the goals of GreenLA. **Table 4.7-7** illustrates the Downtown Plan's consistency with the City's GreenLA CAP.

TABLE 4.7-7 CONSISTENCY ANALYSIS OF THE DOWNTOWN PLAN WITH THE CITY'S GREENLA CAP

Objective	Downtown Plan Consistency
Energy Transform Los Angeles into the model of an energy efficient city.	**Consistent** As discussed above, Downtown Plan Area per capita GHG emissions would be within state targets. In addition, the Downtown Plan contains the following passive energy efficiency policies relating to City facilities and private developments that would result in reductions of GHG emissions: LU 11.2 Encourage efficient building techniques and sustainable materials to guide lasting development that minimizes the adverse effects on the environment. LU 15.6 Encourage sustainable building design and construction standards that can increase building energy and water efficiency. LU 16.1 Implement strategies such as expanding shade cover and more efficient water use to lessen the urban heat island effect and increase reliance on renewable energy sources. LU 16.8 Encourage the implementation of renewable energy source target programs, including the Los Angeles Department of Water and Power 2016 Final Power Integrated Resource Plan (IRP), to improve environmental resilience.
Water Decrease per capita water use.	**Consistent** See the response to Energy: Transform Los Angeles into the model of an energy efficient city, above
Transportation Lower the environmental impact and carbon intensity of transportation.	**Consistent** As illustrated in **Table 4.7-4**, implementation of the Downtown Plan would result in a reduction in per capita GHG emissions by 2040.
Transportation Focus on mobility for people, not cars.	**Consistent** As discussed in Section 4.15, *Transportation and Traffic*, the Downtown Plan Area provides access to a range of transportation options. The Downtown Plan also includes policies that support reductions in vehicle miles traveled and ultimately GHG emissions, such as policies promoting active transport through the development of walkable streets and the expansion of bicycle and pedestrian facilities. While total daily VMT would increase from existing conditions to 2040 with Downtown Plan conditions, per capita VMT would decrease from 76 to 35 VMT per capita daily (based on population values summarized in Section 4.12, *Population, Housing and Employment*). Moreover, a number of policies contained in the Downtown Plan support the development of pedestrian-oriented development with universal accessibility, including: LU 10.3 Incentivize the inclusion of paseos through large sites to improve pedestrian access.

TABLE 4.7-7 CONSISTENCY ANALYSIS OF THE DOWNTOWN PLAN WITH THE CITY'S GREENLA CAP

Objective	Downtown Plan Consistency
	LU 10.8 Promote compact development and encourage walking, biking, and transit use by encouraging no or minimal parking, when possible. LU10.9 Encourage underground parking, when provided, to increase the amount of above grade building square footage dedicated to active uses and improve the pedestrian environment. LU 21.2 Foster and reinforce cohesive, pedestrian-friendly, and inviting streetscapes that promote walking, bicycling, and transit use. Encourage the creative infill of landscaped setbacks and inoperative spaces, such as those resulting from inconsistent streetwalls. LU 33.4 Support walkable neighborhoods with an active and livable street life that is shared by all modes, including pedestrians, cyclists, and transit users. LU 33.5 Promote an enhanced public realm and network of pedestrian paths that connect neighboring resources, such as parks to the Los Angeles River. LU 37.6 Encourage active ground floor activities and pedestrian improvements to support walkability. LU 38.2 Promote a mix of residential and commercial uses to reinforce compact and walkable neighborhoods. MC 2.1 Establish a mode share goal of 75 percent for transit, walking, and biking for the year 2040 to improve the sustainability of Downtown's mobility network and increase access for residents, workers, and visitors. MC 3.1 Implement a coordinated Pedestrian-First District that employs expanded use of Leading Pedestrian Intervals, scramble crosswalks, and right turns limitations on red, and other interventions to improve pedestrian safety and encourage pedestrian activity.
Transportation Create a more livable city.	**Consistent** The entire Downtown Plan Area is well-served by existing and planned transit and many of the mixed-use residences permitted would occur in high activity areas, such as in proximity to transit corridors and along major arterials. Relatively lower-density residential neighborhoods would primarily occur in the northeast portion of the Downtown Plan Area, such as Chinatown, which is buffered from the high-rises of Downtown by the lower elevations of Downtown's civic core buildings.
Waste Shift from waste disposal to resource recovery.	**Consistent** The Downtown Plan the following policy that support diversion of waste to landfills and reduce overall waste generation: LU 16.4 Support systems that symbiotically reduce waste and capitalize on the multi-functionality of spaces.

The City of Los Angeles Sustainable City pLAn

The City's Sustainability City pLAn is the City's sustainability planning document that embraces both short- and long-term goals to improve equity, the City's economy, and the environment. Focus areas for the environmental aspect of the City's Sustainability City pLAn includes improving local water supply, increasing local electricity supply from solar, incentivizing energy efficient buildings, reducing atmospheric carbon, reducing waste destined for landfills, and embracing climate leadership. **Table 4.7-8** below compares the goals and objectives of the Downtown Plan with those of the City's Sustainability City pLAn.

TABLE 4.7-8 CONSISTENCY ANALYSIS OF THE DOWNTOWN PLAN WITH THE CITY'S SUSTAINABLE CITY PLAN

Objective	Downtown Plan Consistency
Local Water Reduce per capita potable water use and increase recycled water.	**Consistent** As discussed in Section 4.17, *Utilities and Service Systems*, the Downtown Plan would minimize per capita water use through water efficient design. In addition, the Downtown Plan contains the following passive energy efficiency policies relating to City facilities and private developments that would result in reductions of per capita GHG emissions: LU 11.2 Encourage efficient building techniques and sustainable materials to guide lasting development that minimizes the adverse effects on the environment. LU 16.1 Implement strategies such as expanding shade cover and more efficient water use to lessen the urban heat island effect and increase reliance on renewable energy sources. LU 16.5 Support citywide water use reduction goals by focusing on water management practices, and stormwater capture and treatment in Downtown that can increase local water supply.
Energy-Efficient Buildings Lead by example through reduced energy consumption in municipal buildings.	**Consistent** See responses to Local Water: Reduce per capita potable water use and increased recycled water, above, and Lead By Example: Reduce municipal building energy consumption, below.
Carbon and Climate Leadership Reduce individual and citywide energy consumption through education and retrofitting.	**Consistent** See responses to Local Water: Reduce per capita potable water use and increased recycled water, above, and Lead By Example: Reduce municipal building energy consumption, below.
Waste and Landfills Execute and expand plans to increase landfill diversion and recycling.	**Consistent** As discussed in Section 4.17, *Utilities and Service Systems*, future Downtown Plan Area development would participate in City recycling and waste diversion programs. In addition, the Downtown Plan the following policy that supports diversion of waste to landfills and reduce overall waste generation: LU 16.1 Implement strategies such as expanding shade cover and more efficient water use to lessen the urban heat island effect and increase reliance on renewable energy sources.
Waste and Landfills Encourage innovative expansion of recycling and waste diversion.	**Consistent** See response to Waste and Landfills: Execute and expand plans to increase landfill diversion and recycling, above.
Mobility and Transit Improve pedestrian and bicycle infrastructure and other sustainable transport, emphasizing connections to mass transit.	**Consistent** As discussed in Section 4.15, *Transportation and Traffic*, the Downtown Plan would minimize per capita vehicle trips and vehicle miles traveled by enhancing access to walking, bicycling, and transit. In addition, the Downtown Plan contains the following policies aimed at improving connectivity with public

	transit and encouraging active transportation modes, such as bicycling and walking: LU 1.1 Ensure the development of complete neighborhoods with diverse uses and Resilient infrastructure, parks, streetscapes, transit, and community amenities. LU 3.3 Foster healthy communities composed of mixed-income housing in proximity to transit, jobs, amenities, services, cultural resources, and recreational facilities. LU 10.1 Require active ground floors and street frontages that improve walkability and connectivity along Primary Streets, especially between transit stations and nearby destinations. LU 10.9 Encourage underground parking, when provided, to increase the amount of above grade building square footage dedicated to active uses and improve the pedestrian environment. LU 18.1 Implement zoning regulations that provide space for the greatest intensity and density of uses; eliminate barriers and create incentives that ensure maximum development potential near transit investment and regional attractions. LU 21.2 Foster and reinforce cohesive, pedestrian-friendly, and inviting streetscapes that foster walking, bicycling, and transit use. Encourage the creative infill of landscaped setbacks and inoperative spaces, such as those resulting from inconsistent streetwalls. LU 21.3 Pursue the implementation of a legible and consistent wayfinding system that guides pedestrians to destinations of interest and transit portals, such as Metro Stations. LU 21.9 (Bunker Hill Neighborhood) Encourage an active, walkable environment through building design that incorporates active ground floor uses and streetscape elements that provide an enhanced pedestrian experience. LU 21.11 (South Park Neighborhood) Seek opportunities to adapt alleys into sustainable, safe, inviting, and vibrant spaces that function as publicly accessible open space and pedestrian paths of travel, while accommodating necessary vehicular and loading functions. LU 25.6 (Broadway Neighborhood) Support existing and future revitalization efforts to expand the sidewalk for pedestrian and recreational use, as well as streetscape and landscape improvements in conjunction with major transit expenditures. LU 28.2 Encourage mixed-income and affordable housing in close proximity to transit, jobs, amenities, and services. LU 29.5 Strengthen pedestrian connections to transit facilities and centers of activity with improved signage and wayfinding. LU 52.5 Locate and design civic, institutional, and cultural buildings, and public spaces, to be easily accessible to pedestrians, cyclists, and transit users. LU 52.6 Reinforce the many transit options in Civic areas by taking a transportation

	demand management approach to new development, and making transit use the most compelling alternative for employees, visitors, and residents. LU 33.4 Support walkable neighborhoods with an active and livable street life that is shared by all modes, including pedestrians, cyclists, and transit users. LU 37.6 Encourage active ground floor activities and pedestrian improvements to support walkability. LU 38.2 Promote a mix of residential and commercial uses to reinforce compact and walkable neighborhoods. MC 2.1 Establish a mode share goal of 75 percent for transit, walking, and biking for the year 2040 to improve the sustainability of Downtown's mobility network and increase access for residents, workers, and visitors. MC 2.4 Promote the use of technologies that can facilitate multimodal travel by improving wayfinding and access to transit schedules, especially for visitors and new users of the Downtown transit system. MC 2.5 Facilitate integration between different modes of travel to create a seamless experience as users switch between modes and to promote transit and active transportation. MC 3.1 Implement a coordinated Pedestrian-First District that employs expanded use of Leading Pedestrian Intervals, scramble crosswalks, and right turns limitations on red, and other interventions to improve pedestrian safety and encourage pedestrian activity. MC 4.3 Support the expansion of Bike Share throughout Downtown and adjacent areas, especially as a means to connect areas that are less served by transit. MC 4.4 Facilitate the integration of bikes on transit to improve first-last mile connections. MC 5.3 Enhance wayfinding information that directs transit users to centers of activity and facilitates pedestrian connections. MC 5.4 Extend DASH service to activity centers with few fixed transit stations, such as the Fashion District, the Arts District, and Central City East. MC 5.6 Encourage the integration of information and payment systems across different transit service providers to provide a seamless experience for transit riders. MC 5.7 Find opportunities to install bus platforms along key corridors to facilitate transit boarding and reduce conflicts with other modes. MC 5.8 Foster the expansion of light and heavy rail transit service to Eastern Downtown, through projects such as the West Santa Ana Branch Line and extension of the Red and Purple Lines, to serve the expanding resident, worker, and visitor populations.

Mobility and Transit Expand high-quality transit options across the city.	See the response to Mobility and Transit: Improve pedestrian and bicycle infrastructure and other sustainable transport, emphasizing connections to mass transit, above.
Air Quality Convert local goods movement to zero-emissions.	**Consistent** The Downtown Plan includes various transportation improvement projects aimed at improving local goods movement and reducing VMT and delay times, anticipated to reduce per capita GHG emissions. In addition, the Downtown Plan contains the following policies that would contribute to converting local goods movement to zero-emissions by encourage zero-emission vehicles and/or eliminating distances traveled: LU 48.1 Support the collocation of businesses to complement industrial activity. LU 48.2 Guide the development of structures that are oriented and conducive to goods movement and new industry, while balancing pedestrian needs, and supporting transit use.
Air Quality Transition personal transport toward zero emissions.	**Consistent** See the response to Air Quality: Convert local goods movement to zero-emissions, above. Moreover, the LADWP's 2016 IRP recommends the expansion of existing programs to promote increased workplace and residential electric vehicle charging stations to support greater electric vehicle adoption, as discussed in Section 4.5.3, *Environmental Setting*, of the Energy analysis of this EIR.
Lead By Example Reduce municipal building energy consumption.	**Consistent** As discussed in Section 4.5.2, *Regulatory Setting*, of the Energy analysis of this EIR, the City's Green Building Code would enforce the application of the 2016 CALGreen standards and would apply to all new buildings, all additions, and any alterations with building valuations over $200,000. In addition, the Downtown Plan contains the following passive energy efficiency policies relating to City facilities and private developments that would result in reductions of per capita GHG emissions: LU 11.2 Encourage efficient building techniques and sustainable materials to guide lasting development that minimizes the adverse effects on the environment. LU 16.1 Implement strategies such as expanding shade cover and more efficient water use to lessen the urban heat island effect and increase reliance on renewable energy sources.
Lead By Example Reduce emissions from municipal transportation and fleets.	**Consistent** The Downtown Plan does not contain any policies specifically aimed at improving City's service fleet's efficiency or alternative fuel use. However, the Downtown Plan does not involve management of the City's service fleet and would not obstruct the City's ambition in implementing this objective. In addition, the Downtown Plan contains various transportation improvement projects that would contribute to reduced emissions from municipal transportation and fleets.
Lead By Example Reduce municipal water consumption.	**Consistent** See the response to Local Water: Reduce per capita potable water use and increased recycled water, above.

In addition, individual development projects constructed within the Downtown Plan Area would be required to comply with the Los Angeles Green Building Code. The City's Green Building Code includes energy and water saving measures that reduce GHG emissions below 2013 Title 24 requirements. It promotes sustainable building practices by creating a series of requirements and incentives for developers to meet the U.S. Building Council's Energy and Design standards. The Green Building Code includes the following key mandatory measures for non-residential and high-rise residential buildings related to GHG reduction:

- Short-Term Bicycle Parking: If a development project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passersby, for five percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack.
- Long-Term Bicycle Parking: For buildings with over 10 occupants, provide secure bicycle parking for five percent of motorized vehicle parking capacity, with a minimum of one space. Acceptable parking facilities shall be convenient from the street and may include:
    - Covered, lockable enclosures with permanently anchored racks for bicycles.
    - Lockable bicycle rooms with permanently anchored racks.
    - Lockable, permanently anchored bicycle lockers.
- Designated Parking: Provide designated parking, by means of permanent marking or a sign, for any combination of low-emitting, fuel-efficient, and carpool/van pool vehicles as described in Table 5.106.5.2 of the Green Building Code.
- Energy Conservation: Provide electric vehicle supply wiring for a minimum of five percent of the total number of parking spaces.
- Energy Conservation: A project must exceed the California Energy Code requirements, based on the 2008 Energy Efficiency Standards, by 15 percent using an Alternative Calculation Method approved by the California Energy Commission.
- Energy Conservation: Each appliance provided and installed shall meet Energy Star requirements if an Energy Star designation is applicable for that appliance.
- Renewable Energy: Provide future access, off-grid pre-wiring, and space for electrical solar systems.

Because the Downtown Plan would be consistent with the goals of GreenLA and the Sustainable City pLAn, and future development projects within the Project Area would be required to comply with the City's Green Building Code, the Downtown Plan would be consistent with the City's strategies for reducing GHG.

The City of Los Angeles General Plan Framework Element

The Downtown Plan focuses on mobility, urban design, public safety, and healthy, sustainable communities. A vision of concentrated, mixed-use development adjacent to transit corridors is promoted in order to conserve resources, protect existing residential neighborhoods, and improve air quality by reducing the use of cars. As part of the Downtown Plan, General Plan designations would be updated to allow for a range of uses that improve the link between land use and transportation in a manner that is consistent with the citywide comprehensive growth strategy identified in the City's General Plan Framework Element. **Table 4.7-9** discusses consistency of the Downtown Plan with the City of Los Angeles' General Plan Framework Element.

TABLE 4.7-9 CONSISTENCY ANALYSIS OF THE DOWNTOWN PLAN WITH THE CITY OF LOS ANGELES GENERAL PLAN FRAMEWORK ELEMENT (1995)

Objective	Downtown Plan Consistency
3.15 Focus mixed commercial/ residential uses, neighborhood-oriented retail, employment opportunities, and civic and quasi-public uses around urban transit stations, while protecting and preserving surrounding low-density neighborhoods from the encroachment of incompatible land uses.	**Consistent** As discussed in Section 4.15, *Transportation and Traffic*, the Downtown Plan Area is well served by public transit, including regional rail service, many local and rapid bus lines, and the Metro Red, Purple, Gold, Blue, and Expo rail lines.
3.16 Accommodate land uses, locate and design buildings, and implement streetscape amenities that enhance pedestrian activity.	**Consistent** The Downtown Plan includes policies that support reductions in vehicle miles traveled and ultimately GHG emissions, such as policies promoting active transport through the development of walkable streets and the expansion of bicycle and pedestrian facilities. While total daily VMT would increase from existing conditions to 2040 with Downtown Plan conditions, total daily VMT per service population would decrease from 19.6 to 15.9 (based on population values summarized in Section 4.12, *Population, Housing and Employment*). Moreover, a number of policies contained in the Downtown Plan support the development of pedestrian-oriented development with universal accessibility, including: LU 10.3 Incentivize the inclusion of paseos through large sites to improve pedestrian access. LU 10.8 Promote compact development and encourage walking, biking, and transit use by encouraging no or minimal parking, when possible. LU 21.2 Foster and reinforce cohesive, pedestrian-friendly, and inviting streetscapes that foster walking, bicycling, and transit use. Encourage the creative infill of landscaped setbacks and inoperative spaces, such as those resulting from inconsistent streetwalls. LU 21.3 Pursue the implementation of a legible and consistent wayfinding system that guides pedestrians to destinations of interest and transit portals, such as Metro Stations.
4.2 Encourage the location of new multi-family housing development to occur in proximity to transit stations, along some transit corridors, and within some high activity areas with adequate transitions and buffers between higher-density developments and surrounding lower-density residential neighborhoods.	**Consistent** As discussed in Section 4.15, *Transportation and Traffic*, the entire Downtown Plan Area is well-served by existing transit and planned transit and many of the mixed-use residences permitted would occur in high activity areas, such as in proximity to transit corridors and along major arterials. Relatively lower-density residential neighborhoods would primarily occur in the northeast portion of the Downtown Plan Area, such as Chinatown, which is buffered from the high-rises of Downtown by the lower elevations of Downtown's civic core buildings.
9.40 Ensure efficient and effective energy management in providing appropriate levels of lighting for private outdoor lighting for private streets, parking	**Consistent** As discussed in Section 4.5.2, *Regulatory Setting*, of the Energy analysis of this EIR, future development in the Downtown Plan Area would be required to comply with energy efficiency lighting and light pollution reduction requirements included in the 2016 California Building Code, including the

TABLE 4.7-9 CONSISTENCY ANALYSIS OF THE DOWNTOWN PLAN WITH THE CITY OF LOS ANGELES GENERAL PLAN FRAMEWORK ELEMENT (1995)	
Objective	**Downtown Plan Consistency**
areas, pedestrian areas, security lighting, and other forms of outdoor lighting and minimize or eliminate the adverse impact of lighting due to light pollution, light trespass, and glare.	CalGreen Code, and the Los Angeles Building Code and Los Angeles Green Building Code (LAMC Chapter IX); the Los Angeles Building Code and Green Building Code largely incorporate and amend the 2013 California Building Code and CalGreen Code, respectively, For example, Subsection 99.05.106.8 of the Los Angeles Green Building Code sets restrictions on residential outdoor lighting, and Section 99.04.211.4 requires residences to be constructed with solar-ready features as specified in the California Energy Code. Lighting requirements and potential light pollution and glare impacts would be less than significant, as discussed in Section 4.1, Aesthetics.

The City of Los Angeles General Plan Air Quality Element

The City's General Plan Air Quality Element, adopted in 2003, sets forth goals, objectives, and policies that aim to guide the City in implementing its air quality improvement programs and strategies. The Air Quality Element recognizes that air quality strategies must be integrated into land use and transportation decisions and aims to facilitate consistency with regional Air Quality, Growth Management, Mobility, and Congestion Management Plans. **Table 4.7-10** shows objectives contained in the City's Air Quality Element applicable to reducing GHG emissions and how the Downtown Plan's goals and objectives satisfy these objectives.

TABLE 4.7-10 CONSISTENCY ANALYSIS OF THE DOWNTOWN PLAN WITH THE CITY OF LOS ANGELES GENERAL PLAN AIR QUALITY ELEMENT (1992)	
Objective	**Downtown Plan Consistency**
1.1 Reduce air pollutants consistent with the Regional Air Quality Management Plan (AQMP), increase traffic mobility, and sustain economic growth citywide.	**Consistent** As discussed in Section 4.2, *Air Quality*, Downtown Plan development would generate emissions exceeding SCAQMD significance thresholds. However, growth under the Downtown Plan would be consistent with SCAG forecasts upon which the AQMP is based. In addition, the Downtown Plan Area includes a wide range of transportation options and consequently, as discussed in Section 4.15, *Transportation and Traffic*, per capita vehicle miles traveled (VMT) in the Downtown Plan Area are forecast to remain well below city and regional averages.
2.1 Reduce work trips as a step towards attaining trip reduction objectives necessary to achieve regional air quality goals.	**Consistent** The Downtown Plan would reduce work trips by promoting development near major transit hubs, promoting development of residences near employment, improving and expanding pedestrian, bicycle, and transit facilities, and supporting complete communities with a mix of residences and community-serving uses. While total daily VMT would increase from existing conditions to 2040 with Downtown Plan conditions, per capita VMT would decrease from 76 to 35 VMT per capita daily (based on population values summarized in Section 4.12, *Population, Housing and Employment*).
2.2 Increase vehicle occupancy for non-work trips by creating disincentives for single passenger vehicles and incentives for high occupancy vehicles.	**Consistent** The Downtown Plan Area is well served by public transit and a variety of enhancements to public transit are proposed. While total daily VMT would increase from existing conditions to 2040 with Downtown Plan conditions, total daily VMT per service population would decrease from 19.6 to 15.9 (based on population values summarized in Section 4.12, *Population, Housing and Employment*). In addition, the Downtown Plan promotes higher vehicle occupancy with the following policy: MC 7.4 Expand programs that offer access to carpools and vanpools for Downtown workers to reduce the commute mode share of single occupancy vehicles.

TABLE 4.7-10 CONSISTENCY ANALYSIS OF THE DOWNTOWN PLAN WITH THE CITY OF LOS ANGELES GENERAL PLAN AIR QUALITY ELEMENT (1992)

Objective	Downtown Plan Consistency
3.1 Increase the portion of work trips made by transit to levels that are consistent with the goals of the AQMP and Congestion Management Plan (CMP).	**Consistent** See response to General Plan Air Quality Element Objective 2.1.
3.2 Reduce vehicular traffic during peak periods.	**Consistent** See response to General Plan Air Quality Element Objective 2.1. The overall reduction in per capita vehicle trips and vehicle miles traveled would also reduce peak period traffic.
4.2 Reduce vehicle trips and vehicle miles traveled associated with land use patterns.	**Consistent** See response to General Plan Air Quality Element Objective 2.1. Reasonably anticipated development from the Downtown Plan would include a mix of residential, service-oriented, and job-generating uses that would encourage transit use, walking, and bicycling while minimizing travel distances and vehicle miles traveled.
5.1 Increase energy efficiency of City facilities and private developments.	**Consistent** As discussed in Section 4.5.2, *Regulatory Setting*, of the Energy analysis of this EIR, the City's Green Building Code would enforce the application of the 2016 CALGreen standards and would apply to all new buildings, all additions, and any alterations with building valuations over $200,000. In addition, the Downtown Plan contains the following passive energy efficiency policies relating to City facilities and private developments that would result in reductions of per capita GHG emissions: LU 11.2 Encourage efficient building techniques and sustainable materials to guide lasting development that minimizes the adverse effects on the environment. LU 16.1 Implement strategies such as expanding shade cover and more efficient water use to lessen the urban heat island effect and increase reliance on renewable energy sources.
5.2 Have a portion of the City's service fleet be comprised of alternative fuel powered vehicles, subject to availability of funding, and practical feasibility.	**Consistent** The Downtown Plan does not contain any policies specifically aimed at improving City's service fleet's efficiency or alternative fuel use. However, the Downtown Plan does not involve management of the City's service fleet and would not obstruct the City's ambition in implementing the City's General Plan Air Quality Element Objective 5.2.
5.3 Reduce the use of polluting fuels in stationary sources.	**Consistent** The Downtown Plan does not contain any policies specifically aimed at reducing polluting fuels in stationary sources. However, implementation of the following Downtown Plan policy would indirectly reduce the use of polluting fuels in stationary sources. Moreover, implementation of the Downtown Plan would not create any obstructions to implement the City's General Plan Air Quality Element Objective 5.3.

The City of Los Angeles General Plan Mobility Element

As discussed in Section 4.15, *Transportation and Traffic*, the citywide Ordinance on TDM and Trip Reduction Measures (Ordinance No. 168,700) would continue to be implemented within the Downtown Plan Area. This Ordinance calls for several measures to be taken by non-residential developments in an effort to reduce single-occupancy vehicle trips. As illustrated in **Table 4.7-11**, the Downtown Plan and the New Zoning Code would be consistent with the City's Mobility Plan 2035.

TABLE 4.7-11 CONSISTENCY ANALYSIS OF THE DOWNTOWN PLAN WITH THE CITY OF LOS ANGELES MOBILITY ELEMENT – MOBILITY PLAN 2035 (2016)

Objective	Downtown Plan Consistency
4.2 Meet a 9 percent per capita GHG reduction for 2020 and a 16 percent per capita reduction for 2035.	**Consistent** As illustrated in **Table 4.7-4**, implementation of the Downtown Plan would result in a 62 percent reduction in per capita GHG emissions by 2040 in comparison to existing conditions, which substantially exceeds the Mobility Element's reduction goals for 2020 and 2035.
4.3 Convert 100 percent of City General Services Division vehicle fleet to alternative fuels and/or zero emission vehicles by 2035.	**Consistent** See the response to General Plan Air Quality Element Objective 5.2. Although the Downtown Plan does not include specific policies to implement this objective, it would not preclude conversion of the City's vehicle fleet.
4.4 Convert 100 percent of City refuse collection trucks and street sweepers to alternative fuels by 2020.	**Consistent** See response to General Plan Air Quality Element Objective 5.2. Although the Downtown Plan does not include specific policies to implement this objective, it would not preclude conversion of the City's vehicle fleet.
4.5 Reduce transportation-related energy use by 95 percent and reduce maintenance requirements of City vehicle fleet.	**Consistent** See response to General Plan Air Quality Element Objective 5.2. Additionally, although implementation of the Downtown Plan would result in an increase in net transportation energy consumption by 2040, as discussed in Section 4.5, *Energy*, the Downtown Plan Area would have a 45 percent decrease in per capita transportation energy consumption by 2040.

As discussed above, the Downtown Plan would concentrate development around transit, comprise a wide mix of uses, and better accommodate pedestrians and bicyclists. By accommodating new residential and non-residential development in an urbanized area with good access to transit, the Downtown Plan would encourage a transportation mode shift from private vehicles to public transit. These characteristics are anticipated to reduce per capita GHG emissions associated with cars and light trucks. The Downtown Plan would be consistent with AB 32, SB 375, the 2016-2040 RTP/SCS, regional and local strategies to reduce GHG, and can be expected to contribute to reductions in per capita GHG emissions when viewed at the regional level. Therefore, impacts related to GHG emissions under the Downtown Plan would be ***less than significant.***

New Zoning Code Impact

Adoption of the New Zoning Code would not directly or indirectly generate an increase in GHG emissions. The New Zoning Code would provide options for a variety of density districts with many different levels of density, ranging from a district with no maximum density to a district which restricts density to one unit. Due to the modular structure of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning.

As discussed in the Proposed California Budget 2018-2019, people living in highly urbanized areas in dense housing make a lower impact on the environment than people living in less urbanized areas in lower density housing (Department of Finance 2018). Therefore, if applied outside of the Downtown Plan Area, Density Districts allowing for more housing units than currently exist have the potential to result in more efficient use of existing infrastructure, which would not be expected to generate GHGs that may have a significant impact on the environment. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts

from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA.

The New Zoning Code would contain many provisions that have the potential to reduce GHG emissions:

- For example, a Development Standard Set designed to increase the use of transit and reduce vehicular traffic in areas served by mass transit, has no minimum parking requirements. This zoning option has the potential to reduce GHG emissions.
- New Use Districts that allow a wide-range of uses within the same geographic area to facilitate walking between housing, job, shopping and entertainment destinations.
- Increased tree canopy to reduce heat island effect and improve air quality. For example, the landscaping standards in Article 4, Development Standards, will require that projects of a certain threshold include trees.

The content of the New Zoning Code would not repeal, amend, or conflict with existing policies intended to reduce GHG emissions impacts. For example, the Green Building Code has many standards that would apply to projects of certain thresholds that would help to reduce GHG emissions, including requirements for cool pavement, and for a certain percentage of electric vehicle ready parking spaces. The New Zoning Code would support compliance with these existing standards to reduce GHG emissions.

Articles described above would support the goals and policies of the City's General Plan and SCAG's 2016-2040 RTP/SCS. The impact would be ***less than significant.***

Mitigation Measures

Significant impacts have not been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

CUMULATIVE IMPACTS

The analysis above analyzes GHG emissions consistent with CEQA Guidelines, Section 15064.4(b) and considers whether the incremental contributions of the Downtown Plan and the New Zoning Code could be cumulatively considerable. No further cumulative impact analysis is necessary.

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4.8 HAZARDS AND HAZARDOUS MATERIALS

This section addresses potential impacts associated with risk of upset related to hazardous materials, airports, wildfires, emergency access, and hazards to schools.

ENVIRONMENTAL SETTING

HAZARDOUS MATERIALS

The term "hazardous material" can have varying definitions for different regulatory programs. For the purpose of this EIR, the term "hazardous materials" refers to both hazardous materials and hazardous waste. The California Health and Safety Code Section 25501(n)(1) defines hazardous materials as any material that "because of its quantity, concentrations, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment." Hazardous materials include but are not limited to hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or environment.

A material is hazardous if it exhibits one or more of the following characteristics: toxicity, ignitability, corrosivity, and reactivity (Code of Regulations, Title 22). These types of hazardous materials are defined below:

- **Toxic Substances.** Toxic substances may cause short-term or long-lasting health effects, ranging from temporary effects to permanent disability, or even death. For example, such substances can cause disorientation, acute allergic reactions, asphyxiation, skin irritation, or other adverse health effects if human exposure exceeds certain levels. (The level depends on the substances involved and is chemical-specific.) Carcinogens (substances that can cause cancer) are a special class of toxic substances. Examples of toxic substances include benzene (a component of gasoline and suspected carcinogen) and methylene chloride (a common laboratory solvent and a suspected carcinogen).
- **Ignitable Substances.** Ignitable substances are hazardous because of their ability to burn. Gasoline, hexane, and natural gas are examples of ignitable substances.
- **Corrosive Materials.** Corrosive materials can cause severe burns. Corrosives include strong acids and bases such as sodium hydroxide (lye) or sulfuric acid (battery acid).
- **Reactive Materials.** Reactive materials may cause explosions or generate toxic gases. Explosives, pure sodium or potassium metals (which react violently with water), and cyanides are examples of reactive materials.

Soil and groundwater can become contaminated by hazardous material releases in a variety of ways, including permitted or illicit use and accidental or intentional disposal or spillage. Before the 1980s, most land disposal of chemicals was unregulated, with the result that numerous industrial properties and public landfills became dumping grounds for unwanted chemicals. The largest and most contaminated of these sites became Superfund sites, so named for their eligibility to receive cleanup money from a federal fund established under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA; see Section 4.8.3, *Regulatory Framework*, for more details about CERCLA). The phase is the

list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The National Priorities List (NPL), discussed further below, is intended primarily to guide the USEPA in determining which sites warrant further investigation. Sites are added to the NPL following a hazard ranking system.

In addition to soil and groundwater contamination, the following substances may occur throughout the City in older buildings or products. The effects of these substances and where they are commonly present are explained below.

Asbestos Containing Materials (ACMs)

Asbestos is a naturally occurring fibrous material that was widely used in structures built between 1945 and 1978 for its fireproofing and insulating properties. ACMs were banned by USEPA between the early 1970s and 1991 under the authority of the federal Clean Air Act (CAA) and the Toxic Substances Control Act (TSCA) due to their harmful health effects. Exposure to asbestos increases risk of developing lung disease, such as lung cancer, mesothelioma (a type of cancer), or asbestosis (a type of chronic, non-cancer lung disease) (USEPA 2017a). Common ACMs include vinyl flooring and associated mastic, wallboard and associate joint compound, plaster, stucco, acoustic ceiling spray, ceiling tiles, heating system components, and roofing materials. Commercial/industrial structures are affected by asbestos regulations if damage occurs or if remodeling, renovation, or demolition activities disturb ACMs. Since many of the structures in the Downtown Plan Area were constructed before 1978, there is a potential for the presence of ACMs to exist in a wide variety of building materials in the Downtown Plan Area.

Lead and Lead-Based Paint (LBP)

Lead is a naturally occurring metallic element. Because of its toxic properties, lead is regulated as a hazardous material. Excessive exposure to lead can result in the accumulation of lead in the blood, soft tissues, and bones. Children are particularly susceptible to potential lead-related health problems, because it is easily absorbed into developing systems and organs. Lead can affect almost every organ and system in the body and can result in behavior and learning problems, lower IQ and hyperactivity, hearing problems, and anemia in children, and cardiovascular effects, decreased kidney function, and reproductive problems in adults (USEPA 2017b). Among its numerous uses and sources, lead can be found in paint, water pipes, solder in plumbing systems, and in soils around buildings and structures painted with LBP. LBP was primarily used during the same time period as ACMs. Commercial/ industrial structures are affected by lead-based paint regulations if the paint is in a deteriorated condition or if remodeling, renovation, or demolition activities disturb LBP surfaces. Since many of the structures within the Downtown Plan Area were constructed before 1978, there is potential for structures to contain paints and coatings with detectable or elevated concentrations of lead.

Polychlorinated Biphenyls (PCBs)

PCBs are mixtures of up to 209 individual chlorinated compounds. There are no known natural sources of PCBs. PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they do not burn easily and are good insulators. The manufacture of PCBs was stopped in the United States in 1977 because of evidence that they build up in the environment and can cause a variety of harmful health effects. Health risks include cancer as well as non-cancer effects on the immune system, reproductive system, nervous system, endocrine system, such as a decrease in the size of the thymus gland, decreased birth weight and gestational age for children born to women exposed to PCBs, and decreased thyroid hormone levels (USEPA 2017c). Products made before 1977 that may contain PCBs include old fluorescent lighting fixtures and electrical devices containing PCB capacitors, and old microscope and hydraulic oils.

EXISTING ENVIRONMENTAL SETTING

Hazardous Materials Sites

The locations where hazardous materials are used, stored, treated and/or disposed of comes to the attention of regulatory agencies through various means, including licensing and permitting, enforcement actions, and anonymous tips. To the extent possible, the locations of these businesses and operations are recorded in several database lists maintained by various state, federal, and local regulatory agencies. In some cases, businesses that use hazardous materials in quantities greater than certain established thresholds are required to file business plans with the Los Angeles Fire Department. Other businesses that engage in the transport, storage, treatment, or disposal of hazardous materials are required to maintain detailed records of all their hazardous materials-related activities. Federal, state, and local agencies enforce regulations applicable to hazardous waste generators and users, and the Los Angeles County Fire Department Health Hazardous Materials Division tracks and inspect hazardous materials handlers to ensure appropriate reporting and compliance.

Permitted uses of hazardous materials include those facilities that use hazardous materials or handle hazardous wastes in accordance with current hazardous materials and hazardous waste regulations. The use and handling of hazardous materials from these sites is considered low risk, although there can be instances of unintentional chemical releases. In such cases, the site would be tracked in the environmental databases as an environmental case. Permitted sites without documented releases are, nevertheless, potential sources of hazardous materials in the soil and/or groundwater (compared to sites where there are no hazardous materials used or stored) because of accidental spills, incidental leakage, or spillage that may have gone undetected. Many of the facilities are permitted for more than one hazardous material use and, therefore, could appear in more than one database.

The potential to encounter hazardous materials in soil and groundwater in the Downtown Plan area was based on a search of federal, State, and local regulatory databases that identify permitted hazardous materials uses, environmental cases, and spill sites.

The following databases were searched for hazardous sites:

- California Department of Toxic Substance Control (DTSC) EnviroStor Database
- State Water Resources Control Board GeoTracker Database
- USEPA Superfund Enterprise Management System (SEMS) Database in Envirofacts

The EnviroStor database contains information on properties in California where hazardous substances have been released or where the potential for a release exists. The GeoTracker database contains information on properties in California for sites that require cleanup, such as leaking underground storage tank (LUST) sites, which may impact, or have potential impacts, to water quality, with emphasis on groundwater. The SEMS database lists Superfund sites that are found on the NPL.

Citywide Hazardous Materials Sites

Hazardous waste sites are located throughout the City. A search of the California Department of Toxic Substances Control (DTSC) Envirostor Database, California State Water Resources Control Board (SWRCB) GeoTracker Database, and United States Environmental Protection Agency (USEPA) website

identify the hazardous materials sites throughout the City. A list of the hazardous waste sites in the City is provided in Appendix Q.[1]

DTSC EnviroStor Database

A search of the EnviroStor Database, conducted on February 11, 2019, identified 18 sites on the Cortese List. In addition to the sites on the Cortese List, 14 active Statewide Evaluation Sites, including one which spans multiple cities in Los Angeles County, were identified. The search also identified approximately 51 active voluntary cleanup sites and approximately 70 active school cleanup sites (DTSC 2019).

SWRCB GeoTracker Database

A search of the GeoTracker database, conducted on February 11, 2019, identified over 2,650 cleanup sites located in the City, including approximately 360 open or active sites. Approximately 120 of the open or active sites are leaking underground storage tank cleanup sites and 156 are cleanup program sites. The remaining sites are sites with Waste Discharge Requirements, land disposal sites, military bases, oil and gas projects, permitted underground storage tanks, and sites with underground injection controls (i.e., sites with wells used for disposing of oilfield fluids by subsurface injection) (SWRCB 2019).

USEPA Superfund Sites

A search of the USEPA Superfund Sites database, conducted on February 11, 2019, identified two Superfund Sites within the City of Los Angeles, including the San Fernando Valley (Area 4) and Del Amo sites (USEPA 2017d). According to the EPA, the San Fernando Valley (Area 4) is a 5,860-acre area of contaminated groundwater in which cleanup and investigative activities are ongoing (USEPA 2017e). The Del Amo site is undergoing long-term cleanup of contaminated soil and groundwater; however, most of the 280-acre Del Amo site has been redeveloped as an industrial park (USEPA 2017e).

Downtown Plan Area Hazardous Material Sites

Hazardous materials sites in the Downtown Plan Area identified in applicable databases are discussed below.

EnviroStor Database

A search of this database was conducted on July 24, 2017 and identified 20 "Active" sites in the Downtown Plan Area. An "Active" site identifies that an investigation and/or remediation is currently in progress and that DTSC is actively involved, either in a lead or support capacity. **Table 4.8-1** lists DTSC listed cleanup sites in the Downtown Plan Area], including the aforementioned 20 active sites as well as a number of sites that are inactive or do not require further action. **Figure 4.8-1** presents the EnviroStor sites in the Downtown Plan Area.

Active sites in the Downtown Plan Area are discussed below.

1. **Cornfield Site – 1245 N Spring Street:** This Voluntary Cleanup site has a cleanup status as "Active as of 11/17/2014." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as arsenic, lead, and motor oil-range total petroleum hydrocarbons (TPH), and the potential media affected is listed as soil and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the site was formerly a Union Pacific Railroad railyard from the early 1900s until approximately 1999, and was acquired by the State for future use as a State Park.

[1] Sites in the Downtown Plan Area were identified based on a separate 2017 database search an may vary slightly from the list contained in Appendix Q.

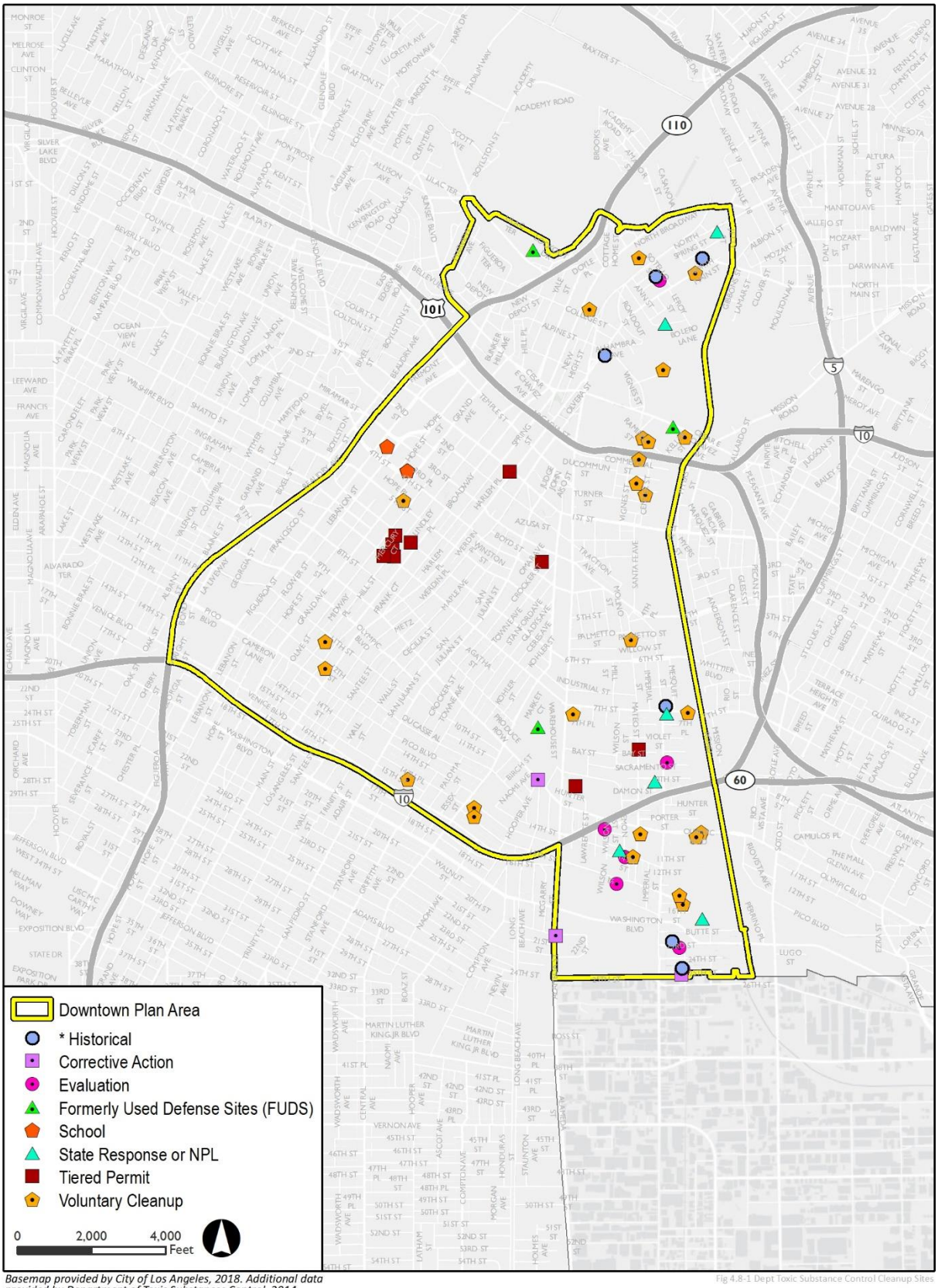
Widespread arsenic and lead contamination was discovered in "near surface soil" at the site in 2014, and the site is currently undergoing remediation.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19400013

2. **William Mead Homes – 1300 Cardinal Street:** This State Response/NPL site has a cleanup status of "Active as of 10/5/2001." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as aqueous solution with metals, oil/water separation sludge, unspecified oil-containing waste, and waste oil and mixed oil, and the potential media affected is listed as soil and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the area south of Cardinal Street was formerly an oil refinery from 1900 to 1924, contamination was visible in the upper five feet of soil, and contaminated soil was excavated and disposed offsite from 2000 to 2001. Investigations conducted at the area north of Cardinal Street indicated that elevated concentrations of lead were present in the upper two feet of soil and elevated polycyclic aromatic hydrocarbons (PAHs) were present in two locations, and contaminated soil was excavated and disposed offsite from 2004 to 2005. A site certification letter issued for the site by the DTSC in 2015 indicates that an Operation & Maintenance Agreement was signed for the site, and a land use covenant is in place for specific areas of the site.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19290312
3. **So Cal Gas/Aliso E MGP – 496 Bauchet Street (Sector E):** This Voluntary Cleanup site has a cleanup status of "Active as of 6/21/2010." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as polychlorinated biphenyls (PCBs) and PAHs, and the potential media affected is listed as indoor air, soil, soil vapor, and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the 9-acre Sector E site was formerly used as part of a butadiene facility from 1943 to 1947, and used for numerous industrial purposes afterward; the site is currently used for parking, a refueling station, and offices. In addition, removal action was completed in 2008, and a site certification letter was issued by the DTSC for the site in 2014 along with a land use covenant.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=70000159
4. **So Cal Gas/Aliso D MGP – Cesar Chavez and Lyons Streets:** This Voluntary Cleanup site has a cleanup status of "Active as of 1/19/2001." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as arsenic, PAHs, VOCs, and others, and the potential media affected is listed as soil and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the 10.5-acre Sector D site was formerly used for lampblack pits, processing, and storage and is currently owned by the Los Angeles Metropolitan Transportation Agency as a transit bus maintenance facility. In addition, remedial action was completed in 2010, and additional removal actions were completed onsite in 2015.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19490243
5. **Aliso Street Investigation – Bauchet, Temple, Cesar Chavez, Vignes, Keller Streets:** This Voluntary Cleanup site has a cleanup status of "Active as of 6/1/2009." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as lead, petroleum hydrocarbons, PCBs, PAHs, and VOCs, and the potential media affected is listed as soil. According to EnviroStor's "site history" section, the 52-acre site is divided into five sectors, A through E, most sectors have been remediated and contaminated soil has been removed, and contaminated groundwater beneath the site is being handled as a separate site. In addition, an investigation report was completed in 2014 that presented health risk-based evaluations for future workers onsite, and a land use covenant is currently being drafted.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60001142
6. **Ramirez Street Investigation – 400-Foot Stretch of Ramirez Street:** This Voluntary Cleanup site has a cleanup status of "Active as of 11/6/2012." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as petroleum and VOCs, and the potential media affected is listed as soil and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the site is identified as a 400-foot stretch of Ramirez Street between Center and Keller Streets,

and between So Cal Gas/Aliso Sectors A and B. Onsite and adjacent investigations have resulted in soil excavation and offsite disposal as the proposed removal action for the Ramirez Street area, and a draft Remedial Action Plan is currently in a public comment period.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60001993

7. **So Cal Gas/Aliso MGP, Sector A – East Parcel – Keller Street, Vignes Street, and 101 Freeway:** This Voluntary Cleanup site has a cleanup status of "Active as of 8/18/2008." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as arsenic, petroleum, and PAHs, and the potential media affected is soil and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the 1.2-acre site was formerly used for gas manufacturing from 1875 to 1946, and removal action was completed in 2007. In addition, partial site certification has been issued and a land use covenant is currently being drafted.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19490240
8. **So Cal Gas/Aliso Site-Wide – Groundwater – Temple/Vignes/Lyon/Keller/Alhambra Streets:** This Voluntary Cleanup site has a cleanup status of "Active as of 1/19/2001." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as 1,3-butadiene, metals, PAHs, and VOCs, and the potential media affected is soil and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the 52-acre site was formerly a manufactured gas plant, groundwater beneath the site is being investigated as five sectors (A through E), and groundwater monitoring and monitored natural attenuation reports have been submitted and are currently under DTSC review.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19490248
9. **So Cal Gas/Aliso Sector C, Block G – Northwest Corner of Commercial and Center Streets:** This Voluntary Cleanup site has a cleanup status of "Active as of 1/19/2001." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as 1,3-butadiene, metals, PAHs, and VOCs, and the potential media affected is soil and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the 1.5-acre site was within a former manufactured gas plant, contaminated soil was excavated and disposed offsite in 2000, and a remedial investigation report finalized in 2004 indicated that "there is no human health risk from the remaining residuals at the Property when used for commercial or industrial use." In addition, groundwater at the site is continuing to be monitored and a land use covenant was drafted but not signed by the property owner.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60000173
10. **So Cal Gas/Aliso Sector C, Block K – Northeast Corner of Ducommun and Center Streets:** This Voluntary Cleanup site has a cleanup status of "Active as of 1/19/2001." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as 1,3-butadiene, metals, PAHs, and VOCs, and the potential media affected is soil and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the 1.8-acre site was within a former manufactured gas plant, removal action was implemented, the removal action completion report was approved in 2009, and the land use covenant is currently under review.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60000171
11. **So Cal Gas/Aliso Sector C, Block O – Southwest Corner of Ducommun and Center Streets:** This Voluntary Cleanup site has a cleanup status of "Active as of 1/19/2001." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as 1,3-butadiene, metals, PAHs, and VOCs, and the potential media affected is soil and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the 1.5-acre site was within a former manufactured gas plant, remedial investigations were conducted in 2003 and 2008, and certification of the site and drafting of a land use covenant is currently in progress.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60000169

Figure 4.8-1 EnviroStor Sites in the Downtown Plan Area



Basemap provided by City of Los Angeles, 2018. Additional data provided by Department of Toxic Substances Control, 2014.

Fig 4.8-1 Dept Toxic Substance Control Cleanup Sites

TABLE 4.8-1 DEPARTMENT OF TOXIC SUBSTANCE CONTROL CLEANUP SITES IN THE DOWNTOWN PLAN AREA

Project Type	Name	Address	Status
Voluntary Cleanup	Blossom Plaza	900 North Broadway	Certified 4/14/2015
Voluntary Cleanup*	Cornfield Site	1245 N Spring Street	Active as of 11/17/2014
Evaluation	Champion Brass Manufacturing Co.	1460 Naud Street	Refer: 1248 Local Agency as of 2/13/2004
State Response or NPL	William Mead Homes	1300 Cardinal Street	Active as of 10/5/2001
Voluntary Cleanup	Witco/Allied Kettle Division	1250 North Main Street	NFA as of 10/24/1995
Voluntary Cleanup	SoCal Gas/Aliso E MGP	496 Bauchet Street-Sector E Extends from the Surved Section of Bauchet Street North to the Former Alhambra Ave and the Los Angeles Rail Road in Downtown Los Angeles.	Active as of 6/21/2010
Voluntary Cleanup	SoCal Gas/Aliso D MGP	Cesar Chavez and Lyons Street	Active as of 1/19/2001
Evaluation	Mogul Corporation	967 North Vignes Street	No Further Action as of 9/9/1985
Voluntary Cleanup	Aliso Street Investigation	Bauchet Street, Temple Street, Cesar Chavez, Vignes Street, Keller Street	Active as of 6/1/2009
Formerly Used Defense Sites (FUDS)	Southern California Gas Co.	Los Angeles, CA	Inactive - Needs Evaluation as of 8/8/2016
Voluntary Cleanup	Southern California Regional Rail Authority Track Extension	Keller Yard in Vicinity of Cesar Chavez	No Further Action as of 1/21/2013
Voluntary Cleanup	Santa Fe/Macy Street	Macy Street/Aliso Street/Keller Street	Certified Operations & Maintenance - Land Use Restriction as of 8/11/2009
Voluntary Cleanup	Ramirez Street Investigation	Approximately 400-foot Stretch of Ramirez Street Located Between Center and Keller Streets	Active as of 11/6/2012
Voluntary Cleanup	Aliso Sector A Denny's Parcel	530 Ramirez Street	Certified/Operation & Maintenance as of 2/19/2000
Voluntary Cleanup	SoCal Gas/Aliso MGP, Sector A - East Parcel	Keller Street, Vignes Street, and 101 Freeway	Active as of 8/18/2008
Voluntary Cleanup	SoCal Gas/Aliso Site-Wide - Groundwater	Temple/Vignes/Keller/Alhambra Streets	Active as of 1/19/2001
Voluntary Cleanup	SoCal Gas/Aliso Sector C, Block G	Northwest Corner of Commercial and Center Street	Active as of 1/19/2001
Voluntary Cleanup	SoCal Gas/Aliso Sector C, Block L	728 E. Commercial Street	Certified O&M - Land Use Restrictions as of 12/7/2004
Voluntary Cleanup	SoCal Gas/Aliso Sector C, Block K	Northeast Corner of Ducommun and Center Street	Active as of 1/19/2001
Voluntary Cleanup	SoCal Gas/Aliso Sector C, Block O	Southwest Corner of Ducommun and Center Street	Active as of 1/19/2001
Voluntary Cleanup	Los Angeles County Metropolitan Transportation Authority	410 Center Street	Certified O&M - Land Use Restrictions as of 12/5/2007
Voluntary Cleanup	Aliso Sector C Block R	820 East Jackson Street	Active as of 4/1/2013

TABLE 4.8-1 DEPARTMENT OF TOXIC SUBSTANCE CONTROL CLEANUP SITES IN THE DOWNTOWN PLAN AREA

Project Type	Name	Address	Status
FUDS	Northern Transportation Co.	Los Angeles, CA	Inactive - Needs Evaluation as of 7/1/2005
Tiered Permit	Newell Colour	221 N. Westmoreland Avenue	Refer: Other Agency
School	Hooper New Primary Center	East 52nd Street/Hooper Avenue	No Action Required as of 10/10/2003
School	Animo Oscar De La Hoya Charter High School	1114 South Lorena Street	No Further Action as of 5/22/2008
Voluntary Cleanup	SoCal Gas/Aliso MGP, Sector A - West Parcel	Keller Street, Vignes Street and 101 Freeway	Active as of 10/2/2008
Corrective Action	Southern California Gas Co	8101 S Rosemead Boulevard	No Action Required as of 2/4/2014
Voluntary Cleanup	At Mateo	555 Mateo Street	Certified as of 7/8/2016
Voluntary Cleanup*	MTA/Butterfield	590 South Santa Fe Avenue	Active as of 12/7/2012
Voluntary Cleanup	Santa Fe/W.A. Grant	2144 East 7th Street	No Further Action as of 9/16/1996
State Response or NPL	Dean and Associates	700 South Santa Fe Avenue	Certified as of 6/30/1987
Voluntary Cleanup	SoCalGas/LA-Alameda MGP	725 Channing Street	Certified as of 6/24/2014
Tiered Permit	Golden Plating, Inc.	930 South Mateo	Refer: Other Agency
Evaluation	Burley Seal Products Co.	1026 Santa Fe Avenue	Refer:1248 Local Agency as of 9/17/2004
State Response or NPL	Western Electrochemical Company	2348 East 8th Street	No Further Action as of 11/25/2013
Tiered Permit	Los Angeles Times, Olympic Facility	2000 East 8th Street	No Action Required
FUDS	Los Angeles Signal Depot	Los Angeles, CA	Inactive - Needs Evaluation as of 7/1/2005
Corrective Action-Haz Waste-RCRA*	Southern California Gas Co.	2424 East Olympic Boulevard	Refer: SMBRP as of 5/13/2013. Operating Permit
Voluntary Cleanup	Alco CAD-Nickel Plating Corporation	1400 Long Beach Avenue	Inactive - Action Required as of 10/7/2013
Voluntary Cleanup	Fishking Processors/15th Street	1335 East 15th Street	No Further Action as of 4/9/1997
Voluntary Cleanup	Fishking Processors/Compton Avenue	1640 Compton Avenue	No Further Action as of 4/9/1997
Tiered Permit	Los Angeles Die Casting	340 Crocker Street	Refer: Other Agency
Tiered Permit	Ace Plating Co. Inc.	710 Towne Avenue	Inactive - Needs Evaluation as of 5/9/2012
School	Central Region 9th Street K-8 Span School	8th Street/Towne Avenue/9th Street/Stanford Avenue	Certified as of 6/12/2012
School	LAUSD Master Agreement	1449 South San Pedro Street	Active as of 7/1/1998
Voluntary Cleanup	Royal Plating	787 East 15th Street	Certified O&M - Land Use Restrictions as of 8/23/2013/

TABLE 4.8-1 DEPARTMENT OF TOXIC SUBSTANCE CONTROL CLEANUP SITES IN THE DOWNTOWN PLAN AREA

Project Type	Name	Address	Status
Voluntary Cleanup	FC Broadway and Hill 1201 South Main	1201 South Main Street	No Further Action as of 4/14/2017
Tiered Permit	West Sixth and Broadway Partnership	314 West 6th Street	Refer: Other Agency
Haz Waste-Standardized	Atlas Precious Metals, Inc.	640 South Hill Street	Operating Permit
Tiered Permit	Los Angeles Unified Investments Co.	650 South Hill Street	Refer: Other Agency
Tiered Permit	United Building Associates	707 South Broadway #411	Refer: Other Agency
Voluntary Cleanup	FC Broadway and Hill 1108 South Hill	1108 South Hill Street	No Further Action as of 4/14/2017
Tiered Permit	Jewelry Design Center	404 West 7th Street #221	Refer: Other Agency
Tiered Permit	M&M Holding, LLC	629 South Hill Street #1202	Refer: Other Agency
Tiered Permit	Park Central Building	412 West 6th Street #1314	Refer: Other Agency
School	Hooper New Primary Center	East 52nd Street/Hooper Avenue	No Action Required as of 10/10/2003
Voluntary Cleanup*	SoCalGas/Olympic Base MGP	2424 E Olympic Boulevard	Active as of 10/4/2013
Voluntary Cleanup*	City of Log Angeles-Asphalt Plant No. 1	2484 East Olympic Boulevard	Inactive – Needs Evaluation as of 8/3/2017
Voluntary Cleanup	Alameda Corridor-Sale Parcel 497B	2424 East Washington Boulevard	No Further Action as of 9/23/1999
Voluntary Cleanup	Crown Coach	2429 East Washington Boulevard	Active as of 3/25/1998
State Response or NPL	Amtrak Redondo Junction Facility	2435 East Washington Boulevard	Active as of 1/10/2003
Evaluation	Bardco Manufacturing & Sales Co.	2450 East 23rd Street	Refer: EPA as of 6/10/2008
Evaluation	Lot, SE Corner of 25th/Minerva	2500 East 25th Street	No Further Action as of 1/29/1998
Corrective Action-Haz Waste-Standardized	P Kay Metal Inc.	2448 East 25th Street	Active as of 11/30/2012-Operating Permit
Corrective Action	Demenno/Kerdoon	2000 North Alameda Street	Active as of 6/7/2011
Voluntary Cleanup	City National Bank	2209 South Santa Fe Avenue	No Further Action as of 9/10/1993
Evaluation	Shamrock Iron & Metal	1949 South Alameda Avenue	No Further Action as of 1/27/1998
Evaluation	Mid City Iron & Metal Corporation	2104 E 15th Street	Inactive - Action Required as of 5/19/2006
Unknown-Haz Waste-RCRA	A&S Metal Recycling	19460 Mateo Street	Closed
Voluntary Cleanup	Eastern Smelting and Refining Site	2220 East 11th Street	Inactive - Action Required as of 3/25/2010
Evaluation	National Aerosol	2193 East 14th Street	Inactive - Needs Evaluation as of 1/9/2006
State Response or NPL	International Lead Co.	2182 East 11th Street	Certified/O&M as of 12/30/2007

TABLE 4.8-1 DEPARTMENT OF TOXIC SUBSTANCE CONTROL CLEANUP SITES IN THE DOWNTOWN PLAN AREA

Project Type	Name	Address	Status
Voluntary Cleanup	Penske Truck Leasing Property	2300 East Olympic Boulevard	No Further Action as of 1/31/2012
Evaluation	California Reclamation/US Brass (Former)	1331-61 Wilson Street/1346-50 Elwood Street	Refer:1248 Local Agency as of 8/2/2002
Evaluation	Martin Metals Inc.	1321 Wilson Street	Refer:12248 Local Agency as of 7/15/2004

* Also listed on SWRCB GeoTracker website. **SOURCE:** EnviroStor Database, 2017.

12. **Aliso Sector C Block R – 820 East Jackson Street:** This Voluntary Cleanup site has a cleanup status of "Active as of 4/1/2013." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as PAHs and VOCs, and the potential media affected is soil and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the 16-acre site was formerly used for a butadiene operation, a remedial investigation was conducted in 2013, and a land use covenant for the site is under review.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60001890
13. **So Cal Gas/Aliso MGP, Sector A – West Parcel – Keller Street, Vignes Street, and 101 Freeway:** This Voluntary Cleanup site has a cleanup status of "Active as of 10/2/2008." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as unspecified oil-containing waste, metals, petroleum, PAHs, and VOCs, and the potential media affected is soil and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the 3-acre site was formerly part of a manufactured gas plant, remedial action occurred in 2007, partial site certification was issued by the DTSC, groundwater beneath the site is currently being monitored and sampled for the entire Aliso site, and a land use covenant is under review by CalTrans.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19490235
14. **MTA/Butterfield – 590 South Santa Fe Avenue:** This Voluntary Cleanup site has a cleanup status of "Active as of 12/7/2012." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as metals, petroleum, PAHs, and VOCs, and the potential media affected is soil, soil vapor, and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the 2.68-acre site was formerly a paint, lacquer, and printing manufacturing facility. The Los Angeles County Metropolitan Transportation Authority obtained ownership of the property in 2015 and plans to remediate and redevelop the site as a maintenance facility for the Purple Line Extension Project. A Removal Action Workplan was prepared and is currently under review.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19281223
15. **LAUSD Master Agreement – 1449 South San Pedro Street:** This School site has a cleanup status of "Active as of 7/1/1998." The lead agency is listed as the DTSC, and the potential contaminants of concern and potential media affected are not listed. According to EnviroStor's "site history" section, the site is included in a Master Oversight Agreement for approximately 100 school sites that the Los Angeles Unified School District are currently evaluating.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19820019
16. **So Cal Gas/Olympic Base MGP – 2424 East Olympic Boulevard:** This Voluntary Cleanup site has a cleanup status of "Active as of 10/4/2013." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as metals, and the potential media affected is soil, soil vapor, and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the 4.5-acre site was formerly a manufacturing gas plant from 1907 to 1952, a remedial investigation report was prepared in 2014, the DTSC-required additional soil and soil gas investigation, capping the entire

area of investigation, repairing the existing cap, amending the land use covenant, and an operation and maintenance workplan and agreement.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19490179

17. **Crown Coach – 2429 East Washington Boulevard:** This Voluntary Cleanup site has a cleanup status of "Active as of 3/25/1998." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as lead, petroleum, and PAHs, and the potential media affected is soil, soil vapor, and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the 16.17-acre property was redeveloped form 2013 to 2015, three underground storage tanks and associated impacted soil were removed from the site, and a soil vapor extraction system was reinstalled and restarted in 2016, and a remedial action completion report is anticipated as of April 2017.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19400008
18. **Amtrak Redondo Junction Facility – 2435 East Washington Boulevard:** This State Response/NPL site has a cleanup status of "Active as of 1/10/2003." The lead agency is listed as the DTSC, the potential contaminants of concern are listed as petroleum, PAHs, and VOCs, and the potential media affected is soil and groundwater (for uses other than drinking water). According to EnviroStor's "site history" section, the 50-acre site was historically used as a railroad maintenance yard, a limited soil vapor survey has been proposed as an initial step in the site investigation, and the probes have not yet been installed as of July 2017.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19400012
19. **P Kay Metal Inc. – 2448 East 25th Street:** This Corrective Action site has a cleanup status of "Active as of 11/30/2012." The lead agency is listed as the DTSC, the potential contaminant of concern is listed as lead, and the potential media affected is surface/structure, sediments, and soil. According to EnviroStor's "site history" section, the onsite facility is a precious metal recycler with a standardized hazardous waste facility permit issued by the DTSC.
http://www.envirostor.dtsc.ca.gov/public/hwmp_profile_report?global_id=CAL000024110&starttab=
20. **Demenno Kerdoon – 2000 North Alameda Street:** This Corrective Action site has a cleanup status of "Active as of 6/7/2011." The lead agency is listed as the DTSC, the potential contaminant of concerns are listed as 1,4-dioxane, petroleum, and VOCs, and the potential media affected are indoor air, soil, and soil vapor. According to EnviroStor's "site history" section, the facility is "the largest used oil recycler facility in the state" and accepts a variety of wastes for storage, treatment, recycling, and transfer including used oil, waste oil, oily waste water, waste gasoline, used oil filters, used antifreeze, and paints. The DTSC issued a hazardous waste facility permit that was valid from 2001 to 2011, a pilot study involving cryogenic soil vapor extraction has been operating at the site since 2010, and an interim measure to extract and treat contaminated groundwater onsite has been operating since 1995.
http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=80001846

California State Water Resources Control Board (SWRCB) GeoTracker Database

A search of this database was conducted on July 24, 2017 and identified 21 "Open" cleanup sites in the Downtown Plan Area and 103 cases that were completed and closed. A completed and closed site indicates that a closure letter or other formal decision document has been issued for a site. Open sites are categorized as "Assessment and Interim Remedial Action," "Remediation," "Site Assessment," Verification Monitoring," "Reopen Case," "Eligible for Closure," or "Inactive" for sites where no regulatory oversight activities are being conducted by the Lead Agency. **Table 4.8-2** lists all GeoTracker cleanup sites in the Downtown Plan Area. **Figure 4.8-2** presents all GeoTracker sites in the Downtown Plan Area.

The Open sites in the Downtown Plan Area are discussed below.

1. **Main Street Oil Depot -** 1630 Main Street N: PAHs, metals, cyanide, and layers of lampblack have been detected in soil and groundwater. Over a period of 55 years (1906-1961) an oil gas plant was

operated at this site. Since 1961, the site has been in various uses, including storage of hazardous materials and hazardous wastes. No additional information was available on GeoTracker; however, documents were reviewed on the EnviroStor website. The site is reportedly paved and there is no known exposure to onsite workers. A release of other solvent or non-petroleum hydrocarbons was reported have affected groundwater in 1991. The lead agency is listed as the DTSC. No additional information is available on GeoTracker.

2. **LA Department Water & Power –** 1630 N Main Street Suite 16: This Corrective Action site has been used by the Los Angeles Department of Water & Power since 1915 as a maintenance facility, and was formerly residential and a former manufactured gas plant. The onsite hazardous waste storage unit is undergoing closure, a former transformer storage building is undergoing investigation, and a human health risk assessment and corrective measures study are or will be conducted for the site.
3. **Jimmie Joe's Texaco** – 900 N Hill Street: A release of gasoline was reported to affect groundwater at this site in 1994 and has been undergoing air sparge and soil vapor extraction remediation through present day.
4. **Piper Technical Center** – 555 Ramirez Street: This site is undergoing remediation due to a release of hydrocarbons that affected groundwater and was reported in 1993. Quarterly groundwater monitoring is ongoing.
5. **Fire Station #3** – 108 N Fremont Avenue: Diesel was reported to have affected groundwater in 1986. The site is currently undergoing in-situ chemical oxidation (ISCO) remediation.
6. **Auto Park 18** – 145 N Grand Avenue: A release of hydrocarbons to soil was reported at this site in 1995. As of July of this year, additional soil brings were proposed to delineate the contamination.
7. **LA1 and LA2 Well Site** – 806 N Beaudry: A release of hydrocarbons was reported to soil at this site in 2016. The extent of contamination is currently undergoing assessment.
8. **Union Pacific Railroad-Cornfield Yard** – 1245 N Spring Street: VOCs and TPH were detected in groundwater at this site. The site is currently undergoing annual groundwater monitoring. This site is also listed on the EnviroStor database and is discussed in detail above.
9. **Bortz Oil** – 1746 N Spring Street: A release of gasoline to groundwater was reported at the site in 1986. As of January 2015, the site is listed as inactive. No additional documents were available on GeoTracker.
10. **Mobil Oil Corp**. – 774 N Broadway Avenue: No case information for this site is available on GeoTracker.
11. **Aliso Manufacturing Gas Plant** – 600 E Ceasar Chavez Avenue: A release of petroleum/fuels was reported at this site in 2000. The site is listed as inactive as of January 2015. No additional information was available on GeoTracker.
12. **Regional Rebuild Center** – 900 Lyon Street: A release of "alcohols" was reported at this site in 1998. The case was referred to the RWQCB by the City of Los Angeles Fire Department in 2015, and based on the RWQCB's review of reports provided, determined that the "residual concentrations of fuel constituents pose a low threat to human health, soil, and groundwater quality beneath the site" and concluded that no further action is required at the site.
13. **PBR Realty LLC** – 531 Commercial Street: A release of other solvent or non-petroleum hydrocarbons reportedly impacted groundwater in 1993. No additional information is available on GeoTracker.
14. **Caltrans – Commercial Street Property** – 501 E Commercial Street: The site was formerly used for various industrial operations; seven USTs were removed from the site in 1988. The potential contaminants of concern are listed as benzene, heating/fuel oil, other chlorinated hydrocarbons, other petroleum, vinyl chloride, waste/motor/hydraulic/lubricating oil, and xylenes and the potential media of concern is listed as soil and groundwater (under investigation). No additional documents were available on GeoTracker.
15. **Unocal – Center Street Terminal #500** – 501 Center Street: A release of petroleum fuels/oils was

reported at this site in 1965. No additional information is available on GeoTracker.

16. **Sun Chemical Corp** – 590 Santa Fe Avenue: A release of petroleum fuels/oils was reported at this site in 1965. No additional information is available on GeoTracker.
17. **Former Ace Plating** – 719 Towne Avenue: This former plating facility operated from approximately 1910 to 2005, and numerous assessments conducted at the site indicate that the soil and soil vapor is impacted by VOCs and metals, and groundwater beneath the site is impacted by VOCs. Workplans for additional assessments were submitted in 2016, and groundwater monitoring is currently ongoing at the site.
18. **Toyota Dealership** – 1600 S Figueroa Street: This active car dealership includes four repair facilities. A release of PCE to soil vapor was discovered in 2014, a soil vapor extraction system was installed in 2016 and is currently operating, with quarterly remedial status reports being submitted to the RWQCB.
19. **JFL Electric Co/United Chemical (Former)** – 8251-8257 Compton Avenue: This dry cleaning and laundry supply facility has been in operations since 1945 and is associated with releases of VOCs, primarily PCE, to soil and groundwater at the site. A cleanup and abatement order was issued by the RWQCB for the site in September 2017.
20. **Union Pacific Railroad J Yard** – 1999 E 25th Street: This railroad switching yard is associated with a release of PCE and TCE to soil, soil vapor, and groundwater beneath the site. Excavation of contaminated soil and operation of a soil vapor extraction system remediated the soil and soil vapor impacts, and the RWQCB requested an additional soil vapor investigation workplan in 2016.
21. **Los Angeles Air Force Base** – El Segundo Boulevard: No documents for this Military Cleanup site are available on GeoTracker; however, it appears that long-term groundwater monitoring is occurring at the site.

Sites outside of the Downtown Plan Area not identified above could also have releases that may affect the Downtown Plan Area. In addition to hazardous materials used and generated in the Downtown Plan Area, there is potential for uncontrolled release of hazardous materials from vehicular accidents on U.S. Highway 101, Interstate 110, and Interstate 10.

USEPA Superfund Enterprise Management System (SEMS) Database in Envirofacts

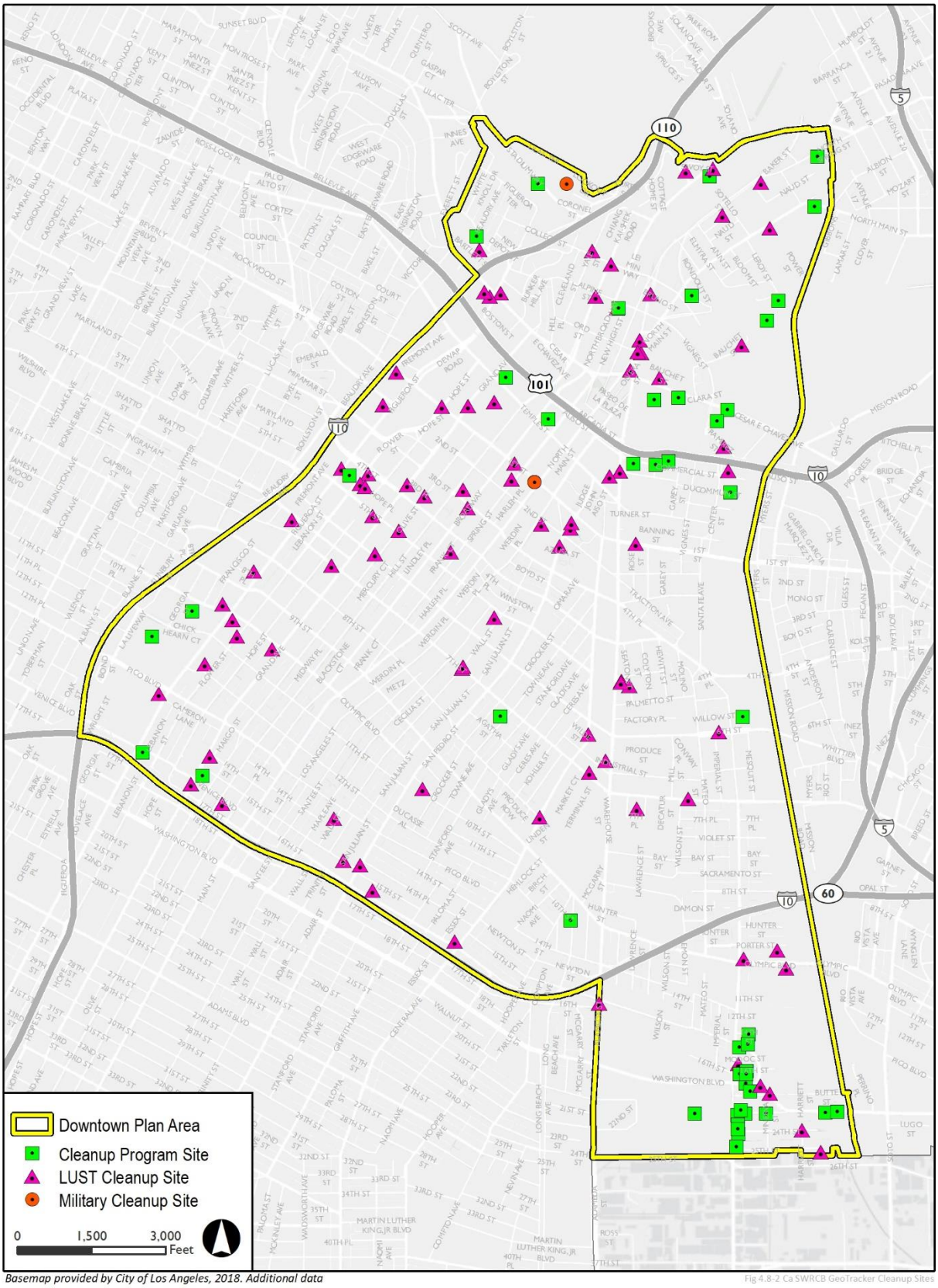
A search of the USEPA database of Superfund sites revealed no sites on the National Priorities List. Please note, however, that the DTSC's Envirostor database, discussed above, lists several National Priorities List (NPL) sites in the Downtown Plan Area. These sites are older and are primarily listed as inactive.

Use, Transport, and Abatement of Hazardous Materials

The use of hazardous materials is typically associated with industrial land uses. Activities, such as manufacturing, plating, cleaning, refining, and finishing, frequently involve chemicals that are considered hazardous when accidentally released into the environment. There are several clusters of low-intensity industrial uses scattered throughout the Downtown Plan Area.

To a lesser extent, hazardous materials may also be used by various commercial enterprises, as well as residential uses. Dry cleaners, in particular, use cleaning agents considered to be hazardous materials. Hardware stores typically stock paints and solvents, as well as fertilizers, herbicides and pesticides. Swimming pool supply stores stock acids, algaecides, and caustic agents. In fact, most commercial businesses occasionally use commonly available cleaning supplies which, when used in accordance with manufacturers' recommendations, are considered safe by the State of California, but when not handled properly can be considered hazardous. Private residences also use and store commonly available cleaning materials, paints, solvents, swimming pool and spa chemicals, as well as fertilizers, herbicides, and pesticides.

Figure 4.8-2 GeoTracker Sites in the Downtown Plan Area



Basemap provided by City of Los Angeles, 2018. Additional data provided by State Water Resources Control Board GeoTracker, 2015.

TABLE 4.8-2 CALIFORNIA SWRCB GEOTRACKER CLEANUP SITES IN THE DOWNTOWN PLAN AREA

Project Type	Name	Address	Status
Leaking Underground Storage Tank (LUST) Cleanup Site	Donald Cozen	1301 W Sunset Blvd	Completed – Case Closed
LUST Cleanup Site	Sengs Auto Repair	1165 W Sunset Blvd	Completed – Case Closed
LUST Cleanup Site	MWD Headquarters Garage	610 N Figueroa Terrace	Completed – Case Closed
LUST Cleanup Site	Domenich Basso, Inc.	1201 N Broadway	Completed – Case Closed
LUST Cleanup Site	Union Pacific/Railroad Company	1322 N Broadway	Completed – Case Closed
Waste Discharge Requirements (WDR) Site	Metabolic Studio	1745 N Spring St	Draft – WDR
LUST Cleanup Site	Main Street Dairy (former)	1620 N Spring St	Completed – Case Closed
LUST Cleanup Site	Western Brassworks	1440 Spring St	Completed – Case Closed
LUST Cleanup Site	Main Street Oil Depot	1630 N Main St	Open – Remediation as of 1/21/1997
Corrective Action	LA Department Water & Power	1630 N Main Street Ste 16	Active as of 6/15/2009-Undergoing Closure
LUST Cleanup Site	Morgan Linen Facility	905 Yale St	Completed – Case Closed
LUST Cleanup Site	Jimmie Joe's Texaco	900 N Hill St	Open – Remediation
LUST Cleanup Site	Fueling Station Former	1135 N Alameda St	Completed – Case Closed
LUST Cleanup Site	LA County Central Jail	441 Bauchet St	Completed – Case Closed
LUST Cleanup Site	Shell #204-4530-3405	766 N Hill St	Completed – Case Closed
LUST Cleanup Site	Mobil #11-H41 (former)	774 N Broadway	Completed – Case Closed
LUST Cleanup Site	G.H. Palmer & Associates	867 E Cesar Chavez Ave	Completed – Case Closed
LUST Cleanup Site	UNOCAL #0253	900 Sunset Blvd	Completed – Case Closed
LUST Cleanup Site	Mendoza Service, Inc.	866 E Cesar Chavez Ave	Completed – Case Closed
LUST Cleanup Site	LA County Parking Garage	1035 N Alameda St	Completed – Case Closed
LUST Cleanup Site	The California Endowment Terminal	1000 N Alameda St	Completed – Case Closed
LUST Cleanup Site	Chevron Station #9-8815	901 N Alameda St	Completed – Case Closed
LUST Cleanup Site	LA City Fire Station #4	800 N Main St	Completed – Case Closed
LUST Cleanup Site	U.S. Postal Service Terminal Annex	900 N Alameda St	Completed – Case Closed
LUST Cleanup Site	Piper Technical Center	555 Ramirez St	Open – Site Assessment
LUST Cleanup Site	Friedman Bag Co.	801 Commercial St	Completed – Case Closed

TABLE 4.8-2 CALIFORNIA SWRCB GEOTRACKER CLEANUP SITES IN THE DOWNTOWN PLAN AREA

Project Type	Name	Address	Status
LUST Cleanup Site	Fire Station #3	108 N Fremont Ave	Open – Remediation
WDR Site	Diamond Street	918-934 Diamond St	Draft – WDR
LUST Cleanup Site	California National Bank	221 Figueroa St	Completed – Case Closed
LUST Cleanup Site	LA City Dept Water & Power	111 N Hope St	Completed – Case Closed
LUST Cleanup Site	Auto Park 18	145 N Grand Ave	Open – Site Assessment
LUST Cleanup Site	LA County Hall of Administration	500 W Temple St	Completed – Case Closed
LUST Cleanup Site	Mobil #11-HDH	520 N Alameda St	Completed – Case Closed
LUST Cleanup Site	LA Southwest College	11404 S Western Ave	Completed – Case Closed
LUST Cleanup Site	Times Mirror Corporation	145 S Spring St	Completed – Case Closed
WDR Site	Los Angeles City – LAMP	200 S Spring St	Draft – WDR
LUST Cleanup Site	Los Angeles Times	214 E 2nd St	Completed – Case Closed
LUST Cleanup Site	Union Bank of California	120 S San Pedro St	Completed – Case Closed
LUST Cleanup Site	Parker Center	151 Judge John Aiso	Completed – Case Closed
LUST Cleanup Site	Related/LL Block 8 LLC	235 San Pedro St	Completed – Case Closed
LUST Cleanup Site	Mangrove Estate, B.V.	617 E 1st St	Completed – Case Closed
LUST Cleanup Site	Bradbury Building	304 S Broadway	Completed – Case Closed
LUST Cleanup Site	Times Mirror	240 S Hill St	Completed – Case Closed
LUST Cleanup Site	The Mutual Garage Building	363 S Olive St	Completed – Case Closed
LUST Cleanup Site	Pacific Bell	420 S Grand Ave	Completed – Case Closed
LUST Cleanup Site	West Lawn-LA Central Library	524 S Flower St	Completed – Case Closed
LUST Cleanup Site	Former Leach Corp. Facility	444 S Flower St	Completed – Case Closed
LUST Cleanup Site	Library Square Construction	633 W 5th St	Completed – Case Closed
WDR Site	Fire Station #3	108 N Fremont Ave	Active – WDR
LUST Cleanup Site	LA City General Services Dept	630 W 5th St	Completed – Case Closed
LUST Cleanup Site	Southern CA Gas Center	501 W 5th St	Completed – Case Closed
LUST Cleanup Site	Pacific Mutual Building	523 W 6th St	Completed – Case Closed
LUST Cleanup Site	Twin Springs LLC	433 S Spring St	Completed – Case Closed

TABLE 4.8-2 CALIFORNIA SWRCB GEOTRACKER CLEANUP SITES IN THE DOWNTOWN PLAN AREA

Project Type	Name	Address	Status
LUST Cleanup Site	LA – Central Facilities Motro Transport Division	519 Wall St	Completed – Case Closed
LUST Cleanup Site	Joe's Car Wash	400 E 7th St	Completed – Case Closed
LUST Cleanup Site	ARCO	500 S Alameda St	Completed – Case Closed
LUST Cleanup Site	Rolo Transportation	536 Seaton St	Completed – Case Closed
WDR Site*	Metro Location 61 South (former Butterfield Property)	590 S Santa Fe Ave	Active – WDR
LUST Cleanup Site	St. Maintenance Service Yard	1451 E 6th St	Completed – Case Closed
LUST Cleanup Site	LA MTA Division 1	624 S Central	Completed – Case Closed
LUST Cleanup Site	Metro Division 1 Maintenance Facility	1130 E 6th St	Completed – Case Closed
LUST Cleanup Site	Texaco Truck Stop (former)	1345 E 5th St	Completed – Case Closed
LUST Cleanup Site	Greyhound Lines Inc.	1614 E 7th St	Completed – Case Closed
LUST Cleanup Site	Exxon #7-8407 (former)	1935 E 7th St	Completed – Case Closed
LUST Cleanup Site	76 Products Station #4010	791 S Central Ave	Completed – Case Closed
LUST Cleanup Site	Jet Delivery	750 E 10th St	Completed – Case Closed
LUST Cleanup Site	Wilshire Grand Hotel Former	930 Wilshire Blvd	Completed – Case Closed
LUST Cleanup Site	Carrier Center Los Angeles	660 W 7th St	Completed – Case Closed
LUST Cleanup Site	801 Tower Building	845 S Figueroa Ave	Completed – Case Closed
LUST Cleanup Site	Downtown Car Wash	811 W Olympic Blvd	Completed – Case Closed
LUST Cleanup Site	UNOCAL #3300	730 W Olympic Blvd	Completed – Case Closed
LUST Cleanup Site	Property Under Construction	1050-1070 S Flower St	Completed – Case Closed
LUST Cleanup Site	Shell Service Station	504 W Olympic Blvd	Completed – Case Closed
LUST Cleanup Site	ARCO #5033	1151 S Flower St	Completed – Case Closed
LUST Cleanup Site	Convention Center	1201 S Figueroa St	Completed – Case Closed
LUST Cleanup Site	Pillack Property	1410 Grand Ave	Completed – Case Closed
LUST Cleanup Site	Robinson's Florist	1610 S Grand Ave	Completed – Case Closed
LUST Cleanup Site	Mobil #11-H3K	1600 S Hill St	Completed – Case Closed

TABLE 4.8-2 CALIFORNIA SWRCB GEOTRACKER CLEANUP SITES IN THE DOWNTOWN PLAN AREA

Project Type	Name	Address	Status
LUST Cleanup Site	LA Department of Water & Power	1324 S Wall St	Completed – Case Closed
LUST Cleanup Site	Business Service Center Garage	604 E 15th St	Completed – Case Closed
LUST Cleanup Site	LAUSD – Safety Section	1425 S San Pedro St	Completed – Case Closed
LUST Cleanup Site	Metro Division 2 Maintenance Facility	720 E 15th St	Completed – Case Closed
LUST Cleanup Site	Shell	1541 S Central Ave	Completed – Case Closed
LUST Cleanup Site	Ryder Truck Rental #91	1508 S Alameda St	Completed – Case Closed
LUST Cleanup Site	Alameda Petroleum Truck Stop	1625 S Alameda St	Completed – Case Closed
LUST Cleanup Site	Angleus Western Paper Stock Co	2474 Porter St	Completed – Case Closed
LUST Cleanup Site	Former Shell Service Station	1520 S Santa Fe Ave	Completed – Case Closed
LUST Cleanup Site*	Asphalt Plant #1, Site 8/25	2484 E Olympic Blvd	Completed – Case Closed
LUST Cleanup Site	ACTA	2026 S Santa Fe Ave	Completed – Case Closed
LUST Cleanup Site	CTMC LLC	2455 E Washington Blvd	Completed – Case Closed
LUST Cleanup Site	Central Repair Yard	2469 E Washington Blvd	Completed – Case Closed
LUST Cleanup Site	ARCO #0009	2601 E 24th St	Completed – Case Closed
LUST Cleanup Site	Darling-Delaware	2626 E 25th St	Completed – Case Closed
LUST Cleanup Site	Darling International	2601 E 26th St	Completed – Case Closed
LUST Cleanup Site	APA Trucking	2634 26th St	Completed – Case Closed
Cleanup Program Site	Naval-Marine Corps Reserve Center	1700 Stadium Way	Completed – Case Closed
Cleanup Program Site	LA1 and LA2 Well Site	806 North Beaudry	Open – Site Assessment
Cleanup Program Site*	Union Pacific Railroad-Cornfield Yard	1245 N Spring St	Open – Verification Monitoring
Cleanup Program Site	Bortz Oil	1746 N Spring St	Open – Inactive/Certified O&M-Land Use Restrictions as of 6/27/2014
Cleanup Program Site	Sage Property	1667 N Main St	Completed – Case Closed
Cleanup Program Site	BNSF Mission Tower Site	1430 Bolero Lane	Completed – Case Closed
Cleanup Program Site	County of Los Angeles-Jail Expansion	498 Bauchet Street	Completed – Case Closed
Cleanup Program Site	International Bank Property	943 N Main St	Completed – Case Closed

TABLE 4.8-2 CALIFORNIA SWRCB GEOTRACKER CLEANUP SITES IN THE DOWNTOWN PLAN AREA

Project Type	Name	Address	Status
Cleanup Program Site	Mobil Oil Corp	774 N Broadway Ave	Open – Inactive
Cleanup Program Site	Metro Rail	Union Station	Completed – Case Closed
Cleanup Program Site	LA to Pasadena Metro Blue Line Construction	Los Angeles	Completed – Case Closed
Cleanup Program Site	Aliso Manufacturing Gas Plant	600 E Cesar Chavez Ave	Open – Inactive
Cleanup Program Site	Regional Rebuild Center	900 Lyon St	Open – Site Assessment
Cleanup Program Site	Cathedral of our Lady of the Angels	555 W Temple St	Completed – Case Closed
Cleanup Program Site	City of Los Angeles-Federal Building Annex	255 Temple St	Completed – Case Closed
Cleanup Program Site	Zimmerman Development Inc.	560 S Alameda St	Completed – Case Closed
Cleanup Program Site	PBR Realty LLC	531 Commercial St	Open – Inactive
Cleanup Program Site	Caltrans - Commercial Street Property	501 E Commercial St	Open – Inactive
Cleanup Program Site	Unocal - Center Street Terminal #500	501 Center St	Open – Inactive
Cleanup Program Site	Westin Bonaventure Hotel	404 S Figueroa St	Completed – Case Closed
Cleanup Program Site	City of Los Angeles-Staples Arena	1111 S Figueroa St	Completed – Case Closed
Cleanup Program Site	Staples Arena	740-750 W 10th Place	Completed – Case Closed
Cleanup Program Site*	Sun Chemical Crop	590 Santa Fe Ave	Open – Inactive
Cleanup Program Site	Former Ace Plating	719 Towne Ave	Open – Site Assessment
Cleanup Program Site	Toyota Dealership	1600 S Figueroa St	Open – Remediation
Cleanup Program Site	City of Los Angeles	1450 Grand Ave	Completed – Case Closed
Cleanup Program Site	JFL Electric Co/United Chemical (former)	8251-8257 Compton Ave	Open – Site Assessment
Cleanup Program Site	ACTA Parcel MC-697 West	1810 E 25th St	Completed – Case Closed
Cleanup Program Site	ACTA Parcel MC-697 East	1830 E 25th St	Completed – Case Closed
Cleanup Program Site	Union Pacific Railroad J Yard	1999 E 25th St	Open – Verification Monitoring
Cleanup Program Site	ACTA North-LA City DWP	2650 E Washington Blvd	Completed – Case Closed
Cleanup Program Site	ACTA North-LA Print Worksite	1960 S Santa Fe Ave	Completed – Case Closed
Cleanup Program Site	ACTA North Parcel	2000 – 2420 even S Santa Fe Ave	Completed – Case Closed
Military Cleanup Site	Los Angeles Air Force Base	El Segundo Blvd	Open – Inactive

* Also listed on DTSC EnviroStor website
SOURCE: GeoTracker Database, 2017.

If improperly handled, hazardous materials can result in public health hazards through human contact with contaminated soils or groundwater, or through airborne releases in vapors, fumes, or dust. There is also the potential for accidental or unauthorized releases of hazardous materials that would pose a public health concern. The use, transport, and disposal of hazardous materials and wastes are required to occur in accordance with federal, State and local regulations. In accordance with such regulations, the transport of hazardous materials and wastes can only occur with transporters who have received training and appropriate licensing. Additionally, hazardous waste transporters are required to complete and carry a hazardous waste manifest (which is a set of forms, reports, and procedures designed to seamlessly track hazardous waste).

Citywide Use, Transport, and Abatement of Hazardous Materials

Hazardous materials are used in commercial, industrial, institutional, and agricultural operations throughout the City. Hazardous materials are shipped through, stored, and used at the major airport (Los Angeles International Airport) and harbor facilities (Port of Los Angeles) within the City boundaries. Hazardous materials are also transported along freeways and highways that route through the City and stored in facilities. Identification, handling, storage, and transport of hazardous materials are managed and regulated by federal, State, and City regulations (City of Los Angeles 1996).

Downtown Plan Area Use, Transport, and Abatement of Hazardous Materials

Hazardous materials use is primarily concentrated in the Arts, Industrial, Manufacturing, and Wholesale Districts in the southeast and south-central portions of the Downtown Plan Area where light and heavy industry are present. Most transportation of hazardous materials through and within the Downtown Plan Area consists of trucks that travel along freeways and major thoroughfares in the Downtown Plan Area.

OIL FIELDS AND WELLS

Oil fields and oil production activities present a variety of hazards in urbanized areas, including toxic air contaminants and dust from oil production, and the potential of contaminant release into an aquatic environment. Unconstrained oil seepage from oil fields and wells can contaminate the soil and groundwater aquifers.

Citywide Oil Fields and Wells

There are 5,130 oil and gas wells in the City (City of Los Angeles 2018a). Of the total 5,130 wells, approximately 3,133 are plugged and abandoned, 930 are buried, 780 are active, and 287 are idle. Approximately 77 percent of active and idle wells in the City are operated by six companies. The City contains 23 oil fields, nine of which are located entirely in the City and 14 of which are located partially in the City and partially in adjacent cities (DOC 2017).

Downtown Plan Area Oil Fields and Wells

The Downtown Plan Area contains three oil fields, Los Angeles City, Union Station, and Los Angeles Downtown (Department of Conservation [DOC] 2017). **Figure 4.8-3** shows the locations of oil fields and oil and gas wells in the Downtown Plan Area.

The Los Angeles City oil field is about four miles long and 0.25 mile across and extends from Vermont Avenue to immediately south of Dodger Stadium, in the northwest portion of the Downtown Plan Area. The oil field was discovered in 1890 and was the State's top producing oil field in the 1890s, and approximately 1,250 wells were once drilled on the field. However, today there are no active wells in the Downtown Plan Area portion of the Los Angeles City oil field (DOC 2017).

The Union Station oil field extends from north of E 6th Street to approximately Temple Street south to north, and from approximately the Los Angeles River to S Central Avenue from east to west. The entire oil field lies within the Downtown Plan Area and contains five oil and gas production wells, all of which have been plugged and abandoned (DOC 2017).

The majority of the Los Angeles Downtown oil field lies in the southwest corner of the Downtown Plan Area. The oil field extends from approximately the Santa Monica Freeway to the latitude line of the Staples Center, south to north, and from the longitude line of the intersection of Olympic Boulevard and S Main Street to the Harbor Freeway, east to west. The oil field contains over thirty wells in the Downtown Plan Area, most of which are concentrated in the block north of W 14th Place, between S Hill Street and S Broadway. This block contains nine active oil and gas production wells (American Petroleum Institute (API) well numbers 03720833, 03720118, 03720204, 03700463, 03711873, 03700458, 03720923, 03700466, 03700465) and one active dry gas well (API 03711869) all owned by Nasco Petroleum Inc., as well as a number of active and idle water flood injector wells and idle oil and gas wells; idle wells are identified as not having produced oil or natural gas for six consecutive months of continuous operation during the last five or more years. Outside of this block, there are an additional four oil and gas production wells that have all been plugged and abandoned (DOC 2017).

The Downtown Plan Area contains an additional 16 oil and gas production wells outside of the identified oil fields. All of these wells have either been plugged and abandoned or buried (DOC 2017).

METHANE GAS

Methane gas is produced by anaerobic decay of organic matter deep under the Earth's surface and is the major component of natural gas, about 87 percent by volume.[2] In common usage, deposits rich in natural gas (i.e., methane) are called natural gas fields. At room temperature and standard pressure, methane is a colorless, odorless gas. While not toxic, it is highly flammable and may form explosive mixtures with air. Methane is also an asphyxiant and may displace oxygen in an enclosed space; however, the concentrations at which flammable or explosive mixtures form are much lower than the concentration at which asphyxiation risk is significant. Thus, the main concern with methane gas is the risk of explosion if methane seeps and accumulates in an enclosed space with air (County of Los Angeles 2002).

Citywide Methane Gas

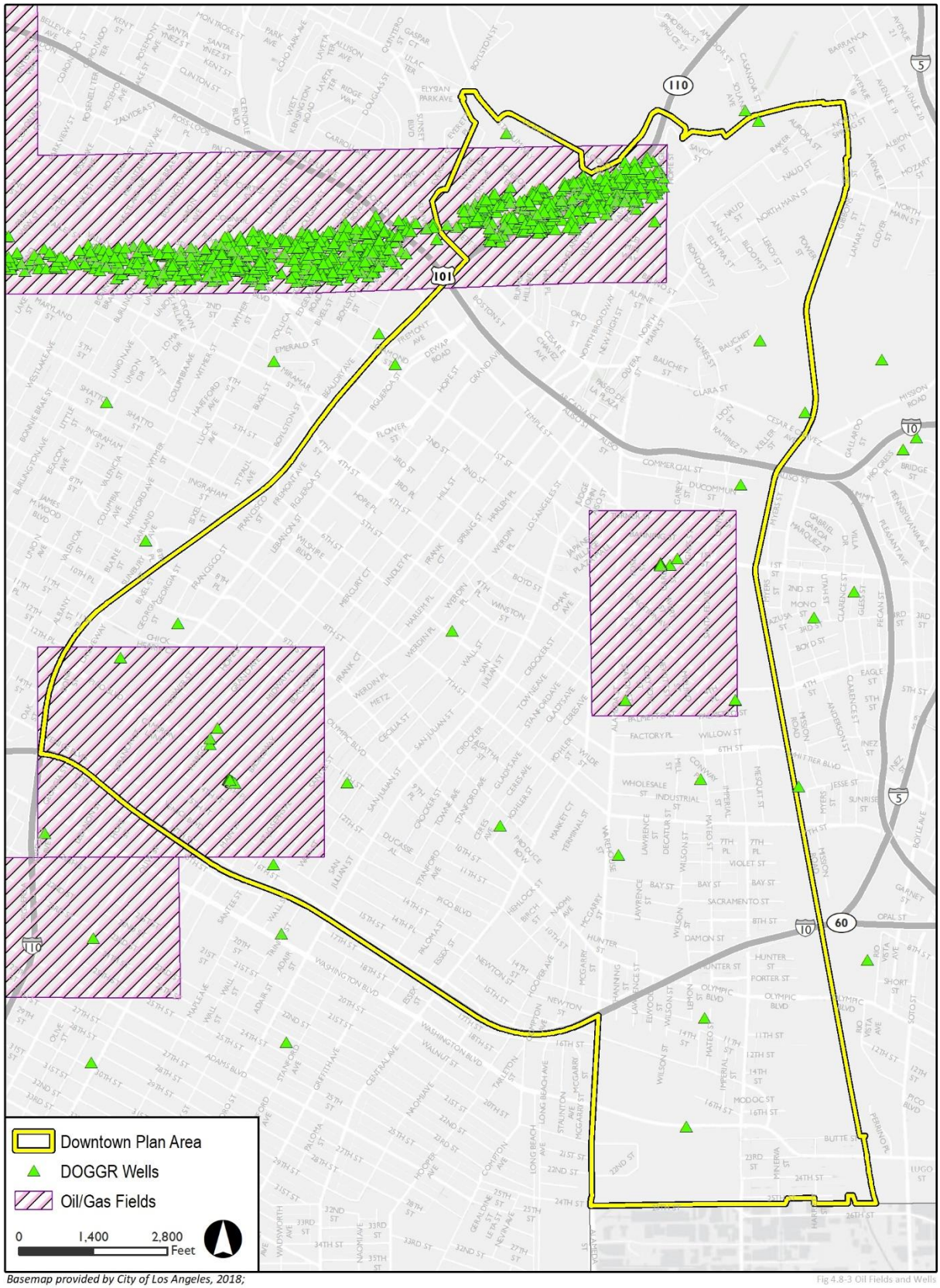
As previously discussed, the City contains 23 oil fields, nine of which are located entirely within the City and 14 of which are located partially within the City and partially within adjacent cities. These areas, in addition to other areas that contain oil and gas wells that are not within an oil field, are designated by the City as Methane Zones and adjacent areas are designated as Methane Buffer Zones.

Downtown Plan Area Methane Gas

As previously discussed, and as shown in **Figure 4.8-3**, the Downtown Plan Area contains three oil fields with oil and gas production wells, as well as wells outside of the oil field areas. These areas are designated by the City as Methane Zones and adjacent areas are designated as Methane Buffer zones. Properties within these zones require methane testing and/or mitigation for construction projects.

[2] Anaerobic decay is the process by which microorganisms break down biodegradable material in the absence of oxygen.

Figure 4.8-3 Oil Fields and Oil and Gas Wells in the Downtown Plan Area



Basemap provided by City of Los Angeles, 2018;
Additional data provided by California Department of Conservation, 2018.

Fig 4.8-3 Oil Fields and Wells

AIRPORTS

Citywide Airports

There are three public use airports within the City of Los Angeles, Los Angeles International Airport (LAX), Van Nuys Airport, and Whiteman Airport (Federal Aviation Administration 2017). LAX is located southwest of downtown Los Angeles and is the second busiest airport in the United States and fourth busiest in the world (Airports Council International 2017). The General Plan land use designation for LAX is Airport Airside and is within the LAX Specific Plan Area and Los Angeles Coastal Transportation Corridor Specific Plan Area. The LAX Specific Plan area consists of 3,900 acres and the portion of the LAX within the Los Angeles Coastal Transportation Corridor Specific Plan Area is bound by the City of Santa Monica on the north, Imperial Highway on the south, San Diego Freeway on the east, and the Pacific Ocean on the west. Van Nuys Airport and Whiteman Airport are located in the San Fernando Valley in the northern portion of the City. Van Nuys Airport is designated for Light Manufacturing use in the City's General Plan. Whiteman Airport is designated for Public Facilities use. In addition to the public use airports, there are 51 private use airports, all of which are heliports.

Downtown Plan Area Airports

The airport nearest to the Downtown Plan Area is the Santa Monica Municipal Airport, located more than nine miles to the southwest. The Los Angeles International Airport (LAX) is located approximately 10 miles southwest of the Plan Area. The Downtown Plan Area is not located within two miles of a public airport or public use airport and, therefore, is not subject to airport-related hazards.

SCHOOLS

School locations require consideration because individuals particularly sensitive to hazardous materials exposure use these facilities. Additional protective regulations apply to projects that could use or disturb potentially hazardous products near or at schools. The California Public Resources Code requires projects that would be located within 0.25 mile of a school and might reasonably be expected to emit or handle hazardous materials to consult with the school district regarding potential hazards. See **Figure 4.8-4**, Educational Facilities in or within 0.25 mile of the Downtown Plan Area.

Citywide Schools

The Los Angeles Unified School District (LAUSD) is the second largest school district in the nation encompassing over 720 square miles, including the City of Los Angeles as well as all or parts of 31 smaller municipalities plus several unincorporated sections of Southern California. There are over 900 schools and 187 public charter schools within LAUSD, which hosts students from kindergarten to 12th grade. In addition to schools within LAUSD, the City of Los Angeles has other educational facilities which include colleges, preschools, nurseries, and private schools (LAUSD 2017).

Downtown Plan Area Schools

Forty-five educational facilities (defined as colleges, high schools, elementary schools, preschools, or nursery schools) are within 0.25 mile of the Downtown Plan Area, as identified in **Table 4.8-3**.

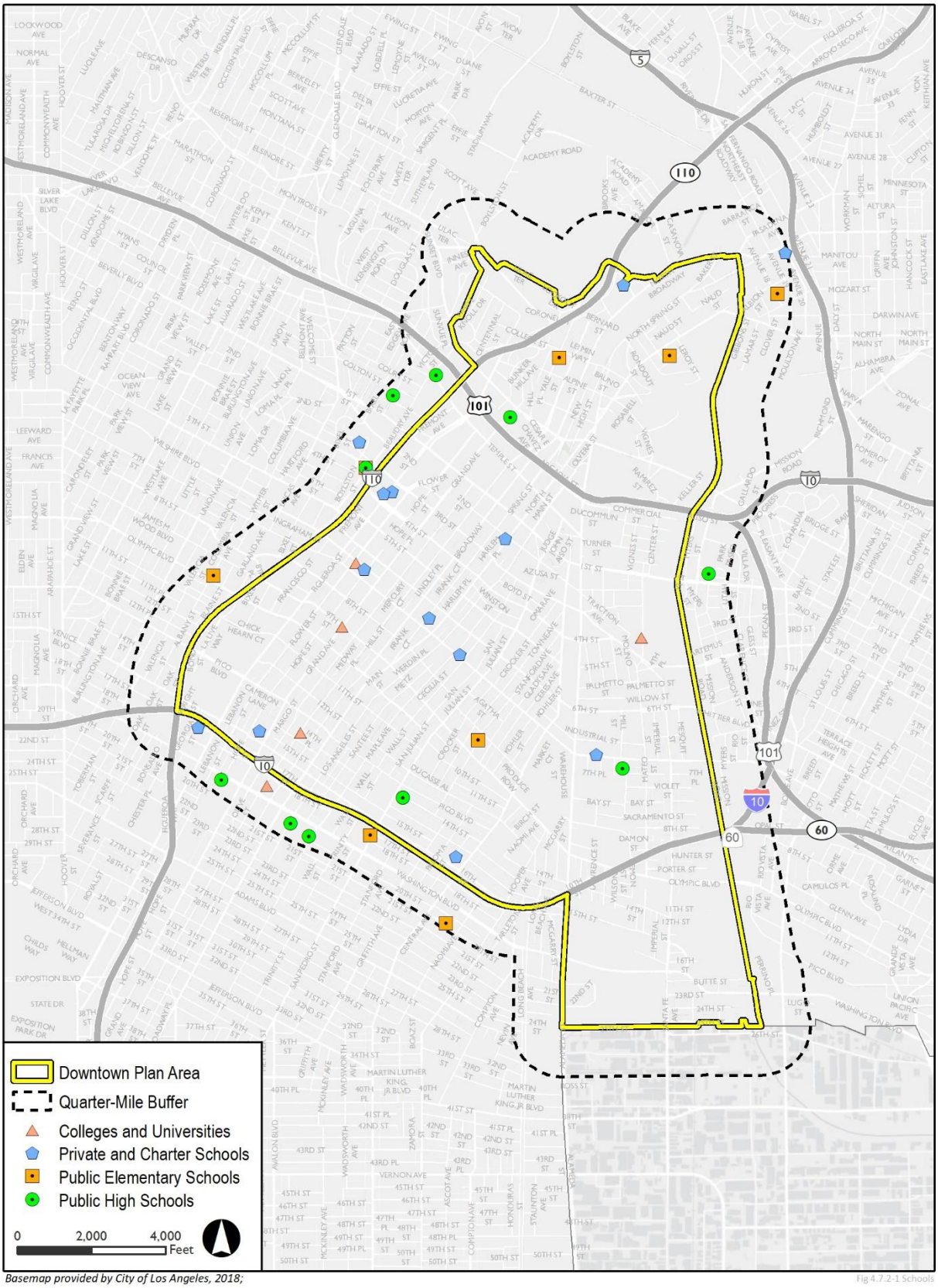
TABLE 4.8-3 EDUCATIONAL FACILITIES IN OR WITHIN 0.25 MILE OF THE DOWNTOWN PLAN AREA

Facility	Address	Type of Schools
Los Angeles Community College District	770 Wilshire Blvd	Colleges and Universities
Coast Career Institute	1354 S Hill St	Colleges and Universities
Abram Friedman Occupational Center	1646 S Olive Street	Colleges and Universities
The Fashion Institute Of Design & Merchandising-Los Angeles	919 S Grand Ave	Colleges and Universities
Virginia Sewing Machines And School Center	1033 S Broadway St	Colleges and Universities
Southern California Institute Of Architecture	960 E. 3rd Street	Colleges and Universities
Los Angeles Trade Technical College	400 W. Washington Blvd.	Colleges and Universities
Jardin de la Infancia	307 East 7th Street	Private and Charter Schools
Camino Nuevo Charter High School	1215 West Miramar Street	Private and Charter Schools
Olympic Primary Center	950 South Albany Street	Public Elementary Schools
Santee Education Complex	1921 South Maple Avenue	Public High Schools
Frida Kahlo High School	1924 South Los Angeles Street	Public High Schools
Alliance Dr. Olga Mohan High School	644 West 17th Street	Private and Charter Schools
Edward R. Roybal Learning Center	1200 West Colton Street	Public High Schools
Special Education-Infant/Preschool Program	333 South Beaudry Avenue, Floor 17	Public Elementary Schools
Para Los Ninos Middle School	835 Stanford Avenue	Private and Charter Schools
Ramon C. Cortines School of Visual and Performing Arts	450 North Grand Avenue	Public High Schools
Felicitas and Gonzalo Mendez High School	1200 Plaza Del Sol	Public High Schools
Endeavor College Preparatory Charter	126 Bloom Street	Private and Charter Schools
Alliance College-Ready Middle School Academy 5	211 South Avenue 20	Private and Charter Schools
Alliance Susan and Eric Smidt Technology High School	211 South Avenue 20	Private and Charter Schools
USC Hybrid High School	350 South Figueroa Street, Suite 100	Private and Charter Schools
Early College Academy-LA Trade Tech College	400 West Washington Boulevard	Public High Schools
Metro Charter	320 West 15th Street, Suite 143	Private and Charter Schools
University Preparatory Value High School	700 Wilshire Boulevard	Private and Charter Schools
Central High School	716 East 14th Street	Public High Schools
Metropolitan Continuation	727 South Wilson Street	Public High Schools
Downtown Business High School	1081 West Temple Street	Public High Schools
Los Angeles Unified Alternative Education	333 South Beaudry Avenue, Floor 18	Public High Schools
Tri-C Community Day	716 East 14th Street, Second Floor	Public High Schools
CDS Secondary	333 South Beaudry Avenue, 18th Floor	Public High Schools
Albion Street Elementary School	322 South Avenue 18	Public Elementary Schools

TABLE 4.8-3 EDUCATIONAL FACILITIES IN OR WITHIN 0.25 MILE OF THE DOWNTOWN PLAN AREA

Facility	Address	Type of Schools
Ann Street Elementary School	126 East Bloom Street	Public Elementary Schools
Castelar Street Elementary School	840 Yale Street	Public Elementary Schools
San Pedro Street Elementary School	1635 South San Pedro Street	Public Elementary Schools
Twentieth Street Elementary School	1353 East 20th Street	Public Elementary Schools
Ninth Street Elementary School	835 Stanford Ave	Public Elementary Schools
Para Los Ninos Charter	1617 East Seventh Street	Private and Charter Schools
CDS Elementary School	333 South Beaudry Avenue, 18th Floor	Public Elementary Schools
Los Angeles Unified School District ROCP	333 South Beaudry Avenue	Public High Schools
SIATech Academy South	634 South Spring Street	Private and Charter Schools
American University Preparatory School	345 South Figueroa Street, Suite 100	Private and Charter Schools
Cathedral High School	1253 Bishops Road	Private and Charter Schools
Pacific Ohana Academy	108 West 2nd Street, Number 208	Private and Charter Schools
St. Turibius Elementary School	1524 Essex Street	Private and Charter Schools

Figure 4.8-4 Educational Facilities in or within 0.25 mile of the Downtown Plan Area



Basemap provided by City of Los Angeles, 2018;
Additional data provided by Los Angeles County, 2017.

WILDLAND FIRE HAZARDS

The California Department of Forestry and Fire Protection (CAL FIRE) identifies fire hazard areas and fire-threatened communities at the wildland urban interface. CAL FIRE maps identify fire hazard severity zones in the state and local responsibility areas. Wildland fire protection in California is the responsibility of either the state, local government, or the federal government. A designated State Responsibility Area (SRA) is the area "in which the financial responsibility of preventing and suppressing fires is primarily the responsibility of the state" (Public Resources Code Section 4125). Local responsibility areas (LRA) in include incorporated cities, cultivated agricultural lands, and portions of the desert. LRA fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government.

Classification of a zone as moderate, high or very high fire hazard is based on a combination of how a fire will behave and the probability of flames and embers threatening buildings.

Citywide Wildland Fire Hazards

Fire Hazard Severity Areas in the City are designated by the Los Angeles County Fire Department. Very high fire hazard severity zones (VHFHSZ) generally coincide with mountainous areas within City boundaries. VHFHSZs designated as Local Responsibility Areas are generally located at the northern border of the City, in portions of Topanga State Park within the City boundaries, Griffith Park, Elysian Park, and Ballona Wetlands Ecological Reserve. VHFHSZs designated as a State or Federal Responsibility Area is located at the border of the City and Angeles National Forest (CAL FIRE 2007).

Downtown Plan Area Wildland Fire Hazards

CAL FIRE has identified the entire Downtown Plan Area as being located within the “Non-Very High Fire Hazard Severity Zone” in the Local Responsibility Area for incorporated cities (CAL FIRE 2011). This indicates that the Downtown Plan Area is not subject to wildfire hazards.

EMERGENCY RESPONSE PLANS

The City of Los Angeles Emergency Management Department (EMD) is comprised of five divisions: administrative services, community preparedness and engagement, operational readiness, planning, and training and exercise. The EMD works with City departments, municipalities and with community-based organizations to ensure that the City and its residents have the resources and information they need to prepare, respond, and recover from emergencies, disasters and significant events (Los Angeles 2018). Within the EMD, the Emergency Operations Organization (EOO) is the operational department responsible for the City’s emergency preparations (planning, training and mitigation), response and recovery operations. The EOO centralizes command and information coordination to enable its unified chain-of-command to operate efficiently and effectively in managing the City's resources. The Emergency Operation Center (EOC) is the focal point for coordination of the City’s emergency planning, training, response and recovery efforts. EOC processes follow the National All-Hazards approach to major disasters such as fires, floods, earthquakes, acts of terrorism and large-scale events in the City that require involvement by multiple City departments.

The LAFD is responsible for rescue and provision of medical care to victims of fires and other emergencies. Key to a successful rapid response is LAFD’s goal of maintaining adequate response distances from any given fire outbreak to the closest fire station. See Section 4.13, *Public Services,* of this Draft EIR, for further details about the LAFD.

Citywide Emergency Response

Emergency response throughout the City is managed by the Emergency Management Department (EMD) which is comprised of five divisions, including the administrative services division, community preparedness and engagement division, operational readiness division, planning division, and training and exercise division (City of Los Angeles 2018b). The Emergency Operations Organization (EOO) is the centralized operational department of the EMD which implements the Safety Element of the General Plan. The EOO is a "department without walls" as it works with all of the City's departments to prepare for, respond to, and recover from emergencies, disasters, and significant events (City of Los Angeles 1996). The EOO also coordinates emergency response planning with other jurisdictions' emergency service organizations (City of Los Angeles 2017a). The Emergency Operations Center (EOC) is the operations center which is the focal point for the coordination of the City's emergency planning, training, response, and recovery efforts. The EOC is a state-of-the-art facility comprised of a Main Coordination Room (MCR), Media Center, Training Room, Management Section Room, Public Information Officer Room, Executive Conference Room, six flexible-use Break Out Rooms (includes Business Operations Center), Amateur Radio Operations Room and two storage rooms (City of Los Angeles 2017b).

Downtown Plan Area Emergency Response

The City's General Plan Safety Element specifies several disaster routes in the Downtown Plan Area. Disaster routes typically parallel major north-south and east-west traffic corridors. Disaster routes within and adjacent to the Downtown Plan Area include U.S. 101, I-110, I-10, W 1st Street, W Ceasar Chavez Avenue, E 4th Street east of Alameda Street, S Figueroa Street, Alameda Street, and S San Pedro Street south of Temple Street (County of Los Angeles 2018).

REGULATORY FRAMEWORK

Hazardous materials and waste can pose a potential hazard to human health and the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Federal, State, and local programs that regulate the use, storage, and transportation of hazardous materials and hazardous waste are in place to prevent unwanted consequences. These regulatory programs are designed to reduce the risk that hazardous substances may pose to people and businesses under normal daily circumstances and as a result emergencies and disasters.

FEDERAL

Primary federal agencies with responsibility for hazardous materials management include the USEPA, U.S. Department of Labor's OSHA, and U.S. Department of Transportation (USDOT).

U.S. Environmental Protection Agency

The USEPA's mission is to protect human health and the environment. USEPA takes action to reduce risks associated with exposure to chemicals in commerce, indoor and outdoor environments, and products and food. USEPA continues to oversee the introduction and use of pesticides, improve their Integrated Risk Information System (IRIS) program, reduce radon risks, identify and address children's health risks in schools and homes, and improve chemical management practices. Oversight of chemical storage and manufacturing in coordination with their interagency partners remains a key focus of USEPA, as well as efforts to reduce urban air toxins.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Enacted in 1980, CERCLA, commonly known as Superfund, creates a tax on the chemical and petroleum industries and provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. The tax goes into a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA:

- Established prohibitions and requirements concerning closed and abandoned hazardous waste sites;
- Provided for liability of persons responsible for releases of hazardous waste at these sites; and
- Established a trust fund to provide for cleanup when no responsible party could be identified.

CERCLA established the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS). The CERCLIS database was renamed to Standardized Emergency Management System (SEMS) by USEPA in 2015. SEMS is the USEPA's system for tracking potential hazardous-waste sites within the Superfund program. In addition, CERCLA authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response.
- Long-term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. These actions can be conducted only at sites listed on the USEPA's National Priorities List (NPL).

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the NPL.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) of 1976 gives the USEPA the authority to control hazardous waste from "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled USEPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Toxic Substances Control Act (TSCA)

Congress enacted the TSCA of 1976, codified in Title 40 of the CFR, to give USEPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. USEPA repeatedly screens these chemicals and can require reporting or testing of those that may pose an environmental or human-health hazard. USEPA can ban the manufacture and import of those chemicals that pose an unreasonable risk. More specifically, in California, polychlorinated biphenyls (PCBs) are regulated by both State (RCRA and Title 22 of the California Code of Regulations [CCR]) and federal (TSCA) rules. TSCA has banned the manufacture, processing, use, and distribution in commerce of PCBs. TSCA gives USEPA the authority to develop, implement and enforce regulations concerning the use, manufacture, cleanup, and disposal of PCBs. TSCA also establishes USEPA's Lead Abatement Program regulations, which provide a framework for lead abatement, risk assessment, and inspections. Those performing these services are required to be trained and certified by USEPA (USEPA 1996).

U.S. Department of Transportation (USDOT)

USDOT prescribes strict regulations for the safe transportation of hazardous materials, including requirements for hazardous waste containers and licensed haulers who transport hazardous waste on public roads. The Secretary of the Department of Transportation receives the authority to regulate the transportation of hazardous materials from the Hazardous Materials Transportation Act (HMTA), as amended and codified in 49 U.S. Code (U.S.C.) Section 5101 et seq. The Secretary is authorized to issue regulations to implement the requirements of 49 U.S.C. The Pipeline and Hazardous Materials Safety Administration (PHMSA), formerly the Research and Special Provisions Administration, was delegated the responsibility to write the hazardous materials regulations, which are contained in Title 49 of the Code of Federal Regulations (CFR) Parts 100-180. Title 49 of the CFR, which contains the regulations set forth by the HMTA, specifies requirements and regulations with respect to the transport of hazardous materials. It requires that every employee who transports hazardous materials receive training to recognize and identify hazardous materials and become familiar with hazardous materials requirements. Under the HMTA, the Secretary "may authorize any officer, employee, or agent to enter upon, inspect, and examine, at reasonable times and in a reasonable manner, the records and properties of persons to the extent such records and properties relate to: (1) the manufacture, fabrication, marking, maintenance, reconditioning, repair, testing, or distribution of packages or containers for use by any "person" in the transportation of hazardous materials in commerce; or (2) the transportation or shipment by any "person" of hazardous materials in commerce."

Title 40 Code of Federal Regulations

Title 40 Code of Federal Regulations (CFR) Part 264 “Standards for Owners of Hazardous Waste Treatment, Storage and Disposal Facilities,” establishes minimum national standards which define the acceptable management of hazardous waste. This standard applies to owners and operators of all facilities which treat, store, or dispose of hazardous waste.

Occupational Safety and Health Act of 1970

The U.S. Department of Labor’s OSHA was created to assure safe and healthful working conditions by setting and enforcing standards and by providing training, outreach, education, and assistance. OSHA provides standards for general industry and construction industry on hazardous waste operations and emergency response. The Occupational Safety and Health Act, which is implemented by OSHA, contains provisions with respect to hazardous materials handling. Federal Occupational Safety and Health Act requirements, as set forth in Title 29 of the CFR Section 1910, et. seq., are designed to promote worker safety, worker training, and a worker’s right-to-know. OSHA has delegated the authority to administer OSHA regulations to the State of California.

Title 49 of the Code of Federal Regulations (CFR), which contains the regulations set forth by the Hazardous Materials Transportation Act of 1975, specifies additional requirements and regulations with respect to the transport of hazardous materials. Title 49 of the CFR requires that every employee who transports hazardous materials receive training to recognize and identify hazardous materials and become familiar with hazardous materials requirements. Drivers are also required to be trained in function and commodity specific requirements.

Research and Special Programs Administration (RSPA)

RSPA regulations cover definition and classification of hazardous materials, communication of hazards to workers and the public, packaging and labeling requirements, operational rules for shippers, and training. They apply to interstate, intrastate, and foreign commerce by air, rail, ships, and motor vehicles, and also cover hazardous waste shipments. The Federal Highway Administration (FHWA) is responsible for

highway routing of hazardous materials and highway safety permits. The U.S. Coast Guard regulates bulk transport by vessel. The hazardous material regulations include emergency response provisions, including incident reporting requirements. Reports of major incidents go to the National Response Center, which in turn is linked with CHEMTREC, a service of the chemical manufacturing industry that provides details on most chemicals shipped in the United States.

Other Hazardous Materials Regulations

In addition to the USDOT regulations for the safe transportation of hazardous materials, other applicable federal laws that also address hazardous materials. These include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Atomic Energy Act
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

Federal Emergency Management Act (FEMA)

FEMA was established in 1979 via executive order and is an independent agency of the federal government. In March 2003, FEMA became part of the U.S. Department of Homeland Security with the mission to lead the effort in preparing the nation for all hazards and effectively manage federal response and recovery efforts following any national incident. FEMA also initiates proactive mitigation activities, trains first responders, and manages the National Flood Insurance Program and the U.S. Fire Administration.

Disaster Mitigation Act of 2000

Disaster Mitigation Act (42 United States Code [U.S.C.] §5121) provides the legal basis for FEMA mitigation planning requirements for State, local, and Indian Tribal governments as a condition of mitigation grant assistance. It amends the Robert T. Stafford Disaster Relief Act of 1988 (42 U.S.C. §5121-5207) by repealing the previous mitigation planning provisions and replacing them with a new set of requirements that emphasize the need and creates incentives for state, Tribal, and local agencies to closely coordinate mitigation planning and implementation efforts. This Act reinforces the importance of pre-disaster infrastructure mitigation planning to reduce disaster losses nationwide and the streamlining of the administration of federal disaster relief and programs to promote mitigation activities. Some of the major provisions of this Act include:

- Funding pre-disaster mitigation activities;
- Developing experimental multi-hazard maps to better understand risk;
- Establishing state and local government infrastructure mitigation planning requirements;
- Defining how states can assume more responsibility in managing the Hazard Mitigation Grant Program (HMGP); and
- Adjusting ways in which management costs for projects are funded.

The mitigation planning provisions outlined in Section 322 of this Act establish performance-based standards for mitigation plans and require states to have a public assistance program (Advance Infrastructure Mitigation [AIM]) to develop county government plans. The consequence for counties that fail to develop an infrastructure mitigation plan is the chance of a reduced federal share of damage

assistance from 75 percent to 25 percent if the damaged facility has been damaged on more than one occasion in the preceding 10-year period by the same type of event.

Federal Fire Safety Act (FFSA)

The FFSA of 1992 is different from other laws affecting fire safety as the law applies to federal operations, and there is no requirement for local action unless a private building owner leases space to the federal government. The FFSA requires federal agencies to provide sprinkler protection in any building, whether owned or leased by the federal government that houses at least 25 federal employees during their employment.

STATE POLICIES AND REGULATIONS

The primary state agencies with jurisdiction over hazardous chemical materials management are CalEPA DTSC and the Los Angeles Regional Water Quality Control Board (LARWQCB). Other state agencies involved in hazardous materials management include California OSHA (Cal/OSHA) and the State Office of Emergency Services (Cal OES).

Authority for the statewide administration and enforcement of RCRA rests with Cal/EPA DTSC. While DTSC has primary state responsibility in regulating the generation, storage and disposal of hazardous materials, DTSC may further delegate enforcement authority to local jurisdictions. In addition, DTSC is responsible and/or provides oversight for contamination cleanup and administers statewide hazardous waste reduction programs. DTSC operates programs to accomplish the following: (1) manage the aftermath of improper hazardous waste management by overseeing site cleanups; (2) prevent releases of hazardous waste by ensuring that those who generate, handle, transport, store, and dispose of wastes do so properly; and (3) evaluate soil, water, and air samples taken at sites.

The storage of hazardous materials in underground storage tanks (USTs) is regulated by the SWRCB, which delegates authority to the Regional Water Quality Control Board (RWQCB) on the regional level, and typically to the local fire department on the local level.

The Cal/OSHA program is administered and enforced by the Division of Occupational Safety and Health (DOSH). Cal/OSHA is very similar to the federal OSHA program. For example, both programs contain rules and procedures related to exposure to hazardous materials during demolition and construction activities. In addition, Cal/OSHA requires employers to implement a comprehensive, written Injury and Illness Prevention Program (IIPP). An IIPP is an employee safety program for potential workplace hazards, including those associated with hazardous materials.

The Cal OES Hazardous Materials (HazMat) section under the Fire and Rescue Division coordinates statewide implementation of hazardous materials accident prevention and emergency response programs for all types of hazardous materials incidents and threats. In response to any hazardous materials emergency, the HazMat section staff is called upon to provide state and local emergency managers with emergency coordination and technical assistance.

California Occupational Safety and Health Act – California Labor Code, Section 6300 et seq.

The California Occupational Safety and Health Act of 1973 addresses California employee working conditions, enables the enforcement of workplace standards, and provides for advancements in the field of occupational health and safety. The Act also created Cal OSHA, the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal OSHA's standards are generally more stringent than federal regulations. Under the former, the employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure. The regulations specify requirements for

employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings. At sites known or suspected to be contaminated by hazardous materials, workers must have training in hazardous materials operations and a Site Health and Safety Plan must be prepared. The Health and Safety Plan establishes policies and procedures to protect workers and the public from exposure to potential hazards at the contaminated site.

California Health and Safety Code, Title 22, Chapter 20 Hazardous Waste Permit Program

Title 22, Chapter 20 Hazardous Waste Permit Program, establishes provisions for the issuance and administration of hazardous waste permits pursuant to the Health and Safety Code. Regulations cover basic permitting requirements, such as application requirements, standard permit conditions, and monitoring and reporting requirements. Hazardous Waste Permits are required for the transfer, treatment, storage, and disposal of any waste which is hazardous waste pursuant to section 66261.3. Owners and operators of certain facilities require hazardous waste facility permits as well as permits under other programs for certain aspects of the facility operation.

California Health and Safety Code, Division 20, Chapter 6.5, Hazardous Waste Control Law

The California Health and Safety Code, Division 20, Chapter 6.5, Hazardous Waste Control Law regulates the safe disposal of hazardous wastes generated within the State of California. The law identifies proper guidance for the handling, storage, use, and disposal of hazardous wastes. Additionally, the Hazardous Waste Control Law identifies the need for proper landfill disposal in order to reduce long-term threats to public health and to air and water quality.

Hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; dictate the management of hazardous waste; establish permit requirements for hazardous waste treatment, storage, disposal and transportation; and identify hazardous wastes that cannot be disposed of in landfills.

California Code of Regulations, Division 4.5, Title 22

California Health and Safety Code and Title 22 regulates processes that produce hazardous waste. The Regulation requires an ID number, regulates accumulation of onsite hazardous materials, shipping and transport, emergency procedures, and worker training.

California Code of Regulations Title 23, Chapter 15 Discharges of Hazardous Waste to Land Section 2511(b)

California Code of Regulations Title 23, Chapter 15 Discharges of Hazardous Waste to Land Section 2511(b) pertains to water quality aspects of waste discharge to land. The regulation establishes waste and site classifications and waste management requirements for waste treatment, storage, or disposal in landfills, surface impoundments, waste piles, and land treatment facilities. Requirements are minimum standards for proper management of each waste category, which allow regional water boards to impose more stringent requirements to accommodate regional and site-specific conditions. In addition, the requirements of California Code of Regulations Title 23, Chapter 15 applies to cleanup and abatement actions for unregulated discharges to land of hazardous waste (e.g. spills).

License to Transport Hazardous Materials – California Vehicle Code, Section 32000.5 et seq.

The California Department of Transportation (Caltrans) regulates hazardous materials transportation on all interstate roads. Within California, the State agencies with primary responsibility for enforcing federal and State regulations and for responding to transportation emergencies are the California Highway Patrol and

Caltrans. Together, federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications for vehicles transporting hazardous materials.

California Fire Code, Title 24, Part 9, Chapters 33, 50 and 57

The 2013 California Fire Code, written by the California Building Standards Commission, is based on the 2012 International Fire Code. The International Fire Code (IFC) is a model code that regulates minimum fire safety requirements for new and existing buildings, facilities, storage and processes. The IFC addresses fire prevention, fire protection, life safety, and safe storage and use of hazardous materials in new and existing buildings, facilities, and processes.

Uniform Fire Code

The Uniform Fire Code, Article 80 (Section 80.103 of the Uniform Fire Code as adopted by the State Fire Marshal pursuant to Health and Safety Code Section 13143.9), includes specific requirements for the safe storage and handling of hazardous materials. These requirements are intended to reduce the potential for a release of hazardous materials and for mixing of incompatible chemicals, and specify the following specific design features to reduce the potential for a release of hazardous materials that could affect public health or the environment:

- Separation of incompatible materials with a noncombustible partition;
- Spill control in all storage, handling, and dispensing areas; and
- Separate secondary containment for each chemical storage system. The secondary containment must hold the entire contents of the tank, plus the volume of water needed to supply the fire suppression system for a period of 20 minutes in the event of catastrophic spill.

California Constitution Article XIII Section 35.

Section 35 of Article III of the California Constitution at subdivision (a)(2) provides: "The protection of the public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services." Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directed the proceeds of a 0.50 percent sales tax to be used exclusively for local public safety services. California Government Code Sections 30051-30056 provide rules to implement Proposition 172. Public safety services include fire protection. Section 30056 provides that cities are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992-93 fiscal year. Therefore, an agency is required to use Proposition 172 to supplement its local funds used on fire protection, as well as other public safety services. In *City of Hayward v. Trustee of California State University* (2015) 242 Cal. App. 4th 833, the court found that, Section 35 of Article XIII of the California Constitution requires local agencies to provide fire services and that it is reasonable to conclude that a lead agency will comply with that provision and ensure that public services are provided. (See *City of Hayward v. Trustee of California State University* (2015) 242 Cal. App. 4th 833, 847, stating "the city has a constitutional obligation to provide adequate fire protection services".)

Title 8 California Code of Regulations (CCR) Sections 1270 and 6773

In accordance with CCR, Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Equipment," the California Occupational Safety and Health Administration (Cal-OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hosing sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

California Health and Safety Code Section 13100-13135

California Health Safety Code Section 13100-13135 codifies regulations known as the "Regulations of the State Fire Marshal" and constitutes the Basic Building Design and Construction Standards of the State Fire Marshall. The regulations establish minimum standards for the preservation and protection of life and property against fire, explosion, and panic through requirements for fire protection and notification systems, fire protection devices, and fire suppression training.

California Governor's Office of Emergency Services (Cal OES)

In 2009, the State of California passed legislation creating the Cal OES and authorized it to prepare a Standard Emergency Management System (SEMS) program (Title 19 CCR Section 2401 *et seq.*), which sets forth measures by which a jurisdiction should handle emergency disasters. In California, SEMS provides the mechanism by which local government requests assistance. Non-compliance with SEMS could result in the state withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster. Cal OES coordinates the state's preparation for, prevention of, and response to major disasters, such as fires, floods, earthquakes and terrorist attacks. During an emergency, Cal OES serves as the lead state agency for emergency management in the state. It also serves as the lead agency for mobilizing the state's resources and obtaining federal resources. Cal OES coordinates the state response to major emergencies in support of local government. The primary responsibility for emergency management resides with local government. Local jurisdictions first use their own resources and, as they are exhausted, obtain more from neighboring cities and special districts, the county in which they are located, and other counties throughout the state through the statewide mutual aid system (see discussion of Mutual Aid Agreements, below). California Emergency Management Agency (Cal-EMA) maintains oversight of the state's mutual aid system.

Mutual Aid Agreements

Cal OES developed the Emergency Managed Mutual Aid (EMMA) System in response to the 1994 Northridge Earthquake. The EMMA System coordinates emergency response and recovery efforts along the coastal, inland, and southern regions of California. The purpose of EMMA is to provide emergency management personnel and technical specialist to afflicted jurisdictions in support of disaster operations during emergency events. Objectives of the EMMA Plan is to provide a system to coordinate and mobilize assigned personnel, formal requests, assignment, training and demobilization of assigned personnel; establish structure to maintain the EMMA Plan and its procedures; provide the coordination of training for EMMA resources, including SEMS training, coursework, exercises, and disaster response procedures; and to promote professionalism in emergency management and response. The EMMA Plan was updated in November 2012 and supersedes the 1997 EMMA Plan and November 2001 EMMA Guidance.

REGIONAL

South Coast Air Quality Management District (SCAQMD) Rule 1403

SCAQMD Rule 1403 establishes asbestos survey requirements, notification, and work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities. Rule 1403 incorporates the requirements of the federal asbestos requirements found in the National Emission Standards for Hazardous Air Pollutants (NESHAP) found in CFR Title 40, Part 61, Subpart M. USEPA delegated SCAQMD the authority to enforce the federal asbestos NESHAP and SCAQMD is the local enforcement authority for asbestos.

LOCAL

The primary local agency with responsibility for implementing federal and state laws and regulations pertaining to hazardous materials management is the Los Angeles County Health Department, Environmental Health Division. The Los Angeles County Health Department is the Certified Unified Program Agency (CUPA) for the County of Los Angeles. A CUPA is a local agency that has been certified by CalEPA to implement the six state environmental programs within the local agency's jurisdiction. This program was established under the amendments to the California Health and Safety Code made by Senate Bill 1082 in 1994. The six consolidated programs are:

- Hazardous Materials Release Response Plan and Inventory (Business Plans)
- California Accidental Release Prevention (CalARP)
- Hazardous Waste (including Tiered Permitting)
- Underground Storage Tanks (USTs)
- Above Ground Storage Tanks (Spill Prevention Control and Countermeasures [SPCC] requirements)
- Uniform Fire Code (UFC) Article 80 Hazardous Material Management Program (HMMP) and Hazardous Material Identification System (HMIS)

As the CUPA for County of Los Angeles, the Los Angeles County Health Department Environmental Health Division maintains the records regarding location and status of hazardous materials sites in the county and administers programs that regulate and enforce the transport, use, storage, manufacturing, and remediation of hazardous materials. By designating a CUPA, Los Angeles County has accurate and adequate information to plan for emergencies and/or disasters and to plan for public and firefighter safety.

A Participating Agency is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within their jurisdiction on behalf of the CUPA. The Los Angeles County Health Department, Environmental Health Division has designated the Los Angeles Fire Department (LAFD) as a Participating Agency. The LAFD monitors the storage of hazardous materials in the City for compliance with local requirements. Specifically, businesses and facilities that store more than threshold quantities of hazardous materials as defined in California Health and Safety Code Chapter 6.95 are required to file an Accidental Risk Prevention Program with LAFD. This program includes information such as emergency contacts, phone numbers, facility information, chemical inventory, and hazardous materials handling and storage locations. LAFD also has the authority to administer and enforce federal and State laws and local ordinances for USTs. Plans for the construction/installation, modification, upgrade, and removal of USTs are reviewed by LAFD Inspectors.

2012 Los Angeles County NPDES Permit

Effective on December 28, 2012, the Los Angeles RWQCB adopted Order No. R4-2012-0175, NPDES Permit No. CAS004001, Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges into the Coastal Watersheds of Los Angeles County. The permit establishes new performance criteria for new development and redevelopment projects in the coastal watersheds of Los Angeles County (with the exception of the city of Long Beach). Storm water and non-storm water discharges consist of surface runoff generated from various land uses, which are conveyed via the municipal separate storm sewer system and ultimately discharged into surface waters throughout the region ("storm water" discharges are those that originate from precipitation events, while "non-storm water" discharges are all those that are transmitted through an MS4 Storm Water Permit and originate from precipitation events). Discharges of storm water and non-storm water from the MS4s, or storm drain systems, in the Coastal Watersheds of Los Angeles County convey pollutants to surface waters throughout the Los Angeles

Region. Non-storm water discharges through an MS4 in the Los Angeles Region are prohibited unless authorized under an individual or general NPDES permit; these discharges are regulated by the Los Angeles County NPDES Permit, issued pursuant to CWA Section 402. Coverage under a general NPDES permit such as the Los Angeles County permit can be achieved through development and implementation of a project-specific SWPPP. (LARWQCB 2012)

County of Los Angeles Flood Control Act

The California State legislature adopted the County of Los Angeles Flood Control Act in 1915, establishing the Los Angeles County Flood Control District (LACFCD) and empowering it to provide flood protection, water conservation, recreation, and aesthetic enhancement within its boundaries. In August 2000, the Watershed Management Division of the Los Angeles County Department of Public Works became the planning and policy arm of the LACFCD. The District encompasses more than 3,000 square miles, 85 cities, and approximately 2.1 million land parcels. It includes a vast majority of drainage infrastructure in incorporated and unincorporated areas in every watershed, including 500 miles of open channels, 2,800 miles of underground storm drains, and an estimated 120,000 catch basins. The LACFCD regulates hydrologic and hydraulic design within its boundaries and provides criteria and planning procedures for flood plains, waterways, channels, and closed conduits in Los Angeles County.

Los Angeles County Operational Area Emergency Response Plan (ERP)

The County of Los Angeles developed the ERP to ensure the most effective allocation of resources for the maximum benefit and protection of the public in time of emergency. The ERP does not address normal day-to-day emergencies or the well-established and routine procedures used in coping with them. Instead, the operational concepts reflected in this plan focus on potential large-scale disasters like extraordinary emergency situations associated with natural and man-made disasters and technological incidents which can generate unique situations requiring an unusual or extraordinary emergency response. The purpose of the plan is to incorporate and coordinate all facilities and personnel of County government, along with the jurisdictional resources of the cities and special districts within the County, into an efficient Operational Area organization capable of responding to any emergency using a Standard Emergency Management System, mutual aid and other appropriate response procedures. The goal of the plan is to take effective life-safety measures and reduce property loss, provide for the rapid resumption of impacted businesses and community services, and provide accurate documentation and records required for cost-recovery.

Los Angeles Fire Department (LAFD)

The LAFD monitors the storage of hazardous materials in the City for compliance with local requirements. Specifically, businesses and facilities which store more than threshold quantities of hazardous materials as defined in Chapter 6.95 of the California Health and Safety Code are required to file an Accidental Risk Prevention Program with the LAFD. This program includes information such as emergency contacts, phone numbers, facility information, chemical inventory, and hazardous materials handling and storage locations. The LAFD also has delegated authority to administer and enforce Federal and State laws and local ordinances for USTs. Plans for the construction/installation, modification, upgrade, and removal of USTs are reviewed by LAFD Inspectors.

Los Angeles Fire Code

Chapter V, Article 7 of the LAMC contains the Los Angeles Fire Code. The purpose of the Fire Code is to prescribe laws for the safeguarding of life and property from fire, explosion, panic, or other hazardous conditions that may arise in the use or occupancy of buildings, structures, or premises and other laws that may be the duty of LAFD to enforce.

City of Los Angeles Emergency Management Department (EMD)

The City of Los Angeles EMD is comprised of four divisions and two units including administrative services division, communications division, community emergency management division, operations division, planning unit, and training exercise unit. The EMD works with City departments, municipalities and with community-based organizations to ensure that the City and its residents have the resources and information they need to prepare, respond, and recover from emergencies, disasters and significant events. The Emergency Operations Organization (EOO) is the operational department responsible for the City's emergency preparations (planning, training and mitigation), response and recovery operations. The EOO centralizes command and information coordination to enable its unified chain-of-command to operate efficiently and effectively in managing the City's resources.

The Emergency Operation Center (EOC) is the focal point for coordination of the City's emergency planning, training, response and recovery efforts. EOC processes follow the National All-Hazards approach to major disasters such as fires, floods, earthquakes, acts of terrorism and large-scale events in the City that require involvement by multiple City departments.

City of Los Angeles General Plan Safety and Conservation Elements

The Safety Element provides a contextual framework for understanding the relationship between hazard mitigation, response to a natural disaster, and initial recovery from a natural disaster. The Safety Element addresses hazardous materials relative to potential natural hazards.

The intent of the Conservation Element of the General Plan is the conservation and preservation of natural resources. Policies of the Conservation Element address the conservation of petroleum resources (i.e., oil and gas) and appropriate, environmentally sensitive extraction of petroleum deposits to protect the petroleum resources for the use of future generations and to reduce the City's dependency on imported petroleum and petroleum products.

Policies from the Safety and Conservation Elements related to Hazards and Hazardous Materials are listed below in **Table 4.8-4**.

TABLE 4.8-4 RELEVANT GENERAL PLAN HAZARDOUS MATERIALS GOALS, OBJECTIVES, AND POLICIES

Safety Element – Hazard Mitigation	
Policy 1.1.1	Coordination. Coordinate information gathering, program formulation and program implementation between City agencies, other jurisdictions and appropriate public and private entities to achieve the maximum mutual benefit with the greatest efficiency of funds and staff.
Policy 1.1.2	Disruption reduction. Reduce, to the greatest extent feasible and within the resources available, potential critical facility, governmental functions, infrastructure and information resource disruption due to natural disaster.
Policy 1.1.3	Facility/systems maintenance. Provide redundancy (back-up) systems and strategies for continuation of adequate critical infrastructure systems and services so as to assure adequate circulation, communications, power, transportation, water and other services for emergency response in the event of disaster related systems disruptions.
Policy 1.1.4	Health/environmental protection. Protect the public and workers from the release of hazardous materials and protect City water supplies and resources from contamination resulting from accidental release or intrusion resulting from a disaster event, including protection of the environment and public from potential health and safety hazards associated with program implementation.
Policy 1.1.5	Risk reduction. Reduce potential risk hazards due to natural disaster to the greatest extent feasible within the resources available, including provision of information and training.
Policy 2.1.1	Coordination. Coordinate program formulation and implementation between City agencies, adjacent jurisdictions and appropriate private and public entities so as to achieve, to the greatest

TABLE 4.8-4 RELEVANT GENERAL PLAN HAZARDOUS MATERIALS GOALS, OBJECTIVES, AND POLICIES	
Safety Element – Hazard Mitigation	
	extent feasible and within the resources available, the maximum mutual benefit with the greatest efficiency of funds and staff.
Policy 2.1.2	Health and environmental protection. Develop and implement procedures to protect the environment and public, including animal control and care, to the greatest extent feasible within the resources available, from potential health and safety hazards associated with hazard mitigation and disaster recovery efforts.
Policy 2.1.3	Information. Develop and implement, within the resources available, training programs and informational materials designed to assist the general public in handling disaster situations in lieu of or until emergency personnel can provide assistance.
Policy 2.1.4	Interim procedures. Develop and implement pre-disaster plans for interim evacuation, sheltering and public aid for disaster victims displaced from homes and for disrupted businesses, within the resources available. Plans should include provisions to assist businesses, which provide significant services to the public and plans for reestablishment of the financial viability of the City.
Policy 2.1.5	Response. Develop, implement, and continue to improve the City's ability to respond to emergency events.
Policy 2.1.6	Standards/fire. Continue to maintain, enforce and upgrade requirements, procedures and standards to facilitate more effective fire suppression. The Fire Department and/or appropriate City agencies shall revise regulations or procedures to include the establishment of minimum standards for location and expansion of fire facilities, based upon fire flow requirements, intensity and type of land use, life hazard, occupancy and degree of hazard so as to provide adequate fire and emergency medical event response. At a minimum, site selection criteria should include the following standards which were contained in the 1979 General Plan Fire Protection and Prevention Plan: ● Fire stations should be located along improved major or secondary highways. If, in a given service area, the only available site is on a local street, the site must be on a street which leads directly to an improved major or secondary highway. ● Fire station properties should be situated so as to provide drive-thru capability for heavy fire apparatus. ● If a fire station site is on the side of a street or highway where the flow of traffic is toward a signalized intersection, the site should be at least 200 feet from that intersection in order to avoid blockage during ingress and egress. The total number of companies which would be available for dispatch to first alarms would vary with the required fire flow and distance as follows: (a) less than 2,000 g.p.m. would require not less than 2 engine companies and 1 truck company; (b) 2,000 but less than 4,500 g.p.m., not less than 2 or 3 engine companies and 1 or 2 truck companies; and (c) 4,500 or more g.p.m., not less than 3 engine companies and 2 truck companies.
Safety Element – Disaster Recovery (Multi-Hazard)	
Policy 3.1.1	Coordination. Coordinate with each other, with other jurisdictions and with appropriate private and public entities prior to a disaster and to the greatest extent feasible within the resources available, to plan and establish disaster recovery programs and procedures which will enable cooperative ventures, reduce potential conflicts, minimize duplication and maximize the available funds and resources to the greatest mutual benefit following a disaster.
Policy 3.1.2	Health/safety/environment. Develop and establish procedures for identification and abatement of physical and health hazards which may result from a disaster. Provisions shall include measures for protecting workers, the public and the environment from contamination or other health and safety hazards associated with abatement, repair and reconstruction programs.
Policy 3.1.4	Interim services/systems. Develop and establish procedures prior to a disaster for immediate reestablishment and maintenance of damaged or interrupted essential infrastructure systems and services so as to provide communications, circulation, power, transportation, water and other necessities for movement of goods, provision of services and restoration of the economic and social life of the City and its environs pending permanent restoration of the damaged systems.
Policy 3.1.5	Restoration. Develop and establish prior to a disaster short- and long-term procedures for securing financial and other assistance, expediting assistance and permit processing and coordinating inspection and permitting activities so as to facilitate the rapid demolition of hazards and the repair,

TABLE 4.8-4 RELEVANT GENERAL PLAN HAZARDOUS MATERIALS GOALS, OBJECTIVES, AND POLICIES	
Safety Element – Hazard Mitigation	
	restoration and rebuilding, to a comparable or a better condition, those parts of the private and public sectors which were damaged or disrupted as a result of the disaster.
Conservation Element – Resource Management (Fossil Library) - Petroleum (Oil And Gas)	
Policy 1	Continue to encourage energy conservation and petroleum product reuse.
Policy 3	Continue to protect neighborhoods from potential accidents and subsidence associated with drilling, extraction and transport operations, consistent with California Department of Conservation, Division of Oil and Gas requirements.
SOURCE: City of Los Angeles 1996 and 2001	

Los Angeles Municipal Code (LAMC)

One of the primary purposes of zoning is to segregate uses that are thought to be incompatible. With respect to hazards, the City uses zoning to separate businesses that use, store, transport, treat, or dispose of hazardous materials, or businesses that engage in potentially hazardous activities, such as manufacturing or refining, from residential areas and the general public.

The Methane Seepage Regulations, contained within LAMC Chapter IX, Article 1, Division 71 (Sections 91.7101 through 91.7109), establishes requirements for mitigation and other general building requirements to prevent potential environmental and harmful health effects that could be caused by the construction of buildings located in a defined Methane Hazard Zone within the City of Los Angeles. All new buildings and paved areas located in a Methane Zone or Methane Buffer Zone must comply with the requirements of LAMC Sections 91.7103 and 91.7104 and the Methane Mitigation Standards established by the Superintendent of Building. The Methane Mitigation Standards identify installation procedures, design parameters and test protocols for the methane gas mitigation system. As established under LAMC Section 91.106.4.1, LADBS has the authority to withhold permits on projects located within a Methane Zone or Methane Buffer Zone. Building permits may be issued upon submittal of detailed plans that show adequate protection against flammable gas incursion by providing the installation of suitable methane mitigation and monitoring systems.

Section 91.7109.2 of the LAMC requires LAFD notification when an abandoned oil well is encountered during construction activities and requires that any abandoned oil well not in compliance with existing regulations be re-abandoned in accordance with applicable rules and regulations of the California Division of Oil, Gas, and Geothermal Resources (DOGGR).

The LAMC is currently undergoing a comprehensive update to all Zoning Code sections as part of the re:code LA effort. re:code LA, which started in 2013 and will continue through 2020, will update the Zoning Code to make the Code more streamlined, visual, and easy to use. The existing Zoning Code regulations are not being repealed as part of this Project. The existing Zoning Code will continue to be located in Chapter 1 of the Los Angeles Municipal Code, while the New Zoning Code will be located in a new Chapter 1A of the Los Angeles Municipal Code. Relevant components of re:code LA are described in detail in Chapter 3, *Project Description*.

Los Angeles County Airport Land Use Commission Comprehensive Land Use Plan

In Los Angeles County, the Regional Planning Commission has the responsibility for acting as the Airport Land Use Commission (ALUC) and for coordinating the airport planning of public agencies within the county. ALUC coordinates planning for the areas surrounding public use airports. The Los Angeles County Airport Land Use Plan (dually titled Comprehensive Land Use Plan) provides for the orderly expansion of Los Angeles County's public use airports and the area surrounding them. It is intended to provide for the

adoption of land use measures that will minimize the public's exposure to excessive noise and safety hazards. In formulating this plan, the Los Angeles County ALUC has established provisions for safety, noise insulation, and the regulation of building height within areas adjacent to each of the public airports in the County.

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance were developed based on Appendix G of the CEQA Guidelines. Implementation of the Proposed Project would have a significant impact related to hazards if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (Threshold 4.8-1)
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment (Threshold 4.8-2)
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (Threshold 4.8-3)
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment (Threshold 4.8-4)
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area (Threshold 4.8-5)
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area (Threshold 4.8-6)
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (Threshold 4.8-7)
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires (Threshold 4.8-8)

METHODOLOGY

For the Downtown Plan, this impact analysis addresses the potential to encounter hazardous substances in soil and groundwater during future project construction in the Downtown Plan Area. The evaluation was performed based on current conditions in the Downtown Plan Area, information in environmental databases, applicable regulations and guidelines, and future development that may have the potential to introduce hazards. Relationships and proximities of potential future development to schools, airports, and fire hazard zones were also identified. The above significance criteria are used in this section as the basis for determining the significance of impacts related to hazards and hazardous materials.

PROJECT IMPACTS

Threshold 4.8-1	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Impact 4.8-1 **Downtown Plan:** Implementation of the Downtown Plan would primarily introduce new residential, commercial, and light industrial development. Although certain heavy industrial facilities would remain and hazardous materials would continue to be transported through the Downtown Plan Area, Plan implementation would not create a significant hazard to the public or environment related to the routine transport, use, or disposal of hazardous materials. This impact would be ***less than significant***.

New Zoning Code. The New Zoning Code would not result in the routine transport, use, or dispose of hazardous materials. Additionally, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid these potential hazards. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This impact would be ***less than significant***.

Downtown Plan Impact

The Downtown Plan would allow for the development of new residential, commercial, light industrial uses in the Downtown Plan Area. The types of hazardous materials associated with operation of these uses in the Downtown Plan Area would include small quantities of maintenance products (e.g., paints and solvents); oils, lubricants and refrigerants associated with building mechanical and HVAC systems; and grounds and landscape maintenance products formulated with hazardous substances, including fuels, cleaners and degreasers, solvents, paints, lubricants, adhesives, sealers, pesticides/herbicides, and industrial related chemicals. Thus, implementation of the Downtown Plan is not anticipated to generate substantial amounts of hazardous materials.

The Downtown Plan would maintain existing light and heavy industrial uses in the southeastern portion of the Downtown Plan Area and expand the mix of uses in the Markets and Hybrid Industrial designation areas. While the Downtown Plan would accommodate additional dwelling units located in proximity to industrial uses, existing and future uses would be required to comply with existing safety standards related to the handling, use, and storage of hazardous materials, and applicable federal, State, and local laws and regulations. Moreover, although the placement of residences near industrial activity may increase the potential for exposure to existing hazards, it would not increase the use of hazardous materials or otherwise increase hazards to existing area residents. It would not be expected to increase, change or exacerbate any risk currently existing from industrial uses that would impact the existing residents and businesses or future residents or businesses from development under the Downtown Plan. As such, this would not be an environmental impact under CEQA. The Downtown Plan would not create additional industrial-zoned parcels or additional parcels with an industrial land use designation. The routine transport, use, or disposal of hazardous materials within industrial areas, as with the entire Downtown Plan Area, would be subject to applicable federal, State, and local regulations. Specifically, the USDOT Office of Hazardous Materials Safety prescribes regulations for the safe transportation of hazardous materials, as described in CFR Titles 40, 42, 45, and 49 and implemented by CCR Titles 17, 19, and 27, which requires appropriate documentation for all transport of hazardous waste off site. Adherence to these regulations would reduce the likelihood and severity of accidents that have the potential to occur during transit.

To ensure that workers and others at individual development sites in the Downtown Plan Area are not exposed to unacceptable levels of risk associated with the use and handling of hazardous materials,

employers and businesses that handle large quantities of hazardous materials are required to implement existing hazardous materials regulations, with compliance monitored by the State (e.g., OSHA in the workplace or DTSC for hazardous waste) and the City. Compliance with applicable local, State, and federal regulations would ensure that impacts related to the use, transport, and disposal of hazardous materials under the Downtown Plan would be ***less than significant***.

New Zoning Code Impact

The New Zoning Code would not result in the routine transport, use, or dispose of hazardous materials. In fact, the New Zoning Code would include Development Standards Districts that would require a buffer when industrial or heavy commercial use districts are adjacent to Use Districts that allow residential. The content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development regulations, such as those required by the USEPA and Cal OSHA as described in Regulatory Setting, intended to avoid potential hazards.

The New Zoning Code would provide options for a range of zone districts that could be applied elsewhere in the City through future community plan updates or amendments. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze if the zoning applied would result in the routine transport, use, or dispose of hazardous materials. A ***less than significant*** impact would occur.

Mitigation Measures

Significant impacts have not been identified; therefore, mitigation is not required.

Threshold 4.8-2	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment

Impact 4.8-2

Downtown Plan: Implementation of the Downtown Plan would introduce new residential, commercial, and light industrial development uses and allow for redevelopment of existing uses. Operational activities associated with these uses would not create increased potential for upset or accident conditions involving hazardous materials release. Redevelopment, renovation, and demolition of structures built before 1979 could potentially release asbestos or lead into the atmosphere. In addition, future development would potentially occur within Methane Zones and Methane Buffer Zones and near oil wells. However, compliance with federal, state, and local requirements, would reduce this impact to a ***less than significant*** level**.**

New Zoning Code: The New Zoning Code would not create a significant hazard involving the release of hazardous materials. Additionally, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid potential hazards. The Proposed Project would not implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the

Downtown Plan Area would be speculative. This is a ***less than significant*** impact.

Downtown Plan Impact

Impacts associated with Downtown Plan implementation relate to possible temporary exposure to asbestos, lead, and PCBs during demolition of older buildings, temporary and long-term exposure to methane, and long-term exposure to hazardous materials associated with operation of individual developments. Potential impacts related to disturbance of soil and/or groundwater contamination are evaluated under Impact 4.8-4.

Asbestos/Lead/PCB Exposure

Demolition and/or renovation activities in the Downtown Plan Area would potentially encounter asbestos-containing materials (ACMs), lead-based paint (LBP), and/or polychlorinated biphenyls (PCBs), depending on the age of structures to be renovated or demolished. ACMs and LBP were widely used in structures built between 1945 and 1978. PCBs were widely used in structures built or renovated between 1950 and 1979. It is therefore reasonable to assume that these materials could be encountered during rehabilitation and demolition of structures built during this time period. Thus, site workers and neighboring properties could potentially be exposed to ACMs, LBP, or PCBs if these materials are not removed and properly disposed of prior to renovation or demolition.

With respect to ACMs, SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities) requires the owner or operator of any demolition or renovation activity to complete a facility survey(i) for the presence of asbestos prior to any demolition or renovation activity. The survey must include the inspection, identification, and quantification of all friable, and Class I and Class II non-friable ACMs. In instances where friable ACMS are identified and could be disturbed by demolition or renovation activities, Rule 1403 also includes specific notification, removal, and disposal procedures for the ACMs. The individual conducting all work must be certified by Cal/OSHA. Compliance with Rule 1403 requirements would reduce the potential for impacts related to ACMs to a ***less than significant*** level.

Similarly, there are numerous regulations related to the handling of LBPs and PCBs in federal and state regulations (see e.g., Title 40 of the CFR and Title 22 of the CCR). Consequently, the impact related to the release of LBP or PCBs from individual construction projects that could be undertaken under the Downtown Plan would be ***less than significant***.

Oil Fields/Methane Exposure

As shown in **Figure 4.8-3**, portions of the Downtown Plan Area are underlain by oil fields and oil and gas production wells and have been designated as Methane Zones or Methane Buffer Zones. The southwest corner of the Downtown Plan Area corresponding to the Los Angeles Downtown oil field lies within Methane and Methane Buffer Zones, as well as an area in the vicinity of Union Station that corresponds to the Union Station oil field, and an area in the northwest portion that corresponds to the Los Angeles City oil field; smaller areas corresponding to individual wells are sprinkled throughout the Downtown Plan Area, but are primarily located in the eastern half of the Downtown Plan Area (City of Los Angeles 2004). Methane and Methane Buffer Zones encompass all designations proposed in the Downtown Plan (i.e., Transit Core, Traditional Core, Community Center, Public Facilities, Hybrid Industrial, Villages, Civic, Medium Residential Neighborhood) and would accommodate a wide range of land uses including commercial, residential, public facility, civic, and industrial uses.

While not toxic, methane poses a hazard to humans because it is highly flammable and may form explosive mixtures with air. Methane is also an asphyxiant and may displace oxygen in an enclosed space; however, the concentrations at which flammable or explosive mixtures form are much lower than the concentration at which asphyxiation risk is significant. Thus, explosion due to the accumulation of methane in an enclosed area is the primary concern posed by methane. LAMC Section 91.7101 requires new buildings in a Methane

or Methane Buffer Zone to incorporate a menu of measures to control methane intrusion from geological sources. These menus include site testing for methane hazard, installation of a passive system for methane mitigation comprised of a de-watering system, sub-slab vent system, and impervious membrane that essentially facilitates release of methane in a manner where it can diffuse without harm; or installation of an active system comprised of a sub-slab system for mechanical extraction, a lowest occupied space system (includes a gas detection system, mechanical ventilation and alarm system), and a control panel.

The Downtown Plan Area also contains a number of active and inactive oil and gas production wells. Producing wells can emit air toxics and dust, while idle wells can be a potential source of soil and groundwater contamination if not properly plugged and abandoned. LAMC Section 91.6105 prohibits the development of specific uses and buildings in proximity to an oil well casing. These include schools, sanitariums, an assembly occupancy (i.e., gathering place for 50 or more people), fuel manufacturing plant, or public utility generating, receiving, or distributing electricity, and buildings more than 400 square feet in area and taller than 36 feet in height. In addition, in accordance with LAMC Section 91.7109.2, any abandoned oil well encountered during construction is required to be evaluated by the Fire Department and may be required to be re-abandoned in accordance with applicable rules and regulations of DOGGR.

Compliance with existing regulations would ensure that the implementation of the Downtown Plan would not create a significant hazard to the public or environment due to the release of methane or hazardous materials associated with oil production wells. Therefore, impacts related to methane and oil well hazards would be ***less than significant***.

Long-Term Operation of New Development

As discussed under Impact 4.8-1, future development in the Downtown Plan Area would primarily involve residential and commercial uses, with limited light industrial activity. Such uses would include the use of and storage of common hazardous materials similarly used in Downtown Plan Area residences and businesses today, with similar risk of upset or accident conditions that would create health or safety risks. The extent and exposure of individuals to hazardous materials would be limited by the relatively small quantities of these materials that would be stored and used on individual properties and transported along roads throughout the Downtown Plan Area. Although common maintenance products and chemicals may be used in new development projects, these hazardous materials would not pose any greater risk compared to other similar development or to existing conditions. Compliance with warning labels and storage recommendations from individual manufacturers would ensure people in the Downtown Plan Area would not be exposed to unusual or significant risks from hazardous materials.

Furthermore, businesses that use, store, or transport large quantities of hazardous materials are required to comply with health and safety, and environmental protection laws and regulations previously described, which require businesses handling or storing certain amounts of hazardous materials to prepare a hazardous materials business plan. This plan includes an inventory of hazardous materials used or stored on-site and procedures to be used in the event of a significant or threatening significant release of a hazardous material. The hazardous materials plan must include a Material Safety Data Sheet (MSDS) for each hazardous material used or stored. To accomplish this, and to otherwise provide a safe and healthy environment, businesses that use hazardous materials must implement health and safety policies and procedures. In addition, future development in the Downtown Plan Area would be required to conform with applicable environmental review processes and environmental regulations related to hazardous materials storage, use and transport. Existing hazardous materials regulations would minimize the potential for the public to be exposed to adverse health or safety effects associated with the accidental release of hazardous materials into the environment.

In conclusion, all impacts related to release of hazardous materials from the use or transport of hazardous materials, methane zones, or oil and gas production uses would be ***less than significant***.

New Zoning Code Impact

The New Zoning Code would not create a significant hazard involving the release of hazardous materials. As discussed above, the New Zoning Code would include increased regulations requiring buffers when certain Use Districts are cited near other more sensitive Use Districts. Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development policies which are intended to avoid potential hazards, such as those required by the USEPA and Cal OSHA as described in the Regulatory Setting.

The New Zoning Code would allow for a variety of new zone districts that could be applied elsewhere in the City through future community plan updates or amendments. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, potential impacts cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze if the zoning applied would create a significant hazard involving the release of hazardous materials. A ***less than significant*** impact would occur.

Mitigation Measures

No significant impact would occur; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

Threshold 4.8-3	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school

Impact 4.8-3

Downtown Plan: Implementation of the Downtown Plan would primarily introduce new residential, commercial, and light industrial development that would not involve the use of large quantities of hazardous materials. Although new development could occur within 0.25 mile of existing schools, such development would not be expected to create hazards associated with hazardous materials use. However, grading and construction activity could potentially result in the release of soil and/or groundwater contamination, which could potentially affect schools. This impact would be ***less than significant with mitigation*.**

New Zoning Code: The New Zoning Code would not create a significant hazard involving the release of hazardous materials. Additionally, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid potential hazards. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This would be a ***less than significant*** impact.

Downtown Plan Impact

Forty-five educational facilities (defined as colleges, high schools, elementary schools, preschools, or nursery schools) are located in or within 0.25 mile of the Downtown Plan Area. To ensure that workers and others at individual development sites within the Downtown Plan Area are not exposed to unacceptable

levels of risk associated with the use and handling of hazardous materials, employers and businesses are required to implement existing hazardous materials regulations, with compliance monitored by the State (e.g., OSHA in the workplace or DTSC for hazardous waste) and the City. Similarly, future development in the Downtown Plan Area would be required to comply with applicable federal, state, and local environmental regulations related to new construction and hazardous materials storage, use and transport. California Health and Safety Code Chapter 6.95 "Hazardous Materials Release Response Plans and Inventory" requires businesses that handle more than a specified amount of hazardous materials to submit a Hazardous Materials Business Plan. Such businesses are required to provide emergency response plans and procedures, training program information, and a hazardous material chemical inventory disclosing hazardous materials stored, used, or handled. In addition, various federal, state, and local regulations and guidelines pertaining to abatement of, and protection from, exposure to asbestos, lead, and other hazardous materials have been adopted for demolition activities and would apply to all new development. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal/OSHA standards. Compliance with existing regulations would ensure that schools and the general public would not be exposed to any unusual or excessive risks related to hazardous materials during construction and operational activities.

The Downtown Plan would not involve direct handling or emissions of hazardous materials within one-quarter mile of schools. Additionally, future development in the Downtown Plan Area will foreseeably comply with all applicable local, State, and federal laws and regulations, as described in the Regulatory Framework, would regulate, control, or respond to hazardous waste, transport, storage, disposal, and clean-up in order to ensure that hazardous materials do not pose a significant risk to nearby receptors. Thus, impacts related to hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school due to operation of future Downtown Plan Area development would not be significant.

As previously discussed, GeoTracker and EnviroStor identifies the locations of hazardous material sites in the Downtown Plan Area. As discussed in detail under Impact 4.8-4, a process to identify and, as necessary, remediate soil and/or groundwater contamination exists and would normally address such hazards. However, because there is not a specific legal requirement to undertake a preliminary investigation to determine the possible presence of hazardous material contamination, it is possible that such contaminants could be overlooked. This could result in the release of hazardous materials during excavation and grading of individual construction sites. If within ¼-mile of a school, such releases could have significant health and safety effects on school-aged children. Impacts related to the release of hazardous emissions during construction activities would be ***potentially significant***.

New Zoning Code Impact

As discussed in Existing Conditions, LAUSD includes over 900 schools and 187 public charter schools. The New Zoning Code would allow for a variety of new zone districts that could be applied elsewhere in the City through community plan updates or amendments. As discussed above, the New Zoning Code would include increased regulations requiring buffers when certain Use Districts are sited near other more sensitive Use Districts. Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development policies, such as those required by the USEPA and Cal OSHA as described in Regulatory Setting, intended to avoid potential hazards.

The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts related to hazards within 0.25 mile of an existing or proposed school cannot be identified. The New Zoning Code only applies to properties where a community plan is

updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze if the zoning applied has the potential to release hazardous emissions or materials near existing and proposed schools. Impacts would be ***less than significant***.

Mitigation Measures

Downtown Plan

See mitigation measure 4.8-4 under Impact 4.8-4. This measure would require preliminary investigation for hazardous materials potential on all Downtown Plan Area excavation and grading.

New Zoning Code

None required.

Significance After Mitigation

Downtown Plan

Implementation of mitigation measure 4.8-4 would reduce impacts to schools to a less than significant level by ensuring the identification and, as necessary, remediation of soil and/or groundwater contamination prior to excavation or grading on properties within ¼-mile of schools. Impacts related to hazardous emissions would be ***less than significant with mitigation incorporated***.

New Zoning Code

Not applicable.

Threshold 4.8-4	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment

Impact 4.8-4

Downtown Plan: Expected development from the Downtown Plan may occur on properties listed as hazardous material sites. The possible presence of soil or groundwater contamination on such sites could expose construction workers and residents or visitors on neighboring properties to hazards during construction of individual future developments. However, implementation of mitigation measure mitigation measure 4.8-4 would ensure project impacts would be ***less than significant with mitigation incorporated.***

New Zoning Code: The content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid potential hazards. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This is a ***less than significant*** impact.

Downtown Plan Impact

Government Code section 65962.5 requires the California Environmental Protection Agency to develop an updated Cortese List. The DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material

release information for the Cortese List (DTSC 2017). The following resources were reviewed to provide hazardous material release information:

- SWRCB GeoTracker database (GeoTracker 2017)
- DTSC EnviroStor database (EnviroStor 2017)

As previously discussed and shown in **Tables 4.8-1** and **4.8-2**, the Downtown Plan Area contains numerous sites that are identified on various regulatory databases as being contaminated from the release of hazardous substances in the soil or groundwater. Thus, construction activity that disturbs soil or groundwater could have the potential to result in the release of hazardous materials, which could adversely affect construction workers and/or neighboring properties. To address such possible concerns, it is common for a Phase I Environmental Site Assessment (ESA) to be conducted prior to excavation and construction activity. The purpose of the Phase I ESA is to identify recognized environmental conditions (RECs) associated with soil and groundwater contamination. The scope of work for the Phase I ESA consists of four elements: records review, site reconnaissance, interviews, and report preparation. The Phase I ESA determines whether there are any known contaminated sites are located near the site or if current or historic uses of the site could have resulted in contamination of the soil or groundwater. Based on the results of the Phase I ESA, an additional Phase II subsurface investigation may be warranted to determine whether any identified RECs involve contamination exceeding regulatory action levels. If contamination exceeding action levels is identified, it would need to be remediated with regulatory oversight from an appropriate agency. Depending on the level and type of contamination, the oversight agency could be the City, the County of Los Angeles, the RWQCB, the DTSC, or the USEPA. Remedial actions would typically involve removal and proper disposal, capping, or treatment of contaminated soil or groundwater.

The process described above would normally identify and, as necessary, remediate soil or groundwater contamination. Remediation of contamination exceeding regulatory action levels would address potential impacts during ground disturbance and improve conditions in the long term. However, because there is not a specific legal requirement for a Phase I ESA for all excavation or construction, there is the potential for soil or groundwater contamination to go undetected. Thus, future grading and construction would have the potential to result in exposure of Downtown Plan Area construction workers and occupants of neighboring properties to releases of hazardous materials. This would be a ***potentially significant impact***.

New Zoning Code Impact

As discussed in Existing Conditions, the City contains numerous sites that are identified on various regulatory databases as being contaminated from the release of hazardous substances. The New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development policies, such as those required by the USEPA and Cal OSHA as described in Regulatory Setting, intended to avoid potential hazards. The New Zoning Code would allow for a variety of new zone districts that could be applied elsewhere in the City through future community plan updates or amendments. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, potential impacts related to hazardous materials sites cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential impacts associated with hazardous materials sites. Impacts would be ***less than significant***.

Mitigation Measures

Downtown Plan

The following mitigation measure is required to ensure that soil and/or groundwater contamination that may be present on Downtown Plan Area properties is identified and, as necessary, remediated.

4.8-4(a) Database Review, Investigation, and Remediation

Prior to issuance of a c, the SWRCB's GeoTracker database (GeoTracker 2017) and DTSC's EnviroStor database (EnviroStor 2017) shall be consulted to determine whether or not the site to be graded is within 500 feet of an identified active hazardous material site.

If the site is identified in the GeoTracker or EnviroStar Database within 500 feet of an identified active hazardous material site, or if the site to be graded is located on a site that was historically used as an industrial use or is currently used as a gas station or dry cleaner, the following process shall be followed prior to issuance of a grading permit:

- A Phase I ESA shall be conducted in accordance with ASTM standards.
- If the Phase I ESA identifies any recognized environmental conditions (RECs), a Phase II ESA shall be conducted to determine whether the identified RECs have resulted in soil, groundwater, or soil-vapor contamination exceeding regulatory action levels.
- If the Phase II ESA identifies contamination exceeding regulatory action levels, remediation or corrective action (e.g., removal of contamination, in-situ treatment, or soil capping) shall be conducted under the oversight of state and/or local agency officials (as necessary) and in full compliance with applicable state and federal laws and regulations.

If remediation is determined to be necessary, the grading permit shall not be issued until the applicable regulatory agency has indicated that further remedial action is not required or that any remedial action can be implemented in conjunction with excavation and/or grading.

4.8-4(b) Notification of Intent to Excavate Language

For all projects not subject to mitigation measure 4.8-4(a) that are seeking excavation or grading permits, the Department of Building and Safety shall obtain the following acknowledgement and affidavit from the applicant:

- No known recognized soil or groundwater contamination exceeding regulatory action levels is present on-site. If contamination exceeding regulatory action levels is discovered during excavation, grading, or construction activities, the applicant and his/her/its contractors shall provide evidence of compliance with all applicable federal, state and local regulations for remediation of hazardous materials, including but not limited to notifying the appropriate oversight agency (e.g., DTSC, the Water Board, County Environmental Health) of the contamination, hiring a qualified environmental professional to conduct the necessary assessments and abatement (including soil sampling, preparing a remediation plan to adequately abate the hazardous materials, and ultimately obtaining necessary clearance letters from the oversight agency), and issuance of a No Further Action letter, if applicable, before obtaining an occupancy permit.

New Zoning Code

None required.

Significance After Mitigation

Downtown Plan

As discussed in the Regulatory Setting, contamination of soils with hazardous materials is heavily regulated by multiple statutes and agencies. Compliance with applicable laws will ensure no impact will occur. Mitigation measures are provided to ensure that applicants are put on notice of the need to determine if there is contamination on site and avoid impacts that may result from lack of detection. The above measures provide for processes to ensure that any development under the Downtown Plan would not create a significant hazard to the public or environment. Thus, this impact would be ***less than significant with mitigation incorporated***.

New Zoning Code

Not applicable.

Threshold 4.8-5	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the area?

Impact 4.8-5

Downtown Plan: No portion of the Downtown Plan Area is in the vicinity of an airport. As such, Plan implementation would have ***no impact*** with respect to airport-related hazards**.**

New Zoning Code: Three airports are located in the City. However, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid potential airport hazards. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. A ***less than significant*** impact would occur.

Downtown Plan Impact

The Downtown Plan Area is not located in the vicinity of a public airport. Los Angeles International Airport (LAX), Bob Hope (Burbank) Airport, Santa Monica Airport, and El Monte Airport are all about 10 miles from the Downtown Plan Area and no portion of the Downtown Plan Area is within an airport safety zone for any of these airports. Impacts related to excessive noise generated by public airports will be addressed in Section 4.11, *Noise*. Therefore, ***no impact*** related to airport safety would result from Downtown Plan implementation.

New Zoning Code Impact

As discussed in Existing Conditions, LAX, Van Nuys Airport, and Whiteman Airport are located in the City, and a portion of the Hollywood-Burbank Airport's Airport Influence Area is located in the City. However, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development policies intended to avoid potential hazards, such as those within the Los Angeles County Airport Land Use Plan as described in the Regulatory Setting. Existing airport overlay zones and their requirements would still apply and be regulated by the Airport Land Use Commission. The New Zoning Code would allow for a variety of new zone districts that could be applied elsewhere in the City through future community plan updates or amendments. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may

occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified.

The Proposed Project would not implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential safety hazards related to public use airports. Impacts related to excessive noise generated by public airports will be addressed in Section 4.11, *Noise*. A ***less than significant*** impact would occur.

Mitigation Measures

No significant impact would occur; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

Threshold 4.8-6	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the area.

Impact 4.8-6

Downtown Plan: No portion of the Downtown Plan Area is in the vicinity of a private airstrip. As such, Plan implementation would have ***no impact*** with respect to airstrip-related hazards**.**

New Zoning Code: Heliports are located throughout the City. However, the content of the New Zoning Code would not repeal, amend, or conflict with the existing regulations intended to avoid potential hazards. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This would be a ***less than significant*** impact**.**

Downtown Plan Impact

The Downtown Plan Area is not located in the vicinity of a private airstrip. One medical helicopter landing pad (helipad) is located in the Downtown Plan Area: Dignity Health California Hospital Medical Center located at 1401 South Grand Avenue. Safety hazards associated with airports or helipads are generally related to construction of tall structures that could interfere with flight paths, or with increasing the number of people working or residing in areas subject to crash hazards. Implementation of the Downtown Plan would add both new taller buildings and population and, therefore, could increase exposure to helicopter-related hazards. However, the Downtown Plan would not increase helicopter operations to or from this facility or otherwise exacerbate potential hazards associated with helicopter operations. Moreover, this and any other helipads would be required to comply with Federal Aviation Administration (FAA) safety requirements as well as those contained in the California Code of Regulations, Title 21 Sections 3525 through 3560. Based on these facts, ***no impact*** related to airstrip safety would result from Downtown Plan implementation.

New Zoning Code Impact

There are 51 private use heliports in the City. The content of the New Zoning Code would not repeal, amend, or conflict with the existing regulations and uniformly applied development policies, such as those within the Noise Element of the City's General Plan and Noise Ordinance which as described in Regulatory

Setting are intended to avoid potential hazards. The New Zoning Code would allow for a variety of new zone districts that could be applied elsewhere in the City through future community plan updates or amendments. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified.

The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential safety hazards related to heliports. A ***less than significant*** impact would occur.

Mitigation Measures

No significant impact would occur; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

Threshold 4.8-7	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impact 4.8-7

Downtown Plan: Future Downtown Plan Area development would increase traffic levels in and around the Downtown Plan Area and would involve construction activity that could temporarily hinder access to individual properties. However, individual project applicants would be required to implement traffic management plans during construction and emergency response and evacuation plans would be adjusted as necessary to reflect changing Downtown Plan Area conditions. Impacts would be ***less than significant***.

New Zoning Code: The content of the Zoning Code would not repeal, amend, or conflict with existing City codes and regulations that are intended to avoid emergency response impacts. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Impacts would be ***less than significant.***

Downtown Plan Impact

Construction and operational activities associated with future development in the Downtown Plan Area could interfere with adopted emergency response or evacuation plans as a result of temporary construction activities within rights-of-way, primarily by temporary construction barricades or other obstructions that could impede emergency access, or increased intensity during operation that could result in additional traffic within roadways. However, the Downtown Plan Area is primarily a grid that provides multiple routes for emergency response and evacuation. In addition, the Downtown Plan Area is crossed by multiple freeways (including the 5, 10, 101, and 110 Freeways) that provide multiple points of regional access as well as multiple evacuation routes. Finally, the goals, objectives, and policies of the Safety Element of the Los Angeles City General Plan and the Los Angeles County Operational Area emergency response plan (ERP) provide guidance during unique situations requiring an unusual or extraordinary emergency response. Implementation of the emergency response plan would also incorporate and coordinate all the facilities and personnel of County government, along with the jurisdictional resources of the cities and

special districts in the County, into an efficient Operational Area organization capable of responding to any emergency using a Standard Emergency Management System, mutual aid and other appropriate response procedures.

The City's Emergency Operations Organization (EOO) implements the goals and policies of the Safety Element. The Safety Element outlines the scope of the EOO's on-going efforts to use experiences and new information to improve the City's hazard program. The EOO Master Plan and individual agency Emergency Response Plans set forth procedures for City personnel to follow in the event of an emergency situation stemming from natural disasters, technological incidents and nuclear defense operations.

The City of Los Angeles Department of Transportation and LAFD would be responsible for ensuring that future development does not impair or physically interfere with an adopted emergency response or evacuation plan. As part of standard development procedures, plans would be submitted for review and approval to ensure that all new development has adequate emergency access and escape routes (clearly marked and delineated) in compliance with existing City regulations. The Downtown Plan would not introduce any features that would preclude implementation of, or alter these policies or procedures in any way. Additionally, the Downtown Plan would not impair implementation of, or physically interfere with the SEP or the ERP.

Based on the above, development and implementation of construction and traffic management plans for all construction activity would ensure that implementation of the Downtown Plan would not impair or physically interfere with adopted emergency response or evacuation. Therefore, impacts related to emergency response plans and emergency evacuation plans would be ***less than significant***.

New Zoning Code Impact

The City's existing Fire Code requires an emergency evacuation plan prior to the issuance of a building permit. Additionally, it is an existing City requirement that applicants must submit a parking and driveway plan to the Bureau of Engineering and LADOT prior to issuance of building permit. The content of the Zoning Code would not repeal, amend, or conflict with these existing regulations and uniformly applied development policies that are intended to avoid emergency response impacts.

The New Zoning Code would provide zone districts allowing for a range of densities and intensities that could be applied elsewhere in the City through future community plan updates or amendments. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential conflicts with or obstructions of emergency response plans. A ***less than significant*** impact would occur.

Mitigation Measures

No significant impact would occur; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

Threshold 4.8-8	Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires

Impact 4.8-8

Downtown Plan: No wildland fire hazard areas exist in Downtown. ***No impact*** associated with wildland fire risks will occur.

New Zoning Code: Wildland fire areas are located throughout the City. The content of the Zoning Code would not repeal, amend, or conflict with existing regulations that are intended to avoid wildland fire impacts. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. A ***less than significant*** impact would occur.

Downtown Plan Impact

The entire Downtown Plan Area is urbanized and lacks open hillside areas that are subject to wildland fire hazards. CAL FIRE has identified the entire Downtown Plan Area as being located in the "Non-Very High Fire Hazard Severity Zone" in the Local Responsibility Area for incorporated cities (CAL FIRE 2011). This indicates that the Downtown Plan Area is not subject to wildfire hazards. Therefore, ***no impact*** would occur.

New Zoning Code Impact

VHFHSZs are generally located at the northern border of the City, in portions of Topanga State Park within the City boundaries, Griffith Park, Elysian Park, and Ballona Wetlands Ecological Reserve. VHFHSZs are also located at the border of the City and Angeles National Forest. The New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development policies, such as those within the Los Angeles Fire Code and the General Plan, that are intended to avoid impacts associated with wildland fires.

The New Zoning Code would allow for a variety of new zone districts that could be applied elsewhere through future community plan updates or amendments. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential impacts associated with wildland fires. A ***less than significant*** impact would occur.

Mitigation Measures

No significant impact would occur; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

CUMULATIVE IMPACTS

The scope to analyze potential cumulatively considerable hazards and hazardous materials impacts is citywide.

Routine Transport, Use, or Disposal of Hazardous Materials

Impacts related to hazards and hazardous materials are generally site-specific and exposure to a hazard at one location generally does not increase hazards at another location. Therefore, although Citywide growth could potentially increase overall quantities of hazardous materials transported, use, and disposed in the City, impacts related to hazardous material transport, use, and disposal generally are not cumulative in nature. Further, as discussed under Impact 4.8-1, the Downtown Plan would not foreseeably result in new development that involves the use, storage, or transport of large quantities of hazardous materials. Moreover, businesses that transport, use, or dispose of hazardous materials throughout the City would be subject to myriad federal, state, and local regulations, as discussed in the Regulatory Framework. The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would involve an increase in hazardous material transport, use, or disposal. For these reasons, cumulative impacts related to hazardous material transport, use, and disposal would not be significant and the incremental effects of the Downtown Plan and New Zoning Code related to hazardous material transport, use, and disposal would not be cumulatively considerable. Cumulative impacts would be ***less than significant***.

Upset/Accident Involving Hazardous Materials

Impacts related to upsets and accidents involving hazardous materials are also generally site-specific and an accident at one location generally does not increase hazards at another location. Cumulative development could occur on properties listed on hazardous materials sites or involve the demolition of existing structures, which may contain hazardous materials such as LBP and ACMs. Various regulations and guidelines pertaining to abatement of, and protection from, exposure to asbestos and lead have been adopted for demolition activities and would apply to all new development in the City and County. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal/OSHA standards. In addition, as discussed under Impact 4.8-2, the Downtown Plan would not foreseeably result in new development that would be expected to increase the potential for accidents involving hazardous materials and businesses that transport or use hazardous materials throughout the City, including the Downtown Plan Area, would be subject to myriad federal, state, and local regulations, as discussed in the Regulatory Framework. Therefore, although Citywide growth could increase the overall potential for accidents involving hazardous materials, impacts related to hazardous material accidents generally are not cumulative in nature. The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would increase the potential for an accident involving hazardous materials. For these reasons, the incremental effect of the Downtown Plan and New Zoning Code would related to accidents involving hazardous materials would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

Hazardous Materials Near Schools

As discussed above, impacts related to hazards and hazardous materials are generally site-specific and exposure to a hazard at one location generally does not increase hazards at another location. Therefore, although Citywide growth could potentially increase the overall potential for hazardous material emissions or releases to affect schools, such impacts generally are not cumulative in nature. In addition, as discussed under Impact 4.8-3, the Downtown Plan would not accommodate new development that would increase the

use, storage, or transport of large quantities of hazardous materials near schools and businesses that transport, use, or dispose of hazardous materials throughout the City, including the Downtown Plan Area, would be subject to myriad federal, state, and local regulations, as discussed in the Regulatory Framework. Mitigation required under Impact 4.8-4 would address any potential impacts in the Downtown Plan Area related to the possible release of hazardous materials near schools. The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would involve an increase in hazardous material transport, use, or disposal near schools. For these reasons, the incremental effect of the Downtown Plan and New Zoning Code with respect to use of hazardous materials near schools would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

Hazardous Material Sites

As discussed above, impacts related to the accidental release of soil or groundwater contaminants are site-specific and exposure to a hazard at one location generally does not increase hazards at another location. Therefore, although Citywide growth could potentially increase the overall potential for releases of hazardous materials from contaminated sites, such impacts generally are not cumulative in nature. As discussed under Impact 4.8-4, the Downtown Plan could involve disturbance of contaminated sites and thus result in the release of hazardous materials; however, such impacts would be localized in nature. Moreover, mitigation included under Impact 4.8-4 would reduce impacts related to disturbance of contaminated sites to a less than significant level. The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would accommodate excavation or grading with the potential to disturb contaminated sites. For these reasons, the incremental effect of the Downtown Plan and New Zoning Code related to the release of hazardous material from such sites would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

Public Airports/Private Airstrips

Aircraft-related hazards occur only in the vicinity of airports or airstrips. Although citywide growth could increase the number of people who are exposed to aircraft-related hazards, such hazards would be localized in nature. In addition, new development would not increase the hazard. Because no portion of the Downtown Plan Area is located in the vicinity of a public airport or private airstrip, the Downtown Plan would have no contribution to any cumulative impact related to these hazards. The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would increase the potential for aircraft-related hazards. For these reasons, the incremental effect of the Downtown Plan and New Zoning Code with respect to potential for exposure to airport/airstrip-related hazards would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

Emergency Response and Evacuation

Construction associated with cumulative development could potentially result in activities that may interfere with adopted emergency response or evacuation plans, primarily through the use of temporary construction barricades or other obstructions that could impede emergency access. However, such impacts would be localized and generally would not be cumulative in nature unless multiple construction projects were to occur simultaneously in close proximity to each other. The overall increase in traffic that may result from Citywide growth could also potentially hinder emergency response and/or evacuation. However, compliance with City requirements on a project-by-project basis and periodic update of

emergency response and evacuation plans to address changed conditions would ensure that cumulative impacts related to interference with adopted emergency plans, including temporary street closures and long-term increases in traffic, remain less than significant. The Downtown Plan's contribution to Citywide impacts would be similarly addressed through compliance with City requirements and periodic emergency response/evacuation plan updates. The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would hinder emergency response or evacuation. For these reasons, the incremental effect of the Downtown Plan and New Zoning Code with respect to emergency response and evacuation would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

Wildland Fire

Wildland fire hazards are limited to hillsides and similar areas that are subject to wildland fire. Although Citywide growth could increase the number of people who are exposed to wildland fire hazards, such hazards would be localized in nature. In addition, new development would not increase wildland fire potential. Because no portion of the Downtown Plan Area is located in a wildland fire hazard area, the Downtown Plan would have no contribution to any cumulative impact related to such hazards. The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would increase the potential for wildland fire hazards. For these reasons, the incremental effect of the Downtown Plan and New Zoning Code with respect to potential exposure to wildland fire hazards would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

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4.9 HYDROLOGY AND WATER QUALITY

This section analyzes impacts to the City's water quality and hydrological resources from implementation of the Downtown Plan and New Zoning Code. Watershed, groundwater, and water quality information was obtained from the Los Angeles Department of Water & Power 2015 Urban Water Management Plan, Ballona Creek Watershed Management Group, Upper Los Angeles River Watershed Management Group, and Los Angeles Regional Water Quality Control Board (LARWQCB).

ENVIRONMENTAL SETTING

Los Angeles has a mild climate with an annual average temperature of 63.8 degrees Fahrenheit with an average high temperature of approximately 71.7 degrees Fahrenheit and an average low temperature of approximately 55.9 degrees Fahrenheit. Average annual precipitation of the region averages approximately 18.67 inches. Precipitation occurs during the months of October through April, averaging approximately 2.6 inches per month (US Climate Data 2017). For planning purposes, the LARWQCB uses the California Department of Water Resources classification system, which divides surface waters into hydrologic units, areas, and subareas, and ground waters into major groundwater basins. The Los Angeles-San Gabriel Hydrologic Unit covers most of Los Angeles County and small areas of southeastern Ventura County. This drainage area totals 1,608 square miles. This hydrologic unit is urbanized and much of the area is covered with semi-permeable or non-permeable material (i.e., paved). The Los Angeles River, San Gabriel River, and Ballona Creek, which are the major drainage systems in Los Angeles County, drain the coastal watersheds of the Transverse Ranges. These surface waters also recharge large reserves of groundwater that exist in alluvial aquifers underlying the San Fernando and San Gabriel Valleys and the Los Angeles Coastal Plain (LARWQCB 1994).

TOPOGRAPHY

Citywide Topography

The City of Los Angeles consists of flat basins defined by the San Gabriel, Santa Susana and Santa Monica Mountains, three major rivers, and the Pacific Ocean. Elevation ranges from 5,074 feet at Sister Elsie Peak in the San Gabriel Mountains to nearly mean sea level in the southwestern part of the City (City of Los Angeles 2017).

Downtown Plan Area Topography

The Downtown Plan Area lies in central Los Angeles. Most of the Downtown Plan Area's topography is relatively level, with no significant hillside areas or slopes, although there is a slight downslope from the northern boundary of the Downtown Plan Area toward the southern boundary; elevations in the Downtown Plan Area range from approximately 200 feet in the southeast corner of the Downtown Plan Area to 600 feet in the northwest tip of the Downtown Plan Area near Dodger Stadium.

WATERSHEDS AND SURFACE WATER

Citywide Watersheds and Surface Water

Four primary watersheds cover the City of Los Angeles: the Los Angeles River, the Santa Monica Bay, Ballona Creek and the Dominguez Channel. The Los Angeles River is the major watercourse that drains

the San Gabriel Mountains. Its watershed covers a land area of over 834 square miles, including the eastern portions of the Santa Monica Mountains and western portions of the San Gabriel Mountains. The Los Angeles River is approximately 55 miles long from its headwaters to its mouth, and 32 miles of the river is within the City of Los Angeles. The Los Angeles River originates at the west end of the San Fernando Valley in the northwest corner of Los Angeles County. The river channel extends east to Glendale, where it turns and flows south to the Pacific Ocean. The Los Angeles River is part of a network of dams, reservoirs, debris collection basins, and spreading grounds built by the Los Angeles County Flood Control District and the U.S. Army Corps of Engineers to minimize flooding. The floodplain starts in the northeast part of the City of Los Angeles at the Arroyo Seco confluence and then passes through the cities of Los Angeles, Bell, Bell Gardens, South Gate, Lynwood, Lakewood, Paramount, Compton, Bellflower, Carson, Gardena and Long Beach on the way to its terminus at the Pacific Ocean (City of Los Angeles 2017).

Downtown Plan Area Watersheds and Surface Water

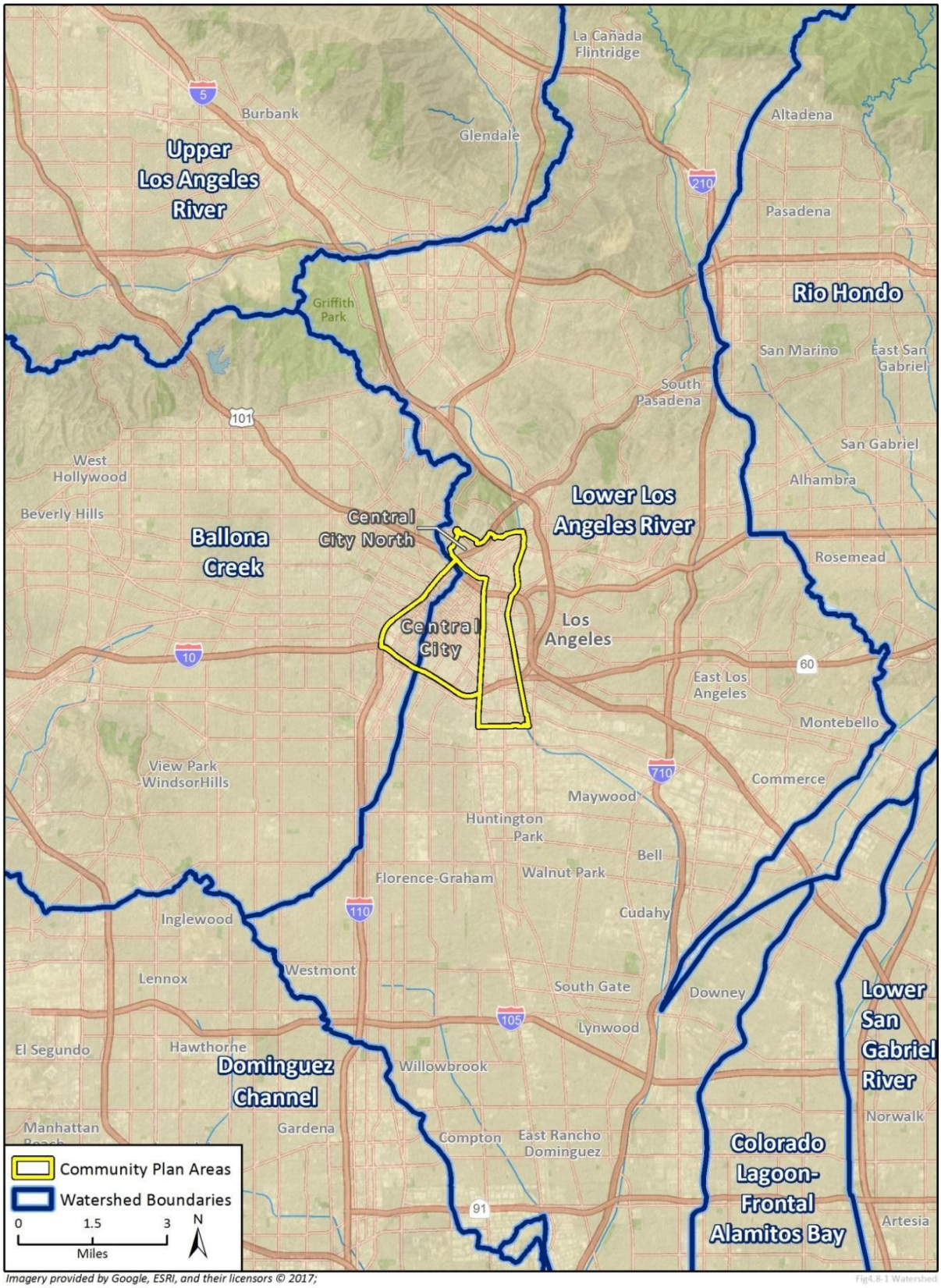
The Central City Community Plan Area is located in two watersheds: the east end of the Ballona Creek Watershed and the west central area of the Lower Los Angeles River Watershed. The Central City North Community Plan Area is entirely within the Lower Los Angeles River Watershed.

The Ballona Creek Watershed covers approximately 123 square miles of the Los Angeles Basin and comprises the cities of Beverly Hills and West Hollywood, and portions of the cities of Los Angeles, Inglewood, Culver City, and Santa Monica as well as unincorporated areas of the County of Los Angeles. It is bounded by the Santa Monica Mountains to the north, the 110 Harbor Freeway to the east, and Baldwin Hills to the south. Ballona Creek and Estuary are collectively approximately 9.5 miles long and divided in three hydrological units (Ballona Creek Watershed Management Group 2014):

- Ballona Creek Reach 1 is approximately two miles long from Cochran Avenue to National Boulevard. This portion of the creek is channelized with vertical concrete walls.
- Ballona Creek Reach 2 is approximately four miles long, between National Boulevard and Centinela Avenue, where Ballona Estuary starts. Reach 2 is also channelized for the most part with trapezoidal walls.
- Ballona Estuary starts at Centinela Creek and continues to the Pacific Ocean. This portion is approximately 3.5 miles of soft bottom channel and experiences tidal inundation.

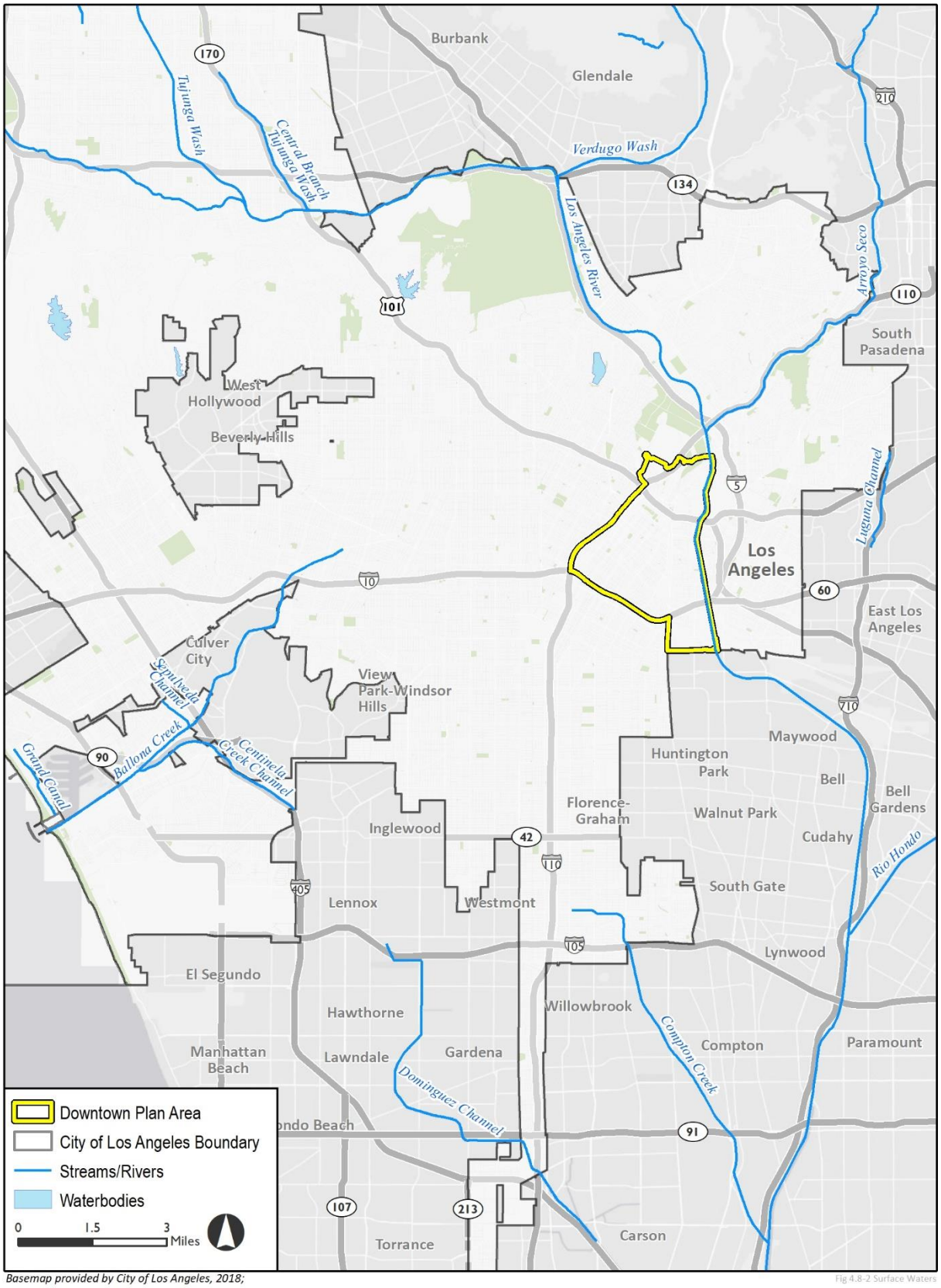
The Upper Los Angeles River Watershed encompasses approximately 479 square miles and comprises the cities of Alhambra, Burbank, Calabasas, Glendale, Hidden Hills, La Canada Flintridge, Los Angeles, Montebello, Monterey Park, Pasadena, Rosemead, San Fernando, San Gabriel, San Marino, South Pasadena, and Temple City as well as the unincorporated areas of the County of Los Angeles. The Los Angeles River is approximately 55 miles long, and five of six reaches lie in the Upper Los Angeles River Watershed. The natural hydrology of the Los Angeles River watershed has been altered by channelization and the construction of dams and flood control reservoirs. The Los Angeles River and many of its tributaries are lined with concrete for most or all of their length. Soft-bottomed segment of the Los Angeles River occur where groundwater upwelling prevents armoring of the river bottom (Upper Los Angeles River Watershed Management Group 2014). The Downtown Plan Area is bounded by the Los Angeles River to the east, and has no other year-round bodies of surface water. Refer to **Figure 4.9-1** and **Figure 4.9-2**.

Figure 4.9-1 Watershed Boundaries



Imagery provided by Google, ESRI, and their licensors © 2017;
Additional data provided by Los Angeles County, 2017; USGS, 2017.

Figure 4.9-2 Surface Water Sources



GROUNDWATER

Citywide Groundwater

The Los Angeles Department of Water and Power (LADWP) provides water service in the City. The LADWP uses several sources of local groundwater, including the Coastal Plain of Los Angeles Groundwater Basin - Central Sub-basin (Central Basin), San Fernando Basin, and Sylmar Basin. The Upper Los Angeles River Area (ULARA) watershed is the principal groundwater resource where the City produces local groundwater from the San Fernando and Sylmar Basins. The City also owns water rights in the Eagle Rock and West Coast Basins, but does not pump its entitlement from these basins due to the lack of production facilities and contamination (LADWP 2015). More information on water supply can be found in Section 4.14, Utilities and Service Systems.

Central Basin

The Central Basin encompasses approximately 277 square miles of surface area, bounded on the north by a surface divide called the La Brea high, and on the northeast and east by emergent less permeable Tertiary rocks of the Elysian, Repetto, Merced and Puente Hills. The southeast boundary between Central Basin and Orange County Groundwater Basin roughly follows Coyote Creek, which is a regional drainage boundary. The southwest boundary is formed by the Newport Inglewood fault system and the associated folded rocks of the Newport Inglewood uplift. The Los Angeles and San Gabriel Rivers drain inland basins and pass across the surface of the Central Basin on their way to the Pacific Ocean. Historically, groundwater flow in the Central Basin has been from recharge areas in the northeast part of the sub-basin, toward the Pacific Ocean on the southwest. However, pumping has lowered the water level in the Central Basin and water levels in some aquifers are about equal on both sides of the Newport-Inglewood uplift, decreasing subsurface outflow to the West Coast Sub-basin. The total storage capacity of the Central Basin is 13.8 million acre-feet (Los Angeles Department of Water Resources [LA DWR] 2004).

Groundwater enters the Central Basin through surface and subsurface flow and by direct percolation of precipitation, stream flow, and applied water; and replenishes the aquifers dominantly in the fore-bay areas where permeable sediments are exposed at ground surface. Natural replenishment of the sub-basin's groundwater supply is largely from surface inflow through Whittier Narrows (and some underflow) from the San Gabriel Valley. Percolation into the Los Angeles Fore-bay Area is restricted due to paving and development of the surface of the fore-bay. Imported water purchased from Metropolitan Water District and recycled water from Whittier and San Jose Treatment Plants are used for artificial recharge in the Montebello Fore-bay at the Rio Hondo and San Gabriel River spreading grounds. Saltwater intrusion is a problem in areas where recent or active river systems have eroded through the Newport Inglewood uplift. A mound of water to form a barrier is formed by injection of water in wells along the Alamitos Gap (Department of Water Resources 2004).

San Fernando Basin

The San Fernando Basin is approximately 226 square miles of surface area, bounded on the north and northwest by the Santa Susana Mountains, on the north and northeast by the San Gabriel Mountains, on the east by the San Rafael Hills, on the south by the Santa Monica Mountains and Chalk Hills, and on the west by the Simi Hills. The valley is drained by the Los Angeles River and its tributaries. Water levels in this basin have been fairly stable over about the past 20 years, since adjudication of the basin. Hydrographs show variations in water levels of 5 feet to 40 feet in the western part of the basin, a variation of about 40 feet in the southern and northern parts of the basin, and a variation of about 80 feet in the eastern part of the basin. Groundwater flows generally from the edges of the basin toward the middle of the basin, then beneath the Los Angeles River Narrows into the Central Basin. In the northeastern part of the basin, groundwater moves from the La Crescenta area southward beneath the surface of Verdugo Canyon toward

the Los Angeles River near Glendale, whereas the groundwater in the Tujunga area flows west following the Tujunga Wash around the Verdugo Mountains to join groundwater flowing from the west following the course of the Los Angeles River near Glendale. Flow velocity ranges from about 5 feet per year in the western part of the basin to 1,300 feet per year beneath the Los Angeles River Narrows. The total storage capacity of the San Fernando Basin in 1998 was calculated at approximately 3 million acre-feet. (LA DWR 2004).

Sylmar Basin

The Sylmar Basin is approximately 8.75 square miles of surface area, bounded on the north and east by the San Gabriel Mountains; on the west by a topographic divide in the valley fill between the Mission Hills and the San Gabriel Mountains; on the southwest by the Mission Hills; on the east by sedimentary rocks along the east bank of the Pacoima Wash; and on the south by the eroded south limb of the Little Tujunga Syncline (Upper Los Angeles River Area Watermaster 2017).

Downtown Plan Area Groundwater

Central Basin

The majority of the Downtown Plan Area is underlain by the Central Basin. The northwestern portion of the Downtown Plan Area is not underlain by a groundwater basin. No additional existing conditions information for the Central Basin is required beyond that described in the Citywide Groundwater subsection above.

San Fernando Basin

No additional existing conditions information for the San Fernando Basin is required beyond that described in the Citywide Groundwater subsection above.

Sylmar Basin

No additional existing conditions information for the Sylmar Basin is required beyond that described in the Citywide Groundwater subsection above.

WATER QUALITY

Citywide Water Quality

The primary sources of pollution to surface and groundwater resources include stormwater runoff from paved areas, which can contain hydrocarbons, sediments, pesticides, herbicides, toxic metals, and coliform bacteria. Improperly placed septic tank leach fields and properly placed septic tanks that do not have proper residence time or are not properly maintained or have improperly disposed of household cleaners and other materials can cause similar types of contamination. Illegal waste dumping can introduce contaminants such as gasoline, pesticides, herbicides and other harmful chemicals.

Industrial contamination issues are the principle reason for restricted use of local groundwater pumping by the LADWP. Much of LADWP's pumping capacity has been impaired by contaminants, primarily volatile organic compounds (VOCs). In the San Fernando Basin, more than 80 of LADWP's 115 water supply wells have been removed from service or restricted in use. In the neighboring Sylmar Basin, contamination has caused two of three LADWP water supply wells to be removed from service. Two of ten LADWP water supply wells in the Central Basin have been impaired, taken off line, and demolished as a result of groundwater contamination issues. Water quality problems associated with hydrocarbon pollutants caused LADWP to discontinue utilizing its West Coast Basin facilities in 1980. Furthermore, declining

groundwater levels and overdraft conditions have become concerns for Los Angeles basins where decades of expanding urbanization, increasing impervious hardscape, and channelization of stormwater runoff have diverted natural replenishment away from local aquifers. Aging wellfields and distribution system infrastructure have also presented challenges to the development and use of the City's local groundwater resources. Combined, these challenges have caused the City to renew its focus on sustainable management of its local groundwater basins. Responding to groundwater contamination issues has been a high priority for the City, particularly in the San Fernando Basin. Recently completed studies have provided analysis of groundwater quality and characterization of the extent of contaminants affecting the City's largest well fields in the basin. Expanded basin remediation systems are under development to remove contamination from the local groundwater basin for the betterment of the environment and to restore the beneficial uses of this important basin. The expanded remediation facilities are anticipated to be operational by 2021. Efforts in the Sylmar and Central Basins have been focused on rehabilitation of LADWP's well fields. Water supply wells impaired by contamination are being replaced using modern construction standards to restore lost pumping capacity and improve water quality (LADWP 2016a).

LADWP's water system supplied four million customers with nearly 160 billion gallons of treated water in 2016. The City's water met and surpassed most federal and state drinking water standards set by the U.S. Environmental Protection Agency and the State of California, Water Resources Control board – Division of Drinking Water, with the exception of two Tier Violations (LADWP 2017). The first violation occurred in January 2016. A six-hour lapse in treatment at the 99th Street Wells Water Treatment Facility resulted in a violation of the Groundwater Rule. However, the 99th Street facility treats water served to customers in the Green Meadows and Watts neighborhoods, outside of the Downtown Plan Area. The second violation occurred on June 16, 2016 when the State Water Resources Control Board, Division of Drinking Water issued a citation to LADWP for failing to adequately monitor its drinking water supply for turbidity. The Surface Water Treatment Rule and Safe Drinking Water Act requires the LADWP to monitor continuously for turbidity at each of the 24 filters at the Los Angeles Aqueduct Filtration Plant. However, turbidity has no health effects at low levels. High levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches (LADWP 2016b).

Downtown Plan Area Water Quality

No additional existing conditions information for water quality is required beyond that described in the Citywide Water Quality subsection above.

FLOOD HAZARDS

Citywide Flood Hazards

The major flooding causes in the City of Los Angeles are short-duration, high-intensity storms. Water courses in the City can flood in response to a succession of intense winter rainstorms, usually between early November and late March. A series of such weather events can cause severe flooding in the City due to the large percentage of impervious area and the age and capacity of the drainage system. Other types of floods that may occur include flash floods, flooding from dam and levee failure, and power-failure-induced flooding. In the City, large floods occur approximately every 5 to 6 years (City of Los Angeles 2017).

Flooding can cause widespread damage to affected areas. Buildings and vehicles can be damaged or destroyed, while smaller objects can be buried in flood-deposited sediments. Floods can also cause drowning or isolation of people or animals. In addition, floodwaters can break utility lines, interrupting services and potentially affecting health and safety, particularly in the case of broken sewer or gas lines.

The secondary effects of flooding are due to standing water, which can result in crop damage, septic tank failure, and water well contamination. Standing water can also damage roads, foundations, and electrical circuits. Inadequately-sized culverts and bridges can create impediments to the passage of high water flow in streams and gullies. Undersized infrastructure typically results in short-term back-ups behind the culvert or bridge, with pooling water in such areas, in effect, an unintended detention basin.

The Federal Emergency Management Agency (FEMA) designated 100-year flood zones and 500-year flood zones are located throughout the City. According to the Safety Element of the General Plan, flood hazard areas subject to 100-year floods comprise 30 square miles within the City. Areas near Chatsworth Reservoir in the northwest portion of the City and Hansen Dam and Tujunga Wash in the northeast portion of the City, the Port of Los Angeles in the southern portion of the City, and central Los Angeles fall within the 100-year floodplain as well as washes throughout the City that flow north and south (City of Los Angeles 1996). A total of 5,628 structures, 88 percent of them residential and 10 percent commercial or industrial, are located in the 100-year flood zone (City of Los Angeles 2017).

Portions of central Los Angeles, the area east of Kenneth Hahn State Recreation Area, Venice, and most of southeast Los Angeles fall within 500-year flood zones (City of Los Angeles 1996). A total of 38,927 structures, 89 percent residential and 9 percent commercial or industrial, are located in the 500-year flood zone (City of Los Angeles 2017).

Downtown Plan Area Flood Hazards

Potential flooding could occur in the Downtown Plan Area from intense localized rainstorms and spillover from nearby flood control channels of the Los Angeles River. The Federal Emergency Management Agency (FEMA) establishes base flood heights for 100-year (one percent annual chance flood) and 500-year (0.2-percent annual chance flood) flood zones, depicted in the Flood Insurance Rate Maps (FIRMs). As shown on **Figure 4.9-3**, the Downtown Plan Area is located adjacent to a 100-year floodplain and much of the Los Angeles River, which bounds the eastern border of the Downtown Plan Area, falls within the 100-year floodplain.

Dam Inundation

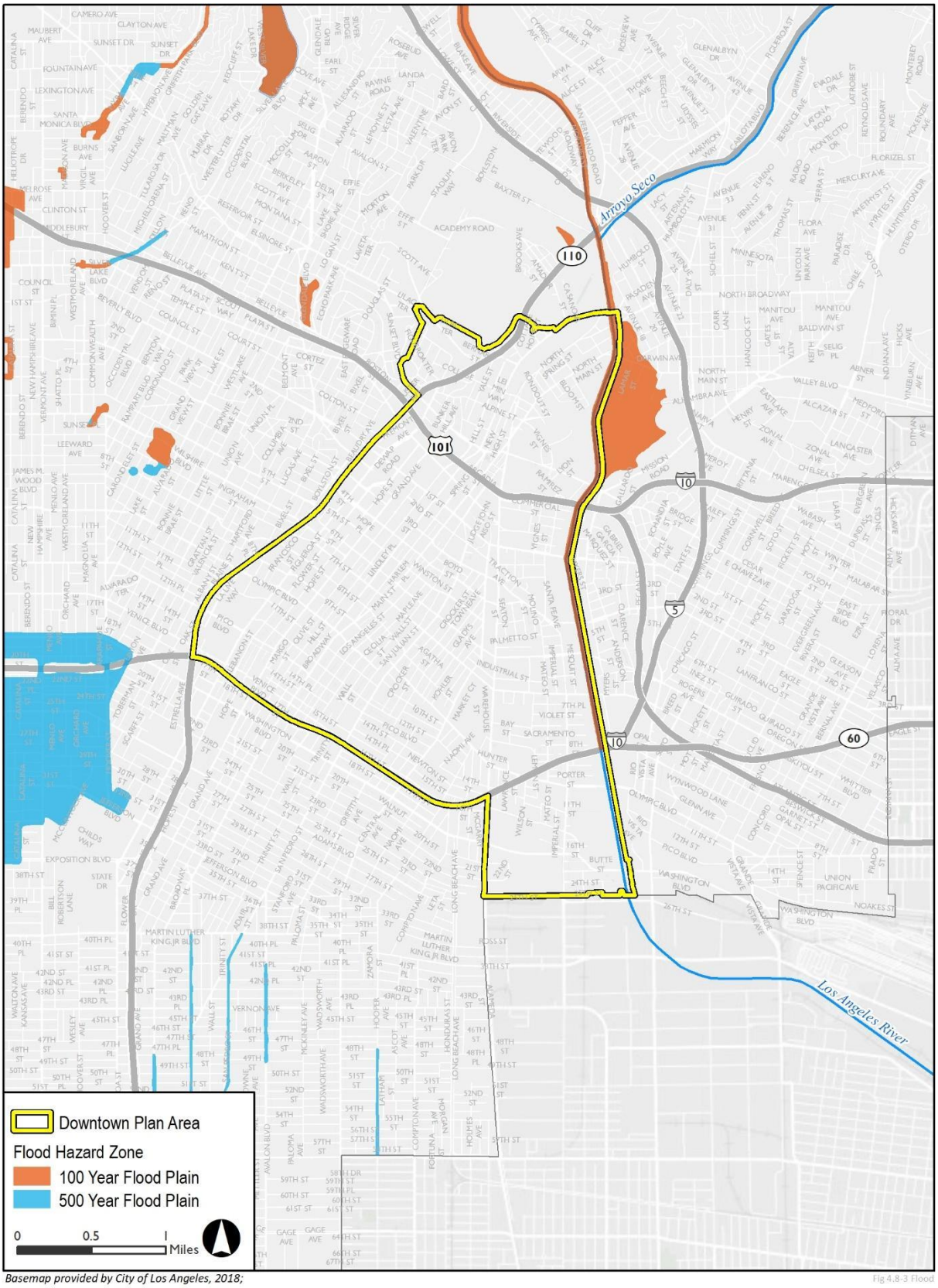
Citywide Dam Inundation

Dam failure events are infrequent and usually coincide with events that cause them, such as earthquakes, landslides and excessive rainfall and snowmelt, but may also occur from water storage facility failure. The City of Los Angeles has 12 dams located within City boundaries, including Eagle Rock, Elysian, Ensino, Hansen Recreation Lake, Lopez, Los Angeles Reservoir, Lower Franklin #2, Mulholland, Riviera Reservoir, Santa Ynez Canyon, Silver Lake, and Stone Canyon. However, dams outside of the City boundaries may have potential to cause inundation within the City. These dams include: 10th and Western, Big Tujunga, Devils Gate, Diederich Reservoir, Glen Oaks 968, Green Verdugo, Greystone, Laguna Basin, Pacoima, Palos Verdes Reservoir, Sepulveda, and Upper Franklin. Over one third of the land area and population in the City is potentially threatened by dam failure (City of Los Angeles 2017).

Downtown Plan Area Dam Inundation

As shown in **Figure 4.9-4**, portions of the Downtown Plan Area lie in the inundation areas for two regional dams: the Sepulveda Dam on the Los Angeles River, approximately 14.5 miles northwest of the Downtown Plan Area, and the Hansen Dam on the Tujunga Wash, approximately 15 miles northwest of the Downtown Plan Area. The Downtown Plan Area also lies approximately 0.5 mile south of the Elysian Reservoir, which could potentially inundate a portion of the Downtown Plan Area in the immediate vicinity of the reservoir in the event of structural failure (Los Angeles County Enterprise Geographic Information Systems 2017).

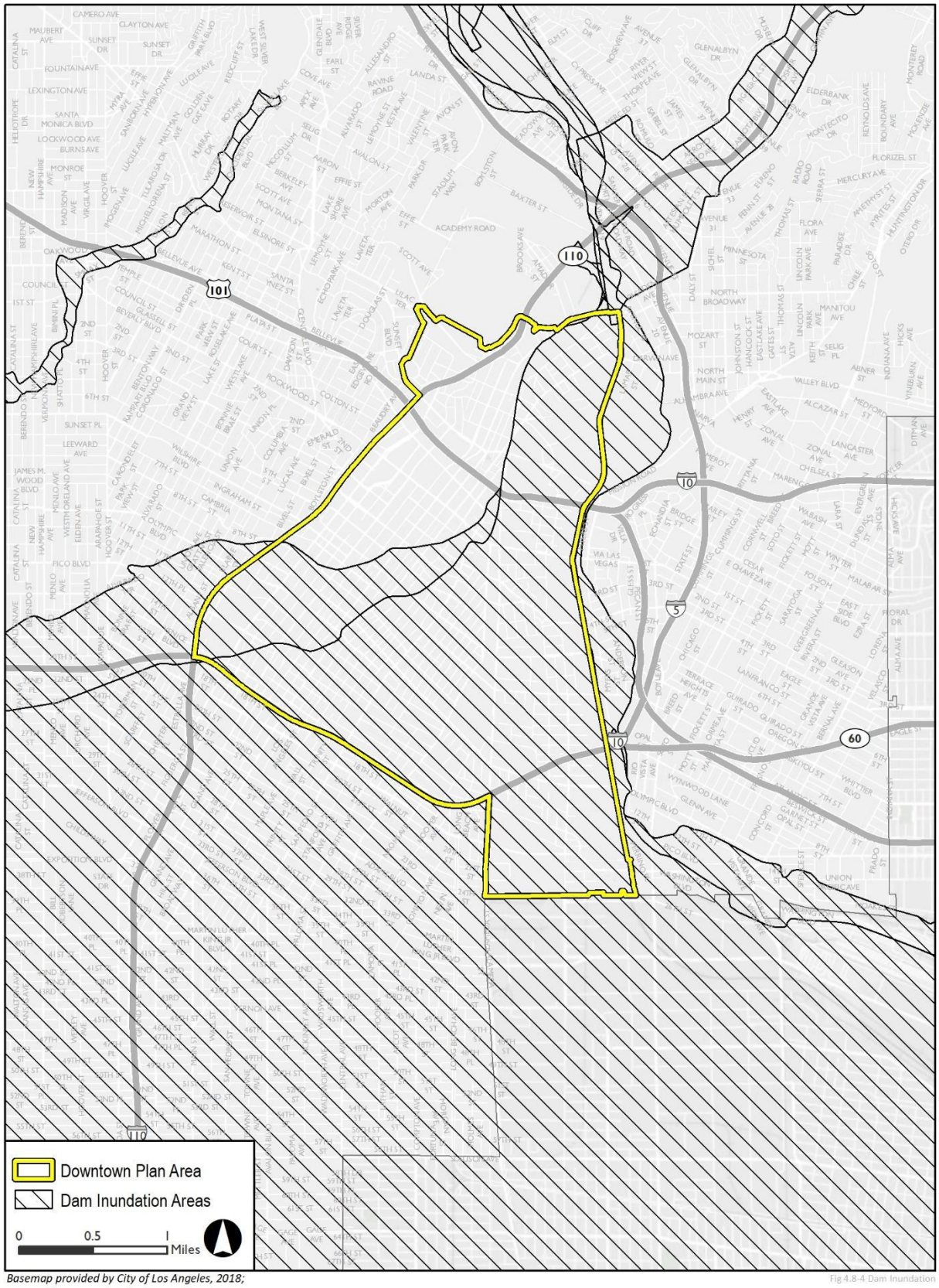
Figure 4.9-3 FEMA Flood Zones



Basemap provided by City of Los Angeles, 2018;
Additional data provided by Los Angeles County, 2017; USGS, 2017; FEMA, 2015.

Fig 4.8-3 Flood

Figure 4.9-4 Dam Inundation Areas



Basemap provided by City of Los Angeles, 2018;
Additional data provided by Los Angeles County, 2017.

Tsunamis and Seiches

Citywide Tsunamis and Seiches

Hazardous tsunamis are rare along the Los Angeles Coast. However, depending upon the magnitude of the tsunami, coastal areas of the City could be inundated, most notably in the San Pedro and Los Angeles Harbor areas, and in neighboring Santa Monica (City of Los Angeles 2017).

A seiche is a surface wave created when a body of water is shaken. Seiches may cause inundation if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam or other artificial body of water. Mitigation of potential seiche action has been implemented by the Department of Water and Power through regulation of the level of water in its storage facilities and providing walls of extra height to contain seiches and prevent overflow. Dams and reservoirs are monitored during storms and measures are implemented in the event of potential overflow (City of Los Angeles 1996).

Downtown Plan Area Tsunamis and Seiches

The Downtown Plan Area is approximately 12.5 miles northeast of the Pacific Ocean and is outside of a Tsunami Hazard Area (City of Los Angeles 1996). No portion of the Downtown Area is subject to seiches.

REGULATORY FRAMEWORK

Development in Los Angeles is subject to various local, state, and federal regulations and permits regarding the use of water resources.

FEDERAL

Clean Water Act (CWA)

Section 303 of the federal Clean Water Act (CWA) requires states to develop water quality standards to protect the beneficial uses of receiving waters. In accordance with California's Porter/Cologne Act, the Regional Water Quality Control Boards (RWQCBs) of the State Water Resources Control Board (SWRCB) are required to develop water quality objectives that ensure their region meets the requirements of Section 303 of the Clean Water Act. All of Los Angeles is within the jurisdiction of the Los Angeles RWQCB, District 4.

Clean Water Act Section 303(d)

Under the Clean Water Act Section 303(d), states are required to submit a list to the U.S. EPA identifying waters within its boundaries not meeting water quality standards (impaired waters) and the water quality parameter (i.e., pollutant) not being met, which is commonly referred to as the 303(d) list. The Los Angeles River Reach 2 (located within the Downtown Plan Area) is listed by the State Water Resources Control Board as Impaired Waters under Clean Water Act Section 303(d) for oil, coliform bacteria, nutrients (algae), lead, copper, ammonia, and trash pollutants. However, all pollutants, except oil and coliform bacteria, are being considered for removal on the Section 303(d) list since it is being addressed with total maximum daily loads (TMDLs; maximum amount of a pollutant a body of water can receive) within allowable standards (SWRCB 2015).

National Pollutant Discharge Elimination System (NPDES)

The federal government also administers the National Pollutant Discharge Elimination System (NPDES) permit program, which regulates discharges into surface waters. Section 404 of the Clean Water Act prohibits the discharge of dredged or fill materials into Waters of the United States or adjacent wetlands without a permit from the U.S. Army Corps of Engineers. As discussed under *Flood Hazards*, the Federal Emergency Management Agency (FEMA) establishes base flood heights for 100-year and 500-year flood zones.

The primary regulatory control relevant to the protection of water quality is the Federal National Pollution Discharge Elimination System (NPDES) permit administered by the State Water Resources Control Board. This board establishes requirements prescribing the quality of point sources of discharge and establishes water quality objectives. These objectives are established based on the designated beneficial uses (e.g., water supply, recreation, and habitat) for a particular surface water body or groundwater basin. The NPDES permits are issued to point source dischargers of pollutants to surface waters and are issued pursuant to Water Code Chapter 5.5 that implements the Federal Clean Water Act. Examples include, but are not limited to, public wastewater treatment facilities, industries, power plants, and groundwater cleanup programs discharging to surface waters (State Water Resources Control Board, Title 23, Chapter 9, Section 2200). Discharge limits, under the NPDES permits, for minerals and pollutants are established and regulated by the California Regional Water Quality Control Board.

National Flood Insurance Act

The National Flood Insurance Act of 1968 established the National Flood Insurance Program. The National Flood Insurance Program is a federal program administered by the Flood Insurance Administration of the Federal Emergency Management Agency (FEMA). It enables individuals who have property (a building or its contents) within the 100-year floodplain to purchase insurance against flood losses. Community participation and eligibility, flood hazard identification, mapping, and floodplain management aspects are administered by state and local programs and support programs within FEMA itself. FEMA works with the states and local communities to identify flood hazard areas and publishes a flood hazard boundary map of those areas.

STATE

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act establishes the SWRCB and each RWQCB as the principal State agencies for coordinating and controlling water quality in California. Specifically, the Porter-Cologne Water Quality Control Act authorizes SWRCB to adopt, review, and revise policies for all waters of the State (including both surface water and groundwater) and directs RWQCBs to develop regional Basin Plans. Section 13170 of the California Water Code (CWC) also authorizes SWRCB to adopt water quality control plans on its own initiative. The Porter-Cologne Act is administered in the Downtown Plan Area by the LARWQCB and is implemented at the city-level through various programs.

California State Water Resource Control Board (SWRCB)

The SWRCB was established through the California Porter Cologne Water Quality Act of 1969. At the State level, SWRCB has responsibility for the protection of water quality and sets Statewide policies and regulations for the implementation of water quality control programs mandated by federal and State water quality statutes and regulations. The SWRCB delegates to the nine RWQCBs the responsibility for the protection of water quality in each major drainage basin throughout the state. The LARWQCB has

jurisdiction over the coastal drainages between Rincon Point (on the coast of western Ventura County) and the eastern Los Angeles County line. A more detailed discussion of the LARWQCB is presented below.

NPDES General Construction Activity Stormwater Permit (GCASP)

Pursuant to CWA Section 402(p) and the Porter-Cologne Water Quality Control Act, SWRCB has issued a Statewide NPDES General Permit, or GCASP, under Order No. 2009-0009-DWQ, NPDES No. CAR000002, which was adopted on September 2, 2009.[1] The Order requires that prior to the beginning of construction activities, the permit applicant must obtain coverage under a GCASP permit by preparing and submitting a Notice of Intent (NOI) along with the appropriate fee to SWRCB. Construction activities subject to GCASP include clearing, grading, and disturbances to the ground, such as stockpiling or excavation, that result in soil disturbances of one acre of total land area or more.

Prior to obtaining the GCASP, an adequate Stormwater Pollution Prevention Plan (SWPPP) has to be prepared. The SWPPP specifies BMPs that will prevent construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off-site into receiving waters. BMPs are intended to diminish impacts to the Maximum Extent Practicable (MEP), which is a standard developed by Congress to allow regulators the flexibility needed to shape programs to the site-specific nature of municipal stormwater discharges. The SWPPP has two major objectives: (1) to help identify the sources of sediment and other pollutants that affect the quality of stormwater discharges and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges. The SWPPP includes a description of: (1) the site, (2) erosion and sediment controls, (3) means of waste disposal, (4) implementation of approved local plans, (5) control of post-construction sediment and erosion control measures and maintenance responsibilities, and (6) non-stormwater management controls. Dischargers are also required to inspect their construction sites before and after storms to identify stormwater discharge associated with construction activity and to identify and implement controls where necessary.

BMPs are intended to diminish impacts to the MEP, which is a standard developed by Congress to allow regulators the flexibility needed to shape programs to the site-specific nature of municipal stormwater discharges. Reducing impacts to the MEP generally relies on BMPs that emphasize pollution prevention and source control, with additional structural controls as needed

Within the City of Los Angeles, SWPPP requirements are enforced through the City's Building and Safety Department plan review and approval process. During the review process, development project plans are reviewed for compliance with the stormwater requirements. Plans and specifications are reviewed to ensure that the appropriate BMPs are incorporated to address stormwater pollution prevention goals.

Regional Dewatering General Waste Discharge Requirements (WDR)

CWC Section 13263(i) authorizes RWQCBs to issue WDRs for a category of discharges if it finds or determines that the discharges in that category: 1) are produced by the same or similar operations, 2) involve the same or similar types of waste, 3) require the same or similar treatment standards, and 4) are more appropriately regulated under general discharge requirements than individual discharge requirements. LARWQCB has issued a general permit for construction dewatering (Waste Discharge Requirements for Discharges of Groundwater from Construction Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties Order No. R4-2008-0032, and NPDES No. CAG994004). Discharges covered by this permit include, but are not limited to, treated or untreated groundwater generated from permanent or temporary dewatering operations (removing or draining water from ground or surface water),

[1]California Water Code Section 13263(i).

treated or untreated wastewater from permanent or temporary construction dewatering operations; subterranean seepage dewatering; and incidental collected stormwater from basements.

Cobey-Alquist Flood Plain Management Act

CWC Sections 8400 et seq. documents the state's intent to support local governments in their use of land use regulations to accomplish floodplain management and to provide assistance and guidance, as appropriate.

Sustainable Groundwater Management Act (SGMA)

Effective in 2015, SGMA creates a framework for sustainable, local groundwater management in California. SGMA allows local agencies to customize groundwater sustainability plans to their regional economic and environmental needs. This act requires local regions to create a groundwater sustainability agency (GSA) and to adopt groundwater management plans for groundwater basins or sub-basins that are designated as medium or high priority. High-priority and medium-priority basins or sub-basins must adopt groundwater management plans by 2020 or 2022, depending upon whether the basin is in critical overdraft. GSAs will have until 2040 or 2042 to achieve groundwater sustainability. The Proposed Project is located within the Hollywood Sub-basin of the Coastal Plain of Los Angeles Basin (south of the Santa Monica Mountains) and San Fernando Valley Basin (the northern and eastern foothills of the Santa Monica Mountains). The Hollywood Sub-basin is classified as very low priority and the San Fernando Valley Basin is classified as medium priority.

The act defines "sustainable groundwater management" as the "management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results. "Undesirable result" means any of the following effects caused by groundwater conditions occurring throughout the basin: chronic lowering of groundwater levels, but excluding reductions in groundwater levels during a drought if they are offset by increases in groundwater levels during other periods; significant and unreasonable reductions in groundwater storage; significant and unreasonable seawater intrusion; significant and unreasonable degradation of water quality; significant and unreasonable land subsidence; and/or surface water depletions that have significant and unreasonable adverse impacts on beneficial uses.

REGIONAL

Los Angeles County Municipally-Owned Separate Storm Sewer Systems (MS4) Permit

Discharges of urban runoff into Municipally-Owned Separate Storm Sewer Systems (MS4s) are regulated under the general NPDES stormwater permit that has been issued by LARWQCB for Los Angeles County (MS4 Permit). The MS4 Permit is intended to ensure the protection of water quality through requirements for site planning, source control, and treatment practices. The MS4 permit is implemented through the City's Standard Urban Stormwater Mitigation Plan (SUSMP).

Los Angeles County Standard Urban Stormwater Mitigation Plan (SUSMP)

On March 8, 2000, Los Angeles County Standard Urban Stormwater Mitigation Plan (SUSMP) requirements were approved by the LARWQCB as part of the MS4 permit to address stormwater pollution from new construction and redevelopment projects. SUSMP is a comprehensive stormwater quality program to manage urban stormwater and minimize pollution of the environment. The purpose of the SUSMP is to reduce the discharge of pollutants in stormwater by outlining BMPs that must be incorporated into the design plans of new development and redevelopment. The SUSMP requirements contain a list of minimum BMPs that must be employed to infiltrate or treat stormwater runoff, control peak flow discharge,

and reduce the post-project discharge of pollutants from stormwater conveyance systems. The SUSMP requirements define, based upon land use type, the types of practices that must be included and issues that must be addressed as appropriate to the development type and size. The SUSMP requirements apply to all development and redevelopment projects that fall into one of the following categories:

- Single-family hillside residences
- One acre or more of impervious surface area for industrial/commercial developments
- Automotive service facilities
- Retail gasoline outlets
- Restaurants
- Ten or more residential units (BMP)
- Parking lots of 5,000 square feet or greater or with 25 or more spaces
- Projects located in or directly discharging to an Ecologically Sensitive Area

The SUSMP requirements are enforced through the City's Building and Safety Department plan review and approval process. During the review process, individual development project plans are reviewed for compliance with stormwater requirements.

Water Quality Control Plan for the Los Angeles Region (Basin Plan)

All of Los Angeles is within the jurisdiction of the LARWQCB, which is one of the nine regional WQCBs in California. The LARWQCB provides permits for projects that may affect surface waters and groundwater locally and is responsible for preparing the Basin Plan, which is updated as necessary every three years. The Basin Plan establishes narrative and numerical water quality objectives for surface waters and groundwater within the Los Angeles region and designates the beneficial uses of inland surface waters, including the Hollywood Reservoir and Los Angeles River. Water quality objectives, as defined by the CWA Section 13050(h), are the "limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses or the prevention of nuisance within a specific area." The State has developed TMDLs, which are a calculation of the maximum amount of a pollutant that a water body can have and still meet water quality objectives established in the Basin Plan.

LOCAL

Los Angeles Municipal Code (LAMC)

The City of Los Angeles relies on Municipal Code Chapter VI, *Public Works and Property* to require permits and oversee the implementation of any land use or development involving grading activities, or the construction of new structures or paving. Article 4 *Sewers, Water Courses and Drains* and Article 4.4 *Stormwater and Urban Runoff Pollution Control* of the Municipal Code establishes minimum standards, guidelines, and/or criteria for specific discharges, connections, and/or Best Management Practices (BMPs). Additional measures are required by the City, when applicable, to prevent or reduce the discharge of pollutants to achieve water quality standards and receiving water limitations. Article 4.4 includes prohibitions for illicit discharges to enter the MS4 and requires implementation of BMPs and Low Impact Development (LID) practices per LAMC 64.70 (City of Los Angeles 2017). In addition, the City requires all construction activities and facility operations to be consistent with the landscape ordinance (Ordinance No. 170,978) as well as other related requirements, outlined in Chapter XII, *The Water Conservation Plan of the City of Los Angeles*, and the *Planning and Land Development Handbook for Low Impact Development (LID)*. The *Handbook* is a tool for developers to comply with the requirements of the City's Standard Urban Stormwater Mitigation Plan (SUSMP). The handbook summarizes the City's project

review and permitting process, identifies stormwater mitigation measures, and references source and treatment control BMP information. The latest edition was adopted on May 9, 2016 (Los Angeles 2016).

Water Quality Compliance Master Plan for Urban Runoff (WQCMP) 2009

In 2009, the City adopted the WQCMP, a 20-year strategy for clean stormwater and urban runoff to reduce pollution entering City waterways. The Master Plan provides an overview of the existing status of urban runoff management in the City, including a description of watersheds in the City, urban runoff pollutant sources, regulatory requirements for water quality, existing watershed management, and plans for compliance with regulatory requirements. In addition, the Master Plan discusses three City initiatives: the Water Quality Management Initiative, the Citywide Collaboration Initiative, and the Outreach Initiative. The WQCMP also contains a financial plan for implementing recommended strategies and initiatives.

County of Los Angeles Hydrology Manual

Drainage and flood control within the Downtown Plan Area is regulated by the City of Los Angeles Department of Public Works (LADPW) and the Los Angeles County Department of Public Works (LACDPW). The County has jurisdiction over regional drainage facilities. The County's Hydrology Manual requires a storm drain system be designed for a 25-year storm event and that the combined capacity of a storm drain and street flow system accommodate flow from a 50-year storm event (LA County DPW 2006). The County also limits the allowable discharge into existing storm drain facilities based on the MS4 Permit and is enforced on all new developments that discharge directly into the County's storm drain system.

Enhanced Watershed Management Plans (EWMPs)

On November 8, 2012, RWQCB adopted the current municipal stormwater permit (NPDES Permit No. CAS004001, Order No. R4-2012-0175), which contains the most extensive provisions to date with 32 incorporated TMDLs, of which 22 affect the City, expanded programs for Minimum Control Measures, development and implementation of watershed management plans, and expanded monitoring provisions. The NPDES permit provides for the development of EWMPs by the MS4 permittees to implement the requirements of the permit on a watershed scale through customized strategies, control measures, and BMPs. EWMPs also address compliance requirements of the 22 TMDLs that currently are effective, as well as other elements of the City's Stormwater Program.

Proposition O

Proposition O, a $500 million bond, authorized the City to fund projects that protect public health, capture stormwater for reuse and meet the federal CWA through removal and prevention of pollutants entering regional waterways. Proposition O projects include but are not limited to: the Temescal Canyon Park Stormwater BMP, Los Angeles Zoo Parking Lot, the Westchester Stormwater BMP, Echo Park Lake Rehabilitation Project, and the Hansen Dam Recreational Area Parking Lot and Wetlands Restoration. In addition, Proposition O funds were utilized for the Catch Basin Screen Cover and Insert Project, which provided for the installation of catch basin inserts and screen covers throughout the City beginning in 2005 with completion on September 30, 2007 (Phase I and Phase II). Phase III began in the spring of 2008 and will retrofit approximately 34,000 remaining catch basins with opening screen covers (Los Angeles 2016a).

Low Impact Development (LID) Ordinance

The LID Ordinance was adopted in 2011. The intent of the LID Ordinance is to expand the applicability of the existing SUSMP requirements. It provides stormwater and rainwater LID strategies for all projects that require building permits in order to maintain or restore the natural hydrologic character of a development

site, reduce off-site runoff, improve water quality, and provide groundwater recharge. The LID Ordinance requires a variety of BMPs to manage stormwater and urban runoff and reduce runoff pollution. It incorporates environmental practices including infiltration, capture and use, and biofiltration.

Flood Control Authority in the City of Los Angeles

In general, flood control authority can be summarized as follows: (1) the U.S. Army Corps of Engineers (USACE) oversees construction of projects associated with navigable bodies of water, including the Los Angeles River-related flood control systems and ocean harbors; (2) LACDPW oversees construction of ancillary Los Angeles County Flood Control District (LACFCD) facilities and designs and/or maintains the flood control drainage facilities, including the Los Angeles River system (under the guidance of USACE) to mitigate 100- and 500-year storms; and (3) LADPW BOE oversees construction and maintenance of the City's storm drainage system which is designed to mitigate 50-year magnitude storms. Various City agencies implement development permit, slope stability, and watershed protection regulations.

City of Los Angeles 2017 Local Hazard Mitigation Plan

The Hazard Mitigation Plan serves as a guide for decision makers as they commit City resources to minimize the effects of natural hazards. The Hazard Mitigation Plan integrates planning disciplines to identify hazard vulnerabilities, create community disaster mitigation priorities, and develop subsequent mitigation strategies and projects. The Hazard Mitigation Plan provides hazard mitigation to reduce risks from disasters to the people, property, economy and environment within the City as a result of natural disasters, including flooding, dam failures, landslides, and tsunamis.

Los Angeles Specific Plan for the Management of Flood Hazards (Flood Hazards Specific Plan)

The Flood Hazards Specific Plan was originally established by Ordinance No. 154,405 and amended most recently in July 1998 by Ordinance No. 172,081. This ordinance governs permit review and mitigation procedures for issuance of development permits in areas prone to flooding, mudflow, or coastal inundation. Mitigation measures include relocation of structures within a property, increased base elevation, additional structural reinforcement, anchoring, and installation of protective barriers. A permit can be denied if mitigation is deemed insufficient to protect human life. Ordinance No. 172,081 designates the City Engineer as the Flood Hazard Mitigation Coordinator for the City. The Flood Hazard Specific Plan specifies the responsibilities of City agencies that process the permits to ensure consistency with applicable FEMA requirements for NFIP coverage. This plan qualifies property owners for greater coverage limits and generally lower flood insurance premium rates (Los Angeles).

Floodplain Management Plan

The Floodplain Management Plan was prepared in October 2015 and presents measures to mitigate potential flood problems in the City of Los Angeles. The purpose of the measures is to reduce or alleviate the loss of life, personal injury, and property damage that can result from flooding. Measures identified in the Floodplain Management Plan involve long- and short-term strategies such as planning, policy changes, programs, projects, and other activities to mitigate the impacts of floods. The plan also identifies resources to help guide and coordinate mitigation activities (Los Angeles 2015).

Water Quality Compliance Master Plan for Urban Runoff (WQCMP)

In 2009, the City adopted the WQCMP, a 20-year strategy for clean stormwater and urban runoff in the City and to meet all water quality regulations for the City's rivers, lakes, and coastal waters. The Master Plan provides an overview of the existing status of urban runoff management in the City, including a

description of watersheds in the City, urban runoff pollutant sources, regulatory requirements for water quality, existing watershed management, and plans for compliance with regulatory requirements. In addition, the Master Plan plans for the future of urban runoff management in the City and discusses three initiatives: Water Quality Management Initiative, Citywide Collaboration Initiative, and Outreach Initiative. The WQCMP also contains a financial outlook that evaluates current and future revenues, provides an estimate of the costs needed for implementing the strategies proposed, and presents opportunities for funding.

Los Angeles River Revitalization Master Plan (LARRMP)

Adopted in April 2007, the LARRMP contains goals in the creation of parks, paths, and open spaces along the Los Angeles River. The LARRMP includes recommendations for physical improvements along the Los Angeles River corridor; policies for managing public access and management structure; and short- and long-term priority projects and potential funding strategies.

River Improvement Overlay (RIO) District

Following the adoption of the LARRMP, the RIO District (Ordinance Nos. 18314 and 183145), effective August 2014 and revised in January 2015, was established to help implement the vision and goals of the LARRMP by focusing on sustainable environments in the surrounding neighborhoods, including guidelines for both private property and public rights-of-way. The RIO provides guidelines for new "complete" streets and includes mobility strategies to meet the needs of pedestrians, bicyclists, transit riders, and vehicle drivers. The RIO District includes all of the neighborhoods within the City of Los Angeles that are adjacent to the Los Angeles River, and generally extends 0.5-mile on either side of the River, creating an area that is potentially 32 miles long and one mile wide. As described in *Chapter 3, Project Description*, applicable development regulations and measures to protect sensitive biological resources in the existing RIO will be incorporated into Frontage Districts and development standard rules of the New Zoning Code. In addition, the RIO will be amended to remove portions that are currently in the Downtown Plan Area to avoid redundancy with the New Zoning Code.

City of Los Angeles General Plan Safety, Conservation, and Framework Elements

The intent of the Conservation Element is the conservation and preservation of natural resources. Policies of the Conservation Element address the effect of erosion on such natural resources as beaches, watersheds, and watercourses. The General Plan Framework Element is a more general, long-term, programmatic element. The policies in the Framework Element address infrastructure and public service systems, many of which are interrelated, and all of which support the City's population and economy. Objectives and policies related to hydrology and water quality contained in these elements are listed in **Table 4.9-1**.

TABLE 4.9-1 RELEVANT GENERAL PLAN HYDROLOGY & WATER QUALITY OBJECTIVES AND POLICIES

Objective/Policy	Objective/Policy Description
Safety Element – Hazard Mitigation	
Policy 1.1.6	State and federal regulations assure compliance with applicable State and federal planning and development regulations, e.g., Alquist-Priolo Earthquake Fault Zoning Act, State Mapping Act and Cobey-Alquist Flood Plain Management Act.
Safety Element – Emergency Response (Multi-Hazard)	
Policy 2.1.2	Health and environmental protection. Develop and implement procedures to protect the environment and public, including animal control and care, to the greatest extent feasible within the resources available, from potential health and safety hazards associated with hazard mitigation and disaster recovery efforts.

TABLE 4.9-1 RELEVANT GENERAL PLAN HYDROLOGY & WATER QUALITY OBJECTIVES AND POLICIES	
Objective/Policy	**Objective/Policy Description**
Conservation Element – Erosion	
Policy 2	Continue to prevent or reduce erosion that will damage the watershed or beaches or will result in harmful sedimentation that might damage beaches or natural areas.
Conservation Element – Ocean	
Policy 1	Continue to reduce pollutant discharge into the bays from both natural and human sources.
Framework Element – Chapter 9 Infrastructure and Public Services	
Policy 9.3.2	Consider the use of treated wastewater for irrigation, groundwater recharge, and other beneficial purposes.
Objective 9.5	Ensure that all properties are protected from flood hazards in accordance with applicable standards and that existing drainage systems are adequately maintained.
Policy 9.5.1	Develop a stormwater management system that has adequate capacity to protect its citizens and property from flooding which results from a 10-year storm (or a 50-year storm in sump areas, a pit or hollow in which liquid collects).
Policy 9.5.2	Assign the cost of stormwater system improvements proportionately to reflect the level of runoff generated and benefits.
Policy 9.5.3	Implement programs to correct any existing deficiencies in the stormwater collection system.
Policy 9.5.4	Ensure that the City's drainage system is adequately maintained.
Objective 9.6	Pursue effective and efficient approaches to reducing stormwater runoff and protecting water quality.
Policy 9.6.1	Pursue funding strategies which link the sources of revenues for stormwater system improvement to relevant factors including sources of runoff and project beneficiaries.
Policy 9.6.2	Establish standards and/or incentives for the use of structural and non-structural techniques which mitigate flood-hazards and manage stormwater pollution.
Policy 9.6.3	The City's watershed-based approach to stormwater management will consider a range of strategies designed to reduce flood hazards and manage stormwater pollution. The strategies considered will include, but not necessarily be limited to: a. Support regional and City programs which intercept runoff for beneficial uses including groundwater recharge; b. Protect and enhance the environmental quality of natural drainage features; c. Create stormwater detention and/or retention facilities which incorporate multiple-uses such as recreation and/or habitat; d. On-site detention/retention and reuse of runoff; e. Mitigate existing flood hazards through structural modifications (flood proofing) or property by-out; f. Incorporate site design features which enhance the quality of off-site runoff; and g. Use land use authority and redevelopment to free floodways and sumps of inappropriate structures which are threatened by flooding and establish appropriate land uses which benefit or experience minimal damages from flooding.
Policy 9.6.4	Proactively participate in inter-agency efforts to manage regional water resources, such as the Santa Monica Bay Restoration Project, the Los Angeles River Master Plan, the Los Angeles River Parkway Project and the Los Angeles County Drainage Area Water Conservation and Supply Feasibility Study.
Objective 9.7	Continue to develop and implement management practices based stormwater program which maintains and improves water quality.
Policy 9.7.1	Continue the City's active involvement in the regional NPDES municipal stormwater permit.
Policy 9.7.2	Continue to aggressively develop and implement educational outreach programs designed to foster an environmentally-aware citizenry.
Policy 9.7.3	Investigate management practices which reduce stormwater pollution to identify technically feasible and cost effective-approaches, through: a. Investigation of sources of pollution using monitoring, modeling and special studies; b. Prioritization of pollutants and sources;

TABLE 4.9-1 RELEVANT GENERAL PLAN HYDROLOGY & WATER QUALITY OBJECTIVES AND POLICIES	
Objective/Policy	**Objective/Policy Description**
	c. Conducting research and pilot projects to study specific management practices for the development of standards; and d. Developing requirements which establish implementation standards for effective management practices.
Objective 9.9	Manage and expand the City's water resources, storage facilities, and water lines to accommodate projected population increases and new or expanded industries and businesses.
Policy 9.9.3	Protect existing water supplies from contamination, and clean up groundwater supplies so those resources can be more fully utilized.
Policy 9.9.4	Work to improve water quality and reliability of supply from the State Water Project and other sources.
Policy 9.9.5	Maintain existing rights to groundwater and ensure continued groundwater pumping availability.
Objective 9.11	Ensure, to the maximum extent possible, the continued provision of water capacity, quality and delivery after an earthquake or other emergency.
Policy 9.11.1	Provide for the prompt resumption of water service with adequate quantity and quality of water after an emergency.
SOURCE: Los Angeles 2001	

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the *CEQA Guidelines,* the Proposed Project would have a significant impact to hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality (Threshold 4.9-1)
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin (Threshold 4.9-2)
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    - Result in substantial erosion or siltation on- or off-site;
    - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
    - Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
    - Impede or redirect flood flows (Threshold 4.9-3)
- Be in flood hazard, tsunami, or seiche zones, thus risking release of pollutants due to project inundation (Threshold 4.9-4)
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan (Threshold 4.9-5)

METHODOLOGY

Baseline information for the analysis was compiled from a review of data and reports published by state agencies, environmental documents for projects in the vicinity, as well as information compiled and evaluated by the City of Los Angeles in conjunction with its stormwater management and hazard mitigation programs. The result of the effort is a general and qualitative analysis of the types of hydrologic and water quality changes that could be expected relative to the implementation of the Proposed Project.

The analysis of water quality impacts identifies the types of pollutants potentially associated with future development as a result of implementation of the Downtown Plan and considers their effects on water quality. Consideration is given to relevant regulations and requirements that would serve to minimize pollutants in stormwater runoff and restrict discharges into surface water. There is a comprehensive regulatory framework implemented at the State, County, and City level to reduce the impacts of effects related to storm drainage, urban pollutants, and flood hazards. Compliance with these regulations is required, not optional. Compliance must be demonstrated to have been incorporated in the project's design before permits for project construction would be issued. Based upon the comprehensiveness of the regulations and the requirement that compliance must be demonstrated to have been incorporated in the project's design before permits are issued, the assumption that compliance with all applicable laws, regulations, and standards is reasonable. Therefore, the analysis presented herein assumes compliance with all applicable laws, regulations, and standards. The impact analysis is based on several factors, including the policies and land uses of the Downtown Plan, the degree to which existing land uses and pervious surfaces in the Downtown Plan Area would change, and the thresholds of significance for hydrology and water quality.

The analysis of inundation by seiche, tsunami, mudflow, and dam failure is based on the proximity of the potential development locations to sizeable bodies of water, ocean, hillside areas, dams and other large water structures respectively and a consideration of potential risk of inundation associated with these features in relation to indirect impacts resulting from the Proposed Project.

In 2015, the California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD)*, held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of a project. However, if a project exacerbates a condition in the existing environment, the lead agency is required to analyze the impact of that exacerbated condition on the environment, which may include future residents and users within the Downtown Plan Area. The decision from *CBIA v. BAAQMD* will inform the analysis of Appendix G thresholds provided above.

PROJECT IMPACTS

Threshold 4.9-1	Would implementation of the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Impact 4.9-1 **Downtown Plan:** Downtown Plan Area development would be subject to federal, State, and local requirements for protecting water quality, as well as policies contained in the Downtown Plan supporting stormwater management. Construction activities associated with the Downtown Plan would potentially involve de-watering, which may require discharge of groundwater into surface waters and degrade water quality. However, groundwater discharges would be required to comply with NPDES permit requirements. Compliance with applicable regulations and policies would prevent violation of water quality standards or

waste discharge requirements and substantial degradation of surface or ground water quality. This impact would be ***less than significant.***

New Zoning Code: The New Zoning Code would not violate any water quality standards or waste discharge requirements. Additionally, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid these effects. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This impact would be ***less than significant.***

Downtown Plan Impact

Future Downtown Plan Area development would be subject to federal, state, and local standards and regulations protecting water quality and hydrological resources. In addition, the Downtown Plan includes a number of policies to support stormwater management and improve water quality. Individual development projects would be required to comply with applicable regulations, standards, and policies, which would prevent violations of water quality standards and waste discharge requirements. Regulations and policies that would apply to project construction and operational activities are discussed below.

Construction

Grading, excavation, and other construction activities associated with the Project could impact water quality due to erosion resulting from exposed soils and the generation of water pollutants, including trash, construction materials, and equipment fluids. Section D of LAMC Article 4.4, *Stormwater and Urban Runoff Pollution Control*, requires owners or developers to implement stormwater pollution control requirements for construction activities depicted in the project plans, which are subject to approval by the Department of Building and Safety; the Director of the Department may require additional and/or alternative site-specific BMPs or conditions, if needed. In addition, construction activities on a site of more than one acre, or on a site which is part of a larger development plan that would total more than one acre, would be subject to the NPDES Statewide General Construction Activity Stormwater Permit. Operators of a construction site would be responsible for preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) that outlines project-specific BMPs to control erosion, sediment release, and otherwise reduce the potential for discharge of pollutants in stormwater. Typical BMPs include:

- Utilizing temporary de-silting basins to ensure that surface water flows do not carry significant amounts of onsite soils and contaminants downstream
- Conducting construction vehicle maintenance in staging areas where appropriate controls have been established to ensure that fuels, motor oil, coolant, and other hazardous materials are not deposited into areas where they may enter surface water and groundwater
- Restricting the use of chemicals that may be transferred to surface waters by storm water flows or leach to groundwater basins through water percolation into the soil
- Requiring that permanent slopes and embankments be vegetated following final grading
- Installation of silt fences, erosion control blankets
- Proper handling and disposal of wastes
- Installation of anti-tracking pads at site exits to prevent off-site transport of soil material

Construction activities, such as excavation for subterranean parking structures and foundation-laying for high-rises, may extend down into the water table necessitating de-watering of the soils to lower the water

table. Depending on the method used for de-watering, displaced groundwater may need to be captured and discharged elsewhere, possibly into surface waters, such as the Los Angeles River. NPDES Order No. R42013-0095 establishes requirements for discharges of groundwater from construction dewatering to surface waters in coastal watersheds of Los Angeles and Ventura County. The permit sets criteria for the quality of discharges, such as a maximum daily concentration of 75 mg per liter of suspended solids per day and an acceptable water pH and temperature range, and criteria for the quality of the receiving water after it has received the discharge. The permit also requires that the discharger store potential pollutants in areas where they would not contribute to runoff and to contain, remove, and clean any spills of such materials immediately.

Operation

All future developments in the Downtown Plan Area would be required to comply with the LID Ordinance and Stormwater and Urban Runoff Pollution Control Ordinance, which require the inclusion of BMPs in a project's design to prevent, control and reduce stormwater pollutants. Typical BMPs include source prevention and treatment control, such as catch basin filters and infiltration/detention basins, as well as minimizing impervious paving. The City's Stormwater and Urban Runoff Pollution Control Ordinance requires future development to comply with the SUSMP requirements, if applicable (see *Regulatory Setting* above for applicability), integrate LID practices and standards for stormwater pollution mitigation, and maximize open, green, and pervious space on all development consistent with the City's landscape ordinance and other related requirements.

Required elements of the SUSMP include provisions for:

- Peak stormwater runoff discharge rates
- Conservation of natural areas
- Minimization of stormwater pollutants of concern
- Protection of slopes and channels
- Storm drain system stenciling and signage
- Properly designed outdoor material storage areas
- Properly designed trash storage areas
- Proof of ongoing BMP maintenance
- Design standards for structural or treatment control BMPs
- Provisions for individual priority project categories
- Limitations on use of infiltration BMPs

BMP requirements are enforced through the City's plan approval and permit process, and plans for all new development projects are subject to City inspection. Compliance with the LAMC would ensure that construction does not violate any water quality standards or discharge requirements or otherwise substantially degrade water quality.

All project-related activities would also be subject to Sections A and B of the LAMC Article 4.4, which generally prohibits discharge of specific materials into the storm drain system or receiving waters, such as the L.A. River located along the eastern boundary of the Downtown Plan Area, and specifically prohibits the discharge of certain materials associated with industrial or commercial activities, respectively.

Additionally, new development within the Plan Area would be subject to the open space and landscaping requirements of the Downtown plan. The Downtown Plan also contains policies to minimize water quality impacts from development, including the following:

- **Land Use (LU)**
- **LU 15.3.** Create a network of well-maintained public and private green infrastructure by incentivizing the use of trees, eco roofs, vertical gardens, stormwater facilities, and landscaped amenity areas.
- **LU 16.6.** Prioritize infrastructure and landscape treatments that absorb pollutants and support stormwater infiltration.
- **LU 17.5.** Encourage trees and architectural elements that provide shade; cooling stations; and seating areas for pedestrians along primary corridors in Downtown.
- **SO 6.1.** Require sustainable best practices relating to pollution reduction, stormwater management, heat reduction, and material recycling.

Conclusion

Compliance with federal, state, and local regulations would reduce impacts resulting from future development in the Downtown Plan Area due to implementation of the Downtown Plan to a less than significant level. Furthermore, the Downtown Plan does not introduce any features that would preclude implementation of, or alter, these policies and procedures in any way. It also includes policies to support compliance. Therefore, implementation of the Downtown Plan would not violate any water quality standards, waste discharge requirements or otherwise substantially degrade surface or ground water quality. Impacts would be ***less than significant***.

New Zoning Code Impact

The New Zoning Code would not violate water quality standards or waste discharge requirements. In fact, the New Zoning Code references LID standards that improve site permeability and reduce stormwater runoff in order to incorporate required stormwater management features into overall site and landscape design. Additionally, the New Zoning Code's landscaping requirements include minimum standards for planted areas, which would support LID objectives on permeability and stormwater capture. Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development standards and policies, such as those required by the RWQCB, intended to avoid water quality and waste discharge impacts.

Due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze if the zoning applied would violate water quality standards or waste discharge requirements or create any other potential impacts relate to water quality. Additionally, individual development projects would be required to comply with all applicable federal, state and local regulations, standards, and policies pertaining to water quality, such as those under the NPDES permitting program. A ***less than significant*** impact would occur.

Mitigation Measures

None required for either the Downtown Plan or the New Zoning Code.

Threshold 4.9-2	Would the Proposed Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impact 4.9-2

Downtown Plan: Due to Court adjudications restricting withdrawal of groundwater resources serving the Downtown Plan Area, reasonably anticipated development from the Downtown Plan would not deplete groundwater supplies. In addition, further development of the Downtown Plan Area would not interfere with groundwater recharge because the area is already mostly paved and developed and future development would be subject to policies and regulations that support the preservation and expansion of pervious surfaces. Construction activities could potentially impact groundwater resources, but required implementation of construction BMPs would reduce the risk of groundwater contamination. Therefore, impacts to groundwater supply and recharge in the Downtown Plan Area would be ***less than significant.***

New Zoning Code: The New Zoning Code would not negatively impact groundwater resources. Additionally, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid impacts to groundwater. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This impact would be ***less than significant.***

Downtown Plan Impact

The Downtown Plan Area lies above the Central Basin, which provides a portion of the water supply needed by overlying residents and industries, and has provided as much as 15 percent of the City's local groundwater supply between 2010 and 2015 (LADWP 2015). Due to issues with groundwater overdraft beginning over 50 years ago, withdrawals from much of the Central Basin is controlled by court adjudications (LADWP 2015); LADWP currently has the right to withdraw 17,236 acre-feet per year (AFY) from the Central Basin, which accounts for approximately 16 percent of the City of Los Angeles' allowed groundwater withdrawal. This prevents depletion of groundwater supplies from the Central Basin and limits the amount of groundwater resources that could be used to serve Downtown Plan Area development. While future Downtown Plan Area development would increase demand for LADWP water by increasing the intensity of use and residential density, this demand would need to be met in a number of ways other than increasing groundwater withdrawal, such as increasing the amount of water purchased from the Metropolitan Water District, implementing water conservation measures, increasing use of recycled water, and/or implementing groundwater recharge projects. See Section 4.14, *Utilities*, for a discussion of the adequacy of LADWP water supplies for meeting future demand, including that associated with future development in the Downtown Plan Area.

Future Downtown Plan Area development would not substantially increase the amount of impervious surface in the Downtown Plan Area because the Downtown Plan Area is already urbanized and largely covered with impervious surfaces; therefore, the Downtown Plan would not interfere substantially with groundwater recharge. Implementation of the Downtown Plan may provide some benefits to groundwater recharge by replacing older development with new development subject to open space, landscaping, and stormwater BMP requirements that would increase pervious surfaces associated with development. In addition, as discussed in Section 4.14, *Recreation*, the Downtown Plan includes a number of policies to support the construction of new parks and green spaces that would also increase the amount of pervious surface and facilitate groundwater recharge.

Construction activities associated with future Downtown Plan Area development, such as excavation for subterranean parking lots and foundation-laying for tall buildings, would potentially extend into the groundwater table. The Los Angeles County Department of Public Works provides historical and current groundwater depth measurements throughout Los Angeles County (LA County DPW 2017). Well 2778 lies in the southeast corner of the Downtown Plan Area. Another two wells lie almost immediately adjacent to the Downtown Plan Area boundary: Well 2279AD lies at the intersection of E 37th Street and S Santa Fe Avenue, while Well 2772E lies directly north of the Downtown Plan Area's northern tip, near the intersection of Figueroa Street and North San Fernando Road. The groundwater depth measured in these wells ranges from about 32.7 feet north of the Downtown Plan Area boundary to 244.6 feet near the southeast corner of the site. Construction activities overlying areas with shallower groundwater depth could expose groundwater resources in the Downtown Plan Area to contamination.

The risk of groundwater contamination during construction is minimal and would most likely occur due to spills or leaks from equipment or materials used in construction. As previously discussed, LAMC Article 4.4 requires that a project include construction BMPs to prevent contamination of stormwater and runoff in its project plans. These BMPs are subject to City review and are required to be implemented during construction. Developers of individual project sites one acre or more in size are also required to prepare a SWPPP, which similarly includes BMPs to prevent contamination of stormwater and runoff during construction. Typical construction BMPs to prevent stormwater contamination would also prevent contamination of groundwater resources, as exemplified by the following BMPs:

- Construction equipment and vehicles shall be properly maintained.
- All materials shall be properly stored and transported.
- Fuels will be stored in secure areas.

With required identification and implementation of appropriate construction BMPs, project impacts to groundwater resources would be ***less than significant***.

New Zoning Code Impact

As discussed in the Existing Conditions section, the City currently produces local groundwater from the San Fernando and Sylmar Groundwater Basins. The New Zoning Code references LID requirements to ensure application of groundwater standards at the project level. Additionally, the New Zoning Code's landscaping requirements include regulations related to minimum standards for planted areas (which would support LID objectives on permeability and stormwater capture), which through future community plan updates or amendments would be applied outside of the Downtown Plan Area. These regulations would likely result in increased groundwater recharge. The content of the New Zoning Code would not repeal, amend, or conflict with existing regulations or uniformly applied development standards and policies pertaining to groundwater supply and recharge.

The New Zoning Code would provide options for a range of zone districts that could be applied elsewhere in the City through future community plan updates or amendments. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and project-specific impacts related to groundwater supply and recharge. A ***less than significant impact*** would occur.

Mitigation Measures

None required for either the Downtown Plan or the New Zoning Code.

Threshold 4.9-3	Would the Proposed Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces, in a manner which would: (i) Result in substantial erosion or siltation on- or off-site; (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) Impede or redirect flood flows?

Impact 4.9-3

Downtown Plan: The eastern boundary within the Downtown Plan area is located in a 100-year flood hazard area. However, no development is proposed in this area. The Downtown Plan would accommodate redevelopment of infill sites in an already urbanized area and, therefore, would not substantially alter Downtown Plan Area drainage patterns. In addition, future development projects in the Downtown Plan Area would be required to incorporate BMPs to manage stormwater and reduce runoff during construction and operation, and industrial sources would be subject to additional stormwater management and discharge requirements under the NPDES program for industrial uses. Impacts would be ***less than significant.***

New Zoning Code: The New Zoning Code would not substantially alter drainage patterns, drainage capacity, or stormwater runoff. Additionally, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid alterations to drainage patterns and runoff. The New Zoning Code would not impede or redirect flows within a 100-year flood hazard area. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This impact would be ***less than significant*.**

Downtown Plan Impact

As discussed in Section 4.9.2 *Environmental Setting*, the FEMA FIRMs identify a 100-year flood zone that is limited to the Los Angeles River channel and embankments along the eastern boundary of the Downtown Plan Area. Because future development would occur outside this flood zone area, Downtown Plan implementation would not place structures in the 100-year flood hazard area that would impede or redirect flood flows.

The Downtown Plan Area is urbanized and almost entirely paved and developed, with the exception of parks and other green spaces. Therefore, new Downtown Plan Area development would not substantially alter Downtown Plan Area drainage patterns. Consequently, reasonably expected growth from the Downtown Plan would not alter the drainage pattern of the Downtown Plan Area to an extent that would result in substantial erosion, siltation, or flooding on- or off-site.

Although Downtown Plan implementation would increase the intensity of uses and residential density in the Downtown Plan Area, it is not expected to result in substantial additional sources of polluted runoff. The Downtown Plan would primarily expand capacity for residential, commercial, retail, and light industrial uses. These uses are not associated with high levels of stormwater pollution; examples of contaminants associated with these uses include garbage, leaked vehicle fuels, and household products. In addition, any new development or re-development projects would be required to incorporate design BMPs to capture and treat runoff, in accordance with regulations deriving from the Los Angeles County NPDES MS4 permit (i.e., SUSMP, LID Ordinance, LID Handbook).

The Downtown Plan allows for some industrial development under the Hybrid Industrial and Markets General Plan designations. These designations are intended to support primarily light industrial uses and research and development (R&D) facilities that are not expected to generate high levels of new pollutants in comparison to traditional heavy industrial sources (e.g., refinery, heavy manufacturing). Light and heavy Industrial uses permitted in the Production General Plan designation would be subject to additional policies and regulations to protect water quality. Specific industrial uses are subject to additional regulatory requirements under NPDES and the LAMC. For example, transportation facility stormwater management practices are regulated under the Category 8 NPDES Industrial Permit, while light manufacturing falls under the Category 11 Industrial Permit (US EPA 2017). The LAMC also has commercial and industry-specific requirements, such as waste discharge requirements for commercial and industrial uses. As discussed under Impact 4.9.1, construction activities would be required to include BMPs to prevent stormwater contamination and reduce runoff under LAMC Article 4.4 and potentially the NPDES General Construction Permit. Therefore, future Plan Area development would not introduce substantial additional sources of polluted runoff.

The Downtown Plan contains a number of policies that would potentially reduce runoff from the Downtown Plan Area. The following policies strive to expand the amount of pervious surface in the Downtown Plan Area, which would increase natural infiltration:

- LU 41.3. Encourage the development of pedestrian paseos and internal courtyards to allow for internal circulation.
- LU 41.5. Support an improved public realm, including a range of open space types that can offer opportunities for culturally relevant and multi-generational recreation, rest, and social interaction
- SO 1.1. Find opportunities to create new parks and other open space through tools such as the transfer of development rights, public outdoor amenity space incentives, non-traditional interventions in the public right-of-way, and as a part of major public projects.
- SO 1.8. Support the development of catalytic new parks and reinvestment in existing parks. Namely:
    - Pershing Square
    - Park 101
    - 6th Street Park
    - A new large park in the Fashion District

The following policies also support stormwater management:

- LU 15.3. Create a network of well-maintained public and private green infrastructure by incentivizing the use of trees, eco roofs, vertical gardens, stormwater facilities, and landscaped amenity areas.
- LU 16.5. Support Citywide water use reduction goals by focusing on water management practices, and stormwater capture and treatment in Downtown that can increase local water supply.

Because implementation of the Downtown Plan would not significantly alter the existing drainage pattern, development and construction of projects would be required to implement stormwater BMPs, and because the Downtown Plan includes open space and landscaping requirements, and policies to support stormwater infiltration and management, future development in the Downtown Plan Area would not generate a substantial increase in runoff that would exceed the capacity of existing storm drains. Impacts related to drainage and runoff would be ***less than significant.***

New Zoning Code Impact

As discussed in the Existing Conditions section, 100-year flood hazard areas comprise 30 square miles within the City. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and project-specific impacts related to 100-year flood hazard areas, including the placement of structures which would impede or redirect flows.

The New Zoning Code would not substantially alter drainage patterns, drainage capacity, or stormwater runoff. In fact, the New Zoning Code references LID standards intended to improve site permeability and reduce stormwater runoff in order to incorporate required stormwater management features into overall site and landscape design. Additionally, the New Zoning Code's landscaping requirements include regulations related to minimum standards for planted areas, which would support LID objectives on permeability and stormwater capture. Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development standards and policies pertaining to stormwater runoff and drainage.

The New Zoning Code would provide options for a range of zone districts that could be applied elsewhere in the City through future community plan updates or amendments. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and project-specific impacts related to drainage patterns and capacity, and stormwater runoff. A ***less than significant*** impact would occur.

Mitigation Measures

None required for either the Downtown Plan or the New Zoning Code.

Threshold 4.9-4	Would the Proposed Project be in flood hazard, tsunami, or seiche zones, thus risking release of pollutants due to project inundation?

Impact 4.9-4 **Downtown Plan**: The Downtown Plan Area is not at risk for inundation by seiche, tsunami or mudflow. Impacts would be ***less than significant.***

New Zoning Code: The New Zoning Code would not increase hazards associated with seiche, tsunami, and mudflows. This impact would be ***less than significant.***

Downtown Plan Impact

As discussed above, the Downtown Plan Area is located in the inundation areas of two regional dams, Sepulveda Dam and Hansen Dam, and a local reservoir, the Elysian Reservoir.

The Sepulveda Dam and Hansen Dam are owned and operated by the U.S. Army Corps of Engineers (the Corps) and is subject to the Corps' Dam Safety Program (Corps 2017a and b). As part of this program, the Corps performs a risk-informed screening process to classify dams based upon confirmed or unconfirmed dam safety issues, the probability of failure, and the magnitude of life or economic consequences should failure occur. Both the Sepulveda Dam and Hansen Dam received a Dam Safety Action Class (DSAC) III rating in March 2009, which indicates that the dams are significantly inadequate or that the magnitude of consequences combined with the probability of failure is moderate to high. Both dams received a DSAC III rating because of three identified scenarios of potential structural failure:

- Deformation between embankment/outlet interface, resulting from the Maximum Credible Earthquake.
- Deformation of the embankment could cause loss of embankment height.
- Failure from overtopping resulting from a Maximum Probable Flood.

As a result of this determination, the Corps has implemented risk reduction measures for each dam that consist of physical inspections under site-specific thresholds and annual updates to the Emergency Action Plan and Notification Sub-plan. Because the Corps is mitigating identified risks related to the Sepulveda and Hansen Dams, and regularly inspects and evaluates dams for compliance with the Federal Guidelines for Dam Safety, the potential risk for significant flooding from dam failure is low.

The type of reasonably expected development from the Downtown Plan is typical of urban environments. Under the Downtown Plan, the open space areas within the Downtown Plan Area would be preserved and no development would occur within the potential inundation areas associated with the Los Angeles River. While the Downtown Plan would increase overall development capacity in the Downtown Plan Area, it would not cause or accelerate the potential for floodings, including from sudden release of water from the Hollywood Reservoir or the Mulholland Dam. In fact, the redevelopment of Downtown Plan Area properties with new development that meets current standards related to detention/retention of site runoff would be expected to incrementally reduce overall flood hazards.

The Elysian Reservoir is a 55-million gallon reservoir that has traditionally supplied water to people in Downtown Los Angeles and surrounding communities. In 2008, the reservoir was drained due to water quality issues (J Williams 2008). In 2012, the LADWP voted to cover up the reservoir's water with a giant rubber cap to meet federal water quality guidelines. In contrast to the dams described above, the reservoir has a much smaller capacity (55 million gallons versus 5.6 billion for the Sepulveda Dam) and functions as auxiliary water storage, rather than as flood control. It is also located in a natural canyon and surrounded by parkland and, if flooded, would drain along an undeveloped path into the Los Angeles River, located 0.2 mile to the southeast. These features, along with future covering of the reservoir water supplies, reduce

the risk of loss, injury, or death from flooding associated with the reservoir. Reasonably anticipated development from the Downtown Plan would increase the number of people and structures who would be exposed to potential flooding from the Sepulveda Dam, Hansen Dam, and Elysian Reservoir. However, the risk of dam failure and flooding from the reservoir is low. In addition, no component of the Downtown Plan would increase the potential for flooding associated with any of these dams.

The Downtown Plan Area is located approximately 12 miles from the coastline and is not at risk of inundation from a tsunami (Los Angeles County Enterprise Geographic Information Systems 2017). The Downtown Plan Area is also not at risk from mudflow; it is located in a major urban center with minor hillside areas in its northern portion that have been identified as having small, shallow, surfacal landslides (Los Angeles 1996). Seiches, or standing waves in an enclosed or partially enclosed body of water, can quickly alter the height of the water body and typically have localized impacts limited to the water body and waterfront areas. The water body nearest to the Downtown Plan Area is the Elysian Reservoir, mentioned above, located half a mile to the north. However, there is no existing or planned development adjacent to the reservoir, and the water surface will also be covered by a rubber lid in the near future, which would help prevent the occurrence of a seiche. Because the Downtown Plan Area would not be exposed to inundation by seiche, tsunami, or mudflow, impacts would be ***less than significant***.

New Zoning Code Impact

As discussed in the Existing Conditions section, there are 12 dams within the City boundaries, as well as several dams outside of the City boundaries that have the potential to cause inundation within the City. Tsunami inundation areas occur within the coastal areas of the City, including San Pedro and Los Angeles Harbor. Additionally, seiches may cause inundation in areas near enclosed water bodies. Mudflows also have the potential to occur in hillside areas. Citywide growth in Los Angeles would increase the potential exposure of people and property to hazards associated with flooding, mudflows, seiches, and tsunamis, however, the risk would be low, and due to the modularity of the New Zoning Code, it is not known where or to what extent future growth may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative.

Furthermore, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan updates and associated zone changes would analyze potential community- and project-specific impacts related to flooding, seiche, tsunami, and mudflow. The content of the New Zoning Code would not repeal, amend, or conflict with existing regulations or uniformly applied development standards and policies pertaining to hazards associated with flooding, seiche, tsunami, or mudflow. A less than significant impact would occur.

Mitigation Measures

None required for either the Downtown Plan or the New Zoning Code.

Threshold 4.9-5	Would the Proposed Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact 4.9-5 **Downtown Plan**: The Downtown Plan would not conflict with the implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be ***less than significant.***

New Zoning Code: The New Zoning Code would not conflict with the

implementation of a water quality control plan or sustainable groundwater management plan. ***No impact*** would occur.

Downtown Plan Impact

As discussed in Thresholds 4.9-1 and 4.9-2, Future Downtown Plan Area development would be subject to federal, state, and local standards and regulations protecting water quality and hydrological resources. In addition, the Downtown Plan includes a number of policies to support stormwater management and improve water quality. Individual development projects would be required to comply with applicable regulations, standards, and policies, which would prevent violations of water quality standards and waste discharge requirements. Impacts related to obstruction of a water quality control plan would be ***less than significant***.

New Zoning Code Impact

As discussed in Thresholds 4.9-1 and 4.9-2, implementation of the New Zoning Code would not repeal, amend, or conflict with existing regulations. ***No impacts*** related to obstruction of a water quality control plan would occur.

Mitigation Measures

None required for either the Downtown Plan or the New Zoning Code.

CUMULATIVE IMPACTS

The geographic area to analyze cumulatively considerable recreation impacts includes the entire City of Los Angeles and surrounding areas.

Water Quality Standards/Water Quality Degradation

Construction and operation of new developments Citywide would potentially increase pollutants in surface waters. However, Section D of LAMC Article 4.4, *Stormwater and Urban Runoff Pollution Control*, requires owners or developers to implement stormwater pollution control requirements for construction activities and construction activities on a site of more than one acre would be subject to the NPDES Statewide General Construction Activity Stormwater Permit. In addition, all future developments would be required to comply with the LID Ordinance and Stormwater and Urban Runoff Pollution Control Ordinance, which require the inclusion of BMPs in a project's design to prevent, control and reduce stormwater pollutants. Continued enforcement of these requirements would reduce cumulative impacts to a less than significant level.

As discussed under Impact 4.9-1, Downtown Plan Area development would be subject to the above requirements, which would reduce impacts related to the Downtown Plan to a less than significant level. The New Zoning Code would only apply to the Downtown Plan Area at this time so analysis of impacts to other portions of the City would be speculative. Nevertheless, it is not anticipated that any provision of the New Zoning Code would adversely affect water quality. Based on this information, neither the Downtown Plan nor the New Zoning Code would cumulatively considerable contributions to a significant cumulative impact. Cumulative impacts would be ***less than significant*** related to water quality standards.

Groundwater

As discussed under Impact 4.9-2, groundwater withdrawals from much of the Central Basin are controlled by court adjudications that prevent depletion of groundwater supplies. While future Citywide development

would increase demand for LADWP water by adding population, this demand would be met in a number of ways other than increasing groundwater withdrawal, such as increasing the amount of water purchased from MWD, implementing water conservation measures, increasing use of recycled water, and/or implementing groundwater recharge projects. This, significant cumulative impacts to groundwater are not anticipated.

As discussed under Impact 4.9-2, future Downtown Plan Area development would not interfere substantially with groundwater recharge and may provide some benefits to groundwater recharge by replacing older development with new development subject to open space, landscaping, and stormwater BMP requirements that would increase pervious surfaces associated with development. The New Zoning Code would only apply to the Downtown Plan Area at this time so analysis of impacts to other portions of the City would be speculative. It is not, however, anticipated that any provision of the New Zoning Code would adversely affect groundwater. Based on this information, neither the Downtown Plan nor the New Zoning Code would have cumulatively considerable contributions to a significant cumulative impact. Cumulative impacts would be ***less than significant*** related to groundwater.

Drainage/Runoff

Growth throughout Los Angeles would generally increase the intensity of uses and residential density Citywide, which would generally increase impervious surface area and surface runoff. However, new development would be subject to current regulations derived from the Los Angeles County NPDES MS4 permit (i.e., SUSMP, LID Ordinance, LID Handbook), which require detention/retention of surface water such that peak runoff levels do not increase. Compliance with these requirements would minimize impacts to regional surface hydrology and, in instances involving redevelopment of developed sites, peak runoff levels may actually decline. Thus, significant cumulative impacts related to drainage and runoff are not anticipated.

As discussed under Impacts 4.9-3 through 4.9-5, the Downtown Plan would primarily expand capacity for residential, commercial, retail, and light industrial uses. Downtown Plan Area development would generally involve redevelopment of already developed sites so would not substantially increase impervious surface area or runoff. New development would also be subject to the regulations cited above, which in many cases would actually reduce peak runoff rates. The New Zoning Code would only apply to the Downtown Plan Area at this time so analysis of impacts to other portions of the City would be speculative. It is not, however, anticipated that any provision of the New Zoning Code would alter stormwater runoff rates or otherwise adversely affect hydrological conditions. Based on this information, neither the Downtown Plan nor the New Zoning Code would have cumulatively considerable contributions to a significant cumulative impact. Cumulative impacts would be ***less than significant*** related to drainage or surface runoff.

Flood Hazards

As discussed under Impact 4.9-3, 100-year flood hazard areas comprise 30 square miles Los Angeles and include areas near Chatsworth Reservoir, Hansen Dam, Tujunga Wash, the Port of Los Angeles, and portions of central Los Angeles, as well as various washes throughout the City that flow north and south. New development in these areas would be subject to local flood control requirements, which require that the design of developments avoids 100-year flood hazards and does not substantially increase flood risk on other properties. Continued implementation of these requirements would reduce cumulative flood impacts to a less than significant level.

As discussed under Impacts 4.9-3 and 4.9-4, no portion of the Downtown Plan Area that is proposed for new development is within a 100-year flood hazard zone. Thus, the Downtown Plan would not expose new development to significant flood hazards or impede flows within a 100-year flood hazard area. The New Zoning Code would only apply to the Downtown Plan Area at this time so analysis of impacts to other

portions of the City would be speculative. Nevertheless, no provision of the New Zoning Code is anticipated to expose new development to significant flood hazards or increase flooding at other properties. Based on this information, neither the Downtown Plan nor the New Zoning Code would have cumulatively considerable contributions to a significant cumulative impact. Cumulative impacts would be ***less than significant*** related to flood hazards.

Levee/Dam Inundation

As discussed under Impact 4.9-4, there are 12 dams within the City boundaries, as well as several dams outside of the City boundaries that have the potential to cause inundation in portions of the City. Citywide growth would increase the exposure of people and property to flooding from any of these dams. However, the risk would be low and new development would not increase the potential for a flood event at any of these dams. Therefore, cumulative impacts would not be significant.

Reasonably anticipated development from the Downtown Plan would also increase the number of people and structures who would be exposed to potential flooding from the Sepulveda Dam, Hansen Dam, and Elysian Reservoir. However, as noted above, the risk of dam failure and flooding from the reservoir is low and the Downtown Plan would not increase the potential for flooding associated with any of these dams. The New Zoning Code would only apply to the Downtown Plan Area at this time so analysis of impacts to other portions of the City would be speculative. Nevertheless, no provision of the New Zoning Code would increase the potential for a flood event at any dam that could potentially affect the City. Based on this information, neither the Downtown Plan nor the New Zoning Code would have cumulatively considerable contributions to a significant cumulative impact. Cumulative impacts would be ***less than significant*** related to levee or dam inundation.

Seiche/Tsunami/Mudflow

As discussed under Impact 4.9-4, tsunami inundation areas occur in the coastal areas of the City, including San Pedro and Los Angeles Harbor. Additionally, seiches may cause inundation in areas near enclosed water bodies, while mudflows have the potential to occur in hillside areas. Citywide growth in Los Angeles would increase the potential exposure of people and property to hazards associated with seiches, tsunamis, and mudflow. However, the risk would be low and new development would not increase the potential for seiches, tsunamis, or mudflow. Therefore, cumulative impacts would be less than significant.

The Downtown Plan Area is not at risk of inundation from a tsunami or mudflow. The water body nearest to the Downtown Plan Area is the Elysian Reservoir, located half a mile to the north. However, there is no existing or planned development adjacent to the reservoir, and the water surface will also be covered by a rubber lid in the near future, which would help prevent the occurrence of a seiche. Therefore, the Downtown Plan Area would not be exposed to inundation by seiche, tsunami, or mudflow. The New Zoning Code would only apply to the Downtown Plan Area at this time so analysis of impacts to other portions of the City would be speculative. Nevertheless, no provision of the New Zoning Code would increase the potential for seiches, tsunamis, or mudflow. Based on this information, neither the Downtown Plan nor the New Zoning Code would have cumulatively considerable contributions to a significant cumulative impact. Cumulative impacts would be ***less than significant*** related to these hazards.

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4.10 LAND USE AND PLANNING

This section addresses impacts related to the City's land uses and planning efforts. Topics include the potential to physically divide an established community, inconsistencies with applicable land use plans and policies, and inconsistencies with adopted habitat conservation plans. Key sources used to gather information on the City's zoning and land use policies included the City's Zone Information Map Access System (ZIMAS, http://zimas.lacity.org/; Los Angeles Department of City Planning [LADCP] 2017a), the City's General Plan (https://planning.lacity.org/GP_elements.html; LADCP various dates), and the Southern California Association of Governments (SCAG's) 2016-2040 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) (http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx; SCAG 2016-2040 RTP/SCS).

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

Citywide Existing Conditions

The City of Los Angeles encompasses roughly 478 square miles, including 5 square miles of water area and just under 472 square miles of land area consisting of 35 separate community planning areas. Land uses in the City are diverse and vary widely by community planning area. Residential land uses make up the largest use in terms of acreage and are located throughout the City. Commercial and office uses also occur throughout the City and are located primarily along arterial corridors, at nodes at principal intersections, and in larger scale nodes and centers. Increasingly, centers such as Downtown include a mix of residential, commercial, and office uses. Industrial uses also occur throughout the City, but have major clusters along rail lines and near air and water ports. Institutional uses are dispersed throughout the City, with concentrations in Downtown (the Civic Center) and near major educational facilities, such as UCLA, USC, CSUN, and CSULA. Open space and recreational uses include parks, golf courses, and beaches, as well as areas such as the Santa Monica and Verdugo mountains, Ballona wetlands, and facilities such as Dodger Stadium, Staples Center, and the Los Angeles Memorial Coliseum.

Downtown Plan Area Existing Conditions

The Downtown Plan Area is currently developed with a mix of commercial, residential, public facilities, open space, and light industrial uses, which reflects its role as the governmental, cultural, entertainment, financial, employment, and industrial hub of Los Angeles (LADCP 2003). The area is replete with spaces of citywide and regional importance, including public spaces, such as the Los Angeles Public Library Building, Union Station, Los Angeles City Hall, and Grand Park; arts and cultural institutions, such as the Museum of Contemporary Art (MOCA), the Walt Disney Concert Hall, Mark Taper Forum, Ahmanson Theatre, Dorothy Chandler Pavilion, Broad Museum, and Redcat Theater; large sports and entertainment venues, such as Staples Center and the Los Angeles Convention Center; and office centers, such as the Citigroup Center, Ernst & Young Plaza, Southern California Gas Company Complex, and Wilshire Grand Center. Surrounding communities include Silver Lake-Echo Park Elysian Valley to the north, Westlake to the west, South Los Angeles and Southeast Los Angeles to the south, Boyle Heights to the east, and Northeast Los Angeles to the northeast.

The Downtown Plan Area is accessed by a number of freeways and major arterials. Freeways serving Downtown include U.S. 101, and I-5, I-10, and I-110. Major east-west arterials include First Street, and Wilshire, Olympic, Pico, and Venice boulevards. Major north-south arterials include Figueroa Street and Grand, Main, Central, and Alameda avenues. Downtown is also the center of the region's growing rail transit system, with six commuter lines operated by Metrolink and five rapid-transit rail lines and local and regional bus service operated by Metro. Major Metro stations in the district include Los Angeles Union Station, Civic Center/Grand Park station, Pershing Square station, 7th Street/Metro Center station, Pico station, and Little Tokyo/Arts District station. The area circulation system is described in greater detail in Section 4.15, *Transportation/Traffic*.

The Downtown Plan Area encompasses the City's Historic Core and other iconic Los Angeles neighborhoods, including the Financial District, Bunker Hill, South Park, Chinatown, Skid Row, Fashion District, and Little Tokyo. Major Downtown neighborhoods are described below.

- **Financial District and Commercial Core.** The commercial core of Downtown is generally located in the central-west side of the Downtown Plan area, and contains both modern and historic office buildings, hotels, restaurant and retail destinations, and entertainment and nighttime attractions. These areas have the highest intensity of land uses, with the tallest buildings in the City. This portion of the Downtown Plan Area is well-served by transit, including regional and local bus lines, as well as Metro Rail stations connecting Downtown to the rest of the City of Los Angeles through the Red, Purple, Blue, Gold, and Expo lines.[1] Additional infrastructural improvements are planned for this area, such as streetscape and mobility improvements for 7th Street, the primary pedestrian corridor for this area, and the Downtown Streetcar route. Buildings are primarily mid- and high-rises and include many of the skyscrapers that define the Downtown Los Angeles skyline.
- **Bunker Hill and Cultural Corridor.** Bunker Hill and the cultural corridor along Grand are north of the Financial District. They serve as both a center for office activity and a cultural corridor, featuring institutional and cultural landmarks including the Broad Museum, Walt Disney Concert Hall, and Dorothy Chandler Pavilion, and the Colburn School. Integrated with these uses are mixed-use commercial and residential buildings, and a planned Metro station currently under construction at 2nd Street and Hope Street that is part of the Metro Regional Connector Project which is currently under construction.
- **Historic Core and Entertainment Center.** The Historic Core and entertainment center along Broadway are located in the heart of the Downtown Plan Area. This area has one of the largest collections of historic buildings not just in Downtown Los Angeles, but in the country. As a result, the built environment is generally consistent, with 12-story Beaux Arts and Art Deco buildings built out to the property lines and continuing active uses on the ground floor. While many of these structures were originally built to serve financial and commercial offices, much of the building stock has been adapted into residential apartments and condominiums.
- **South Park.** South Park is in the southwest portion of the Downtown Plan Area. It is a walkable, residential mixed-use neighborhood, supported by commercial, office, and medical uses, and served by a Metro transit station. A majority of the development in South Park occurred in the past decade, with structures commonly between six and twelve stories with active uses on the ground floor.
- **Convention Center Area and Los Angeles Sports and Entertainment District.** The Convention Center area sits in the southwestern portion of Plan area. It is the site of several of Los Angeles' foremost sports and entertainment venues, and is regulated by the Los Angeles Sports and Entertainment District Specific Plan (LASED). The district includes the Los Angeles Convention

[1] Starting as of late 2019, the Red Line is known as B Line, the Purple Line is known as the D Line, the Gold Line is known as the L Line, the Blue Line is known as the A Line, and the Expo line is known as the E Line.

Center, Staples Center, L.A. Live, Grammy Museum, and Microsoft Theater. It also includes hotel, commercial, office, entertainment, and residential uses.

- **Skid Row.** Skid Row is in the central portion of the Plan area, and is a residential neighborhood that has long served people in need. The community is home to family and social service organizations, permanent supportive housing, single room occupancy hotels, as well as homeless and unhoused community members. Structures in Skid Row range between one story and twelve stories in height.
- **Civic Center, El Pueblo, and Union Station.** The Civic Center is home to Federal, State, County, and local agencies and is the second largest concentration of governmental offices in the country. It contains civic and architectural landmarks, as well as one of Downtown's primary open spaces, Grand Park. El Pueblo de Los Angeles Historical Monument is a historical district that includes areas that once formed the original pueblo, or "town," from which Los Angeles later developed. El Pueblo encompasses approximately 44 acres surrounding the Los Angeles Plaza. It contains a number of historical buildings and features, including the Nuestra Seňora La Reina de Los Angeles Church (1822), Avila Adobe (1818), the Olvera Street market, and Pico House (1870) (City of Los Angeles 2018). Los Angeles Union Station is in the northeastern portion of the Plan area, and east of Union Station is the Los Angeles River and to the west is the City's historic Olvera Street and El Pueblo de Los Angeles State Historic Park, as well as the Civic Center. Union Station is the City's principal transportation hub, home to local, regional, and national transit providers, and the planned site for the California High Speed Rail (HSR) Los Angeles station.
- **Arts District.** The Arts District is located in the eastern portion of the Downtown Plan Area. It is a mixed use environment consisting of production, manufacturing, and creative office uses, and is home to a growing residential population. Many of the existing low-scale warehouses and industrial buildings have been converted into live/work, commercial, and institutional uses. New mixed-use buildings with housing, commercial, light production, restaurants, retail establishments, and business incubation uses have been constructed and other similar projects have been proposed.
- **Chinatown and Victor Heights/Figueroa Terrace.** Chinatown is home to a long-standing variety of small and family-owned businesses, family associations, and institutional services that serve the Chinese-American population throughout the region, as well as other communities. The neighborhood also includes a number of historic cultural resources that are generally Asian eclectic in style. The historic center is characterized by walkable commercial corridors and internally oriented courtyard and mid-scale development. Building heights range from one-story single family homes and retail establishments to multi-family and mixed-use mid-rise buildings. Victor Heights, also known as Figueroa Terrace, is a multi-generational residential community with primarily multi-family housing such as townhomes, garden courts, and apartments that range from one to five stories and are interspersed with single family homes.
- **Little Tokyo.** Little Tokyo is a historic-cultural neighborhood and the symbolic center for the Los Angeles Japanese-American community. The neighborhood contains a variety of religious and cultural institutions as well as a mix of residential, commercial, and other institutional uses. Small-scale shops, restaurants, and storefronts with unique architectural features occupy buildings that range between one and twenty stories in height. Little Tokyo contains the Little Tokyo First Street National Historic Landmark, which is a historic Japanese commercial district originally settled in the late 19th century (National Park Service [NPS] 2018). The historic district is roughly bounded by 301-349 East First St., 110-120 Judge John Aiso Street, and 119 S Central Avenue.
- **Industrial, Manufacturing, and Wholesale Districts.** These districts are located in the southeast and south-central portion of the Downtown Plan Area and are characterized by large-format and medium to low-scale buildings with wholesale, warehousing and distribution uses. These districts also include a mix of additional uses, including social services, supportive housing, nonprofit, and

institutional organizations that serve as an anchor for employment in the City. Some sub-districts, such as the Flower Market and Fashion District, have high levels of pedestrian activity with fine-grained alleys and market halls that attract patrons from across the City and region.

- ***Production.*** The Production area is located in the southern most portion of the Downtown Plan Area with low-scale one to three story buildings that predominantly house industrial and manufacturing uses. The Production area serves as a jobs base for the region and offers employment in industries such as clean technology, heavy industrial, industrial manufacturing, and fabrication with very limited retail uses.

CURRENT GENERAL PLAN LAND USE DESIGNATIONS AND ZONING

Adopted in 1996, the City's General Plan Framework Element is a strategy for long-term growth and development, setting a citywide context for the update of the 35 Community Plans and other citywide general plan elements. While the General Plan Framework Element incorporates a diagram that depicts the generalized distribution of centers, districts, and mixed-use boulevards throughout the City, the specific General Plan Land Use Designations are established and applied by the community plans.

The existing General Plan designations for the Downtown Plan Area are established in the Central City Community Plan (adopted in 2003) and the Central City North Community Plan (adopted in 2000). (**Figure 4.10-1** provides the existing General Plan Land Use Maps for the two Community Plan Areas.)

The following section summarizes the General Plan Framework Element designations throughout the City, categorized by broader land use categories of residential, commercial, industrial, open space, and public facilities land uses. This is followed by a description of current land uses for the Downtown Plan Area, as established in Central City and Central City North Community Plans.

Residential

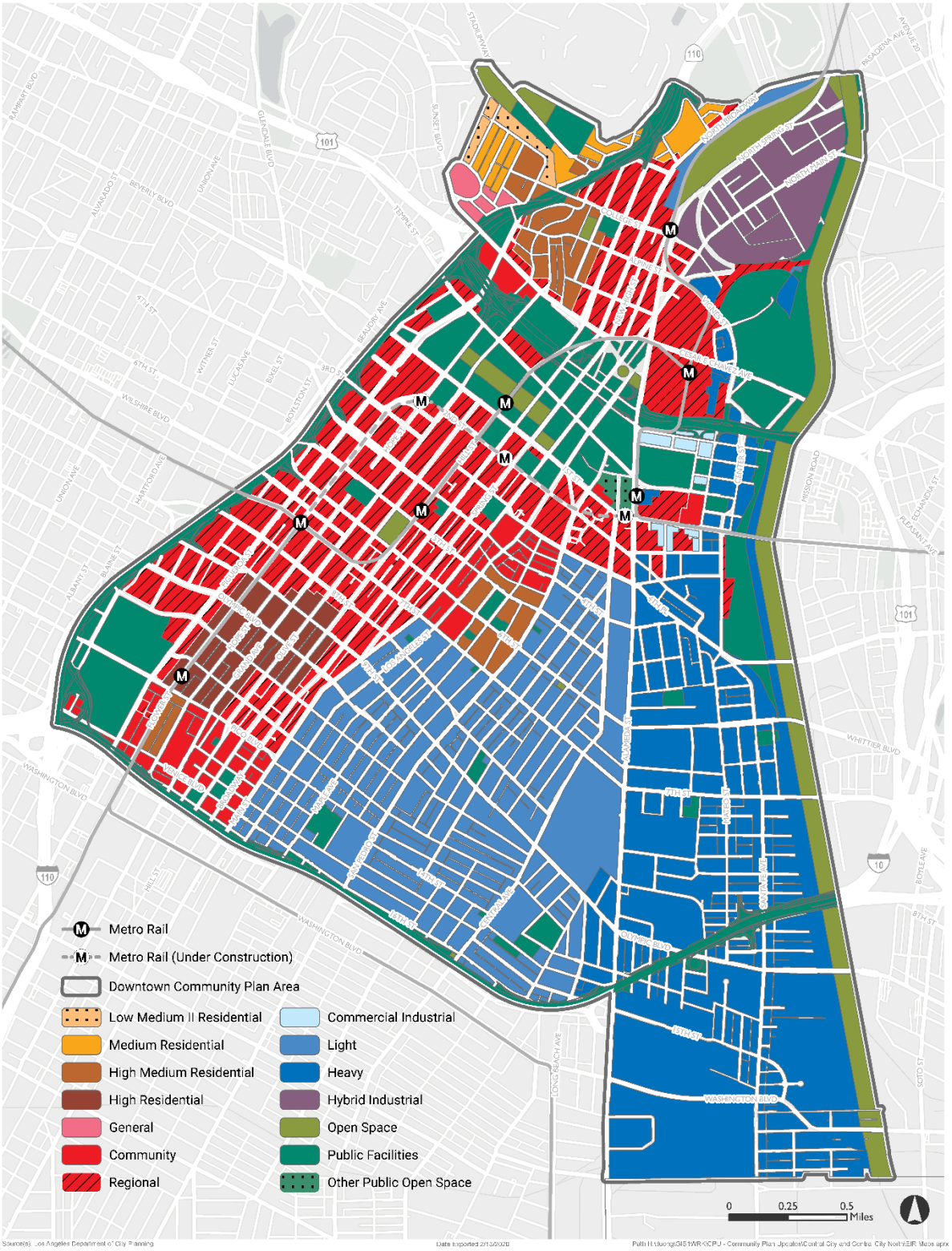
Citywide

Residential General Plan land use designations in the City consist of low-density and multi-family residential. Low-density residential ranges from one to nine dwelling units per acre (du/ac) using the categories Minimum, Very Low, Very Low I, Very Low II, and Low. Multi-family residential ranges from Low Medium I (10-17 du/ac), Low Medium II (18-29 du/ac), Medium (30-55 du/ac), High Medium (56-109 du/ac), and High (110-218 du/ac), although some community plans encourage greater densities. In addition, residential uses are permitted within Commercial land use designations.

Downtown Plan Area

All existing residential land use designations applied within the Downtown Plan area are multi-family, and include Low Medium II, Medium, High Medium, and High. These are applied primarily in South Park and in the northwest portion of Central City North. South Park is predominantly designated High Residential with R5 zoning, and Height District 3-D and 4-D, allowing for up to 6.0:1, and 13.0:1 FAR with no height limitations through a transfer of development rights process. Residential designations are also applied in Bunker Hill and Little Tokyo, where development can reach up to 6.0:1 FAR. The western portion of the Skid Row neighborhood is designated High Medium Residential with R5 zoning and Height District 2D and development can reach 3.0:1 FAR. Victor Heights and Figueroa Terrace are designated Low Medium II, Medium and High Medium Residential with a mix of RD1.5, R3 and R4 Residential zoning, and Height District 1, allowing for up to 45 feet in RD1.5 and R3 zones and no height limitations in the R4 zones.

Figure 4.10-1 Current Downtown Plan Area General Plan Designations



Commercial

Citywide

Commercial General Plan land use designations in the City consist of Regional, Community, Neighborhood, Highway Oriented, Limited, and General Commercial. Regional Commercial areas allow for the highest development potential and widest variety of uses, including corporate and professional offices, retail commercial, offices, and personal services, eating and drinking establishments, entertainment, major cultural facilities, commercial overnight accommodations, and mixed-use structures that integrate housing with commercial uses. Community, Neighborhood, Highway-Oriented, and General Commercial designations may restrict various uses and development potential is typically lower than the Regional designation. Limited Commercial is the most restrictive designation. All commercial areas allow multi-family residential development.

Downtown Plan Area

Within the Central City Community Plan Area, the Regional Commercial designation is applied to the western portion of the Plan Area, primarily south of 1st Street, north of Pico Boulevard and west of North Main Street. The area is predominantly zoned with C2 Commercial zoning, allowing for a mix of uses including commercial, office, retail, housing, hotel, schools, auto sales, and limited manufacturing uses. There is also C4 Commercial zoning, which allows for a variety of C2 uses such as commercial, office, retail, multi-unit residential, hotel, schools, and auto sales, with limitations. This area does not have density limitations, due to the Greater Downtown Housing Incentive Ordinance, which applies to the entirety of the Central City Community Plan area. The area is predominantly assigned Height District 3-D and 4-D and can reach up to 6.0:1 with no height limitations, and 13.0:1 FAR with no height limitations through a transfer of development rights process.

The Community Commercial designation is applied to the portion of the Plan Area south of Pico Boulevard and west of Main Street, and along the eastern side of the Historic Core and in the Toy District. Buildings are primarily low- and mid-rises and support smaller businesses, such as restaurants, used auto stores, medical or dental clinics, and nurseries.

Little Tokyo is predominantly designated Regional Center Commercial with C2 Commercial zoning and Height District 4D, allowing for up to 6.0:1 FAR with no height limitations. The area has Qualifying [Q] Conditions, which limit ground floor activity to neighborhood-serving uses. Little Tokyo is also regulated by the Little Tokyo Community Design Overlay District (CDO).

In the Central City North Community Plan Area, land designated for commercial is primarily concentrated in Chinatown, north and east of the intersection of Alameda Street and Cesar E. Chavez Avenue. The commercial core of Chinatown is designated Regional Center Commercial with C2 Commercial zoning, and Height District 2, allowing for up to 6.0:1 FAR with no height limitations.

Industrial

Citywide

Industrial General Plan land use designations in the City consist of Commercial Manufacturing, Hybrid, Limited, Light, and Heavy Industrial. Hybrid industrial areas allow for a mix of residential and clean, light industrial uses. Limited and Light Industrial designations are more restrictive to allow for greater compatibility with residential uses. Heavy industrial areas allow the widest range of industrial, machinery, and manufacturing uses, and do not permit any by-right residential uses.

Downtown Plan Area

Industrial land use designations are generally applied east of Main Street below Seventh Street, east of San Pedro Street from Seventh to Third Street, and east of Alameda Street from Third Street to the Hollywood Freeway. This consists of Light Manufacturing and Heavy Manufacturing in the Central City Plan Area. These areas are zoned for CM, MR2, M2, and M3, with Height Districts allowing for up to a 3.0:1 FAR, and up to a 6:1 through a transfer of floor area process west of San Pedro Street.

The northeast portion of the Central City North Community Plan area is designated Hybrid Industrial and regulated by the Cornfield Arroyo Seco Specific Plan (CASP). South of the 101 Hollywood Freeway, land is predominantly designated Heavy Manufacturing, with M3 Heavy Industrial zoning, which allows for the widest range of industrial uses including commercial, manufacturing uses, and storage. The area assigned Height District 1 allows for up to 1.5:1 FAR with no height limitations. The area is regulated by the River Improvement Overlay (RIO).

Open Space

Citywide

Open space land use designations in the City include park and recreation facilities (bicycle trails, equestrian trails, walking trails, park land/lawn areas, child care facilities, and athletic fields), natural resource preserves (forest land, waterways, watersheds, agricultural lands, areas containing mineral deposits), ecological preserves and habitat protection sites, closed sanitary landfills sites, public water supply reservoir (uncovered), and water conservation areas such as percolation basins and floodplain areas.

Downtown Plan Area

The Open Space land use designation is applied in various locations throughout the Downtown Plan Area and includes approximately 226 acres of land. Areas designated for Open Space include 6th & Gladys Park, Pershing Square, Grand Park, and the Los Angeles State Historic Park.

Public Facilities/Institutional

Citywide

Public Facilities/Institutional General Plan land use designations in the City include fire and police stations, public libraries, post offices and related facilities, public health facilities such as clinics and hospitals, public elementary and secondary schools, among others.

Downtown Plan Area

The Public facilities land use designation is applied primarily north and south of Temple Street to the Civic Center and El Pueblo areas. These areas are predominantly zoned PF, and permit uses including public libraries, schools, police and fire stations, freeways, and institutional uses. Much of the area is assigned a Height District 2-D, and development in the Civic Center can reach up to 6.0:1 through a transfer of floor area process and development in El Pueblo can reach up to 3.0:1 FAR with unlimited height. The Union Station area is regulated by the Alameda District Specific Plan, which encourages a pedestrian-oriented and mixed-use business district with hotels, retail, entertainment, housing, cultural, and transit-related functions in medium and high-density development.

REGULATORY FRAMEWORK

Federal, State, and Local land use and planning laws, Regulations, and adopted plans applicable to the Downtown Plan are summarized below.

FEDERAL

There are no federal land use regulations applicable to the Proposed Project.

STATE

State Planning Law

State planning law (California Government Code Section 65300) requires every city and county in California to adopt a comprehensive, long-term general plan for the physical development of the jurisdiction and of any land outside its boundaries that, in the planning agency's judgment, bears relation to its planning (sphere of influence). A general plan should consist of an integrated and internally consistent set of goals and policies grouped by topic into a set of elements and guided by a jurisdiction-wide vision. State law requires that a general plan address seven elements or topics (land use, circulation, housing, conservation, open space, noise, and safety), but allows some discretion on the arrangement and content. Additionally, each of the specific and applicable requirements in the state planning law should be examined to determine if there are environmental issues within the community that the general plan should address, such as hazards or flooding.

State Density Bonus Law (Government Code Section 65915)

The State Density Bonus law (signed into law in 1979) requires jurisdictions to provide applicants with a density bonus and incentives or concessions for the production of housing development in which affordable housing is also provided. Eligible projects include housing developments with 10 percent housing for lower income households, 5 percent of the housing for very low income households, senior citizen housing, and 10 percent of the total dwelling units provided as affordable housing in condominium projects. The City has implemented the State Density Bonus Law in various municipal code sections of the LAMC.

On September 27, 2014, Governor Brown signed AB 2222, which amended sections of the State Density Bonus Law (Government Code Section 65915). AB 2222 requires that density bonus projects resulting in a loss of existing affordable and otherwise locally-regulated (i.e., rent-stabilized) housing units replace those units one-for-one. It also extends the affordability period from 30 to 55 years and expands the use of equity sharing in for-sale units. Several other clarifications of the existing law are also included, but they were not judged to represent a change to current City policy.

Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375 (SB 375))

The Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008) supports the state's climate action goals to reduce greenhouse gas (GHG) emissions through coordinated transportation and land use planning with the goal of creating more sustainable communities. Under the Sustainable Communities Act, the California Air Resources Board (ARB) sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, ARB established these targets for 2020 and 2035 for each region covered by one of the State's metropolitan planning organizations (MPO). ARB periodically reviews and updates the targets.

SB 375 requires metropolitan planning organizations (MPO) to prepare a "sustainable communities strategy" (SCS) in conjunction with their Regional Transportation Plan (RTP). The City of Los Angeles is a member of the SCAG MPO, which adopted the 2016-2040 RTP/SCS in 2016. The document provides integrated land use and transportation strategies and policies intended to reduce the region's GHG emissions from passenger vehicle use to meet the GHG reduction targets set by the California Air Resources Board. The RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept SCAG's determination that the SCS, if implemented, would meet the regional GHG targets. Downtown Plan consistency with the 2016-2040 RTP/SCS is analyzed under Impact 4.10-2.

Complete Streets Act (AB 1358)

Assembly Bill 1358, the Complete Streets Act (Government Code Sections 65040.2 and 65302), was signed into law by former Governor Arnold Schwarzenegger in September 2008. As of January 1, 2011, the law requires cities and counties, when updating the part of a local general plan that addresses roadways and traffic flows, to ensure that those plans account for the needs of all roadway users. Specifically, the legislation requires cities and counties to ensure that local roads and streets adequately accommodate the needs of bicyclists, pedestrians and transit riders, as well as motorists. At the same time, the California Department of Transportation (Caltrans) unveiled a revised version of Deputy Directive 64, an internal policy document that now explicitly embraces Complete Streets as the policy covering all phases of state highway projects, from planning to construction to maintenance and repair.

REGIONAL

2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The 2016-2040 RTP/SCS, the most recent SCAG RTP/SCS, was adopted by SCAG in April 2016 and approved by CARB. The RTP/SCS provides an integrated transportation and land use vision for Los Angeles, Orange, San Bernardino, Imperial, Riverside, and Ventura Counties (SCAG 2016-2040 RTP/SCS). The RTP portion of the 2016-2040 RTP/SCS identifies priorities, goals and policies, and performance measures for transportation planning and improvements to ensure that future projects are consistent with other planning goals for the area. Transportation projects being constructed within the SCAG region must be listed in the 2016-2040 RTP/SCS. The SCS portion of the 2016-2040 RTP/SCS presents an overall land use concept for the region with increasing focus on long-term emission reduction strategies for rail and trucks; expanding the region's high-speed and commuter rail systems; expanding active transportation; leveraging technological advances for transportation; and making the region more resilient to climate change. The RTP/SCS is intended to aid local jurisdictions in developing local plans and addressing local issues of regional significance.

Regional Housing Needs Assessment (RHNA)

The RHNA is a key tool used by SCAG and its member governments to plan for growth. The 5th cycle Final RHNA Allocation Plan was adopted by the SCAG Regional Council on October 4, 2012 and quantifies the need for housing within each jurisdiction between 2013 and 2021. Communities then plan and determine how they will address this need through the process of completing the housing elements of their general plans. The RHNA allows communities to anticipate growth, so that they can grow in ways that enhance quality of life, improve access to jobs, transportation and housing, and not adversely impact the environment. The RHNA is produced periodically by SCAG, as mandated by State law, to coincide with the region's schedule for preparing housing elements. It consists of two measurements: 1) existing need for housing and 2) future need for housing (SCAG 2012).

The existing need assessment is based on data from the most recent U.S. Census to measure ways in which the housing market is not meeting the needs of current residents. These variables include the number of low-income households paying more than 30 percent of their income for housing, as well as severe overcrowding. The future need for housing is determined primarily using the forecasted growth in households in a community, historical growth patterns, job creation, household formation rates, and other factors. The need for new dwelling units is then adjusted to account for an ideal level of vacancy needed to promote housing choice, maintain price competition, and encourage acceptable levels of housing upkeep and repair. The RHNA also accounts for units expected to be lost due to demolition, natural disaster, or conversion to non-housing uses. The sum of these factors – household growth, vacancy need, and replacement need – form the "construction need" assigned to each community. In addition, the RHNA considers how each jurisdiction might grow in ways that will decrease the concentration of low-income households in certain communities. The need for new housing is distributed among different income groups so that each community moves closer to the regional average income distribution.

Airport Land Use Compatibility Plan

An Airport Land Use Compatibility Plan is a planning document that contains policies for promoting safety and compatibility between public use airports and the communities that surround them. The Los Angeles County Airport Land Use Commission has adopted the comprehensive Los Angeles County Airport Land Use Compatibility Plan that covers all 15 airports within its jurisdiction, including those within the City of Los Angeles (Los Angeles County 2018). The Los Angeles International Airport, the Whiteman Airport, and the Van Nuys Airport are located in the City of Los Angeles. The Hollywood Burbank Airport is located adjacent to the City of Los Angeles boundary and a portion of the Hollywood-Burbank Airport's Airport Influence Area is located in the City of Los Angeles.

LOCAL

City of Los Angeles General Plan

California law requires that cities prepare and adopt a comprehensive, integrated, long-term General Plan to direct future growth and development. The General Plan is the fundamental policy document of a city. It defines how a city's physical and economic resources are to be managed and utilized over time. Decisions by a city with regard to the use of its land, design and character of buildings and open spaces, conservation of existing and provision of new housing, provision of supporting infrastructure and public and human services, and protection of residents from natural and man-caused hazards are guided by and must be consistent with the General Plan. State law requires general plans to contain seven elements: land use, circulation, housing, conservation, open space, noise, and safety. Cities can also adopt additional General Plan elements.[2] The Land Use Element of the City of Los Angeles General Plan is composed of 35 community plans, which are the official guides to the future development of the City. The 35 Community Plans guide the location and intensity of private and public uses of land; direct the arrangement of land uses, streets, and services; and encourage the economic, social, and physical health, safety, welfare, and convenience of people who live and work in the community. In addition to incremental updates to the City's Land Use Element through the Community Plan update program, the City of Los Angeles launched a program to update the City's General Plan in 2018. This effort will result in a new 20-year citywide plan for the sustainable development of the City.

[2] Effective in January 1, 2018, SB 1000, requires that when an agency updated more than two elements the agency is required to adopt an environmental justice element or include environmental justice related goals, policies, and objectives integrated in other elements, "that identifies disadvantaged communities within the area covered by the general plan of the city, county, or city and county, if the city, county, or city and county has a disadvantaged community."

The City's elements, other than land use, include:

- Framework Element
- Air Quality Element
- Conservation Element
- Housing Element
- Noise Element
- Open Space Element
- Service Systems Element/Public Recreation Plan
- Safety Element
- Mobility Element (Mobility Plan 2035)
- Plan for a Healthy Los Angeles

Some of the key elements are discussed below.

Framework Element

Vision for Growth and Guide for Community Plan Updates

The City's General Plan Framework Element (GPF) establishes the overarching guide for how Los Angeles will grow in the future. Adopted in 1996 and again in 2001, the Framework Element is a strategy for long-range growth and development, setting a citywide context for the update of Community Plans and citywide elements. The Framework Element responds to state and federal mandates to plan for the future by providing goals, policies, and objectives on a variety of topics, such as land use, housing, urban form, open space, transportation, infrastructure, and public services. The General Plan Framework Element's key guiding principles, summarized below, are advanced at the community-level through the Community Plans:

- *Grow strategically.* Should the City's population continue to grow, as is forecasted by SCAG, growth should be focused in a number of higher-intensity commercial and mixed-use districts, centers, and boulevards, particularly in proximity to transportation corridors and transit stations. This type of smart, focused growth links development with available infrastructure and encourages more walkable, transit-friendly neighborhoods, helping to ease reliance on the automobile, and minimize the need for new, costly infrastructure.
- *Conserve existing residential neighborhoods.* By focusing much of the City's growth in centers and along commercial corridors, the City can better protect the existing scale and character of nearby single- and multi-family neighborhoods. The General Plan Framework Element encourages the preservation of the unique character of different residential neighborhoods whenever possible.
- *Balance the distribution of land uses.* Maintaining a variety of land uses is crucial to the long-term sustainability of the City. Commercial and industrial uses contribute to a diverse local economy, while residential uses provide necessary housing for the community. Integrating these uses within smaller geographical areas can better allow for a diversity of housing types, jobs, services, and amenities to be located in close proximity to each other to improve transit access and reduce auto dependence.
- *Enhance neighborhood character through better development standards*. Better development standards are needed to both improve the maintenance and enhancement of existing neighborhood character, and ensure high quality design in new development. These standards are needed for all types of development; residential, commercial, and industrial uses.

- *Create more small parks, pedestrian districts, and public plazas.* While regional parks and green networks are an important component of the City's open space strategy, more small-scale, urban open spaces must be developed as well, as they are crucial to the quality of life of the City's residents. There are many opportunities at the community level to create public "pocket" parks as part of new developments, to enhance pedestrian orientation in key commercial areas, and to build well-designed public plazas.
- *Improve mobility and access.* The City's transportation network should provide adequate accessibility to jobs, services, amenities, open space, and entertainment, and maintain acceptable levels of mobility for all those who live, work, travel, or move goods in Los Angeles. Attainment of this goal necessitates a comprehensive program of physical infrastructure improvements, traffic systems management techniques, and land use and behavioral changes that reduce vehicle trips. An emphasis is placed on providing for and supporting a variety of travel modes, including walking, bicycling, public transit, and driving.
- *Identify a hierarchy of commercial districts and centers.* The Framework Element provides an overall structure and hierarchy for the City's commercial areas. This hierarchy, which includes Neighborhood Districts, Community Centers, Regional Centers, and Mixed-Use Boulevards, has helped shape the development and urban form of the City and will continue to do so in the future. Understanding this hierarchy helps us better understand the roles that these different types of "activity centers" play within our communities so that their unique characteristics can be enhanced.

The Framework Element of the General Plan will be amended to include new General Plan land use designations that are introduced as part of the Downtown Plan. The proposed designations are designed to convey the Downtown Plan's land use strategy and to facilitate their limited applicability in the Downtown Plan Area. The proposed land use designations and their objectives are described under Proposed General Plan Land Use section further below.

Mobility Plan 2035

Mobility Plan 2035, adopted in September 2016, as an update to the Transportation Element, serves as the circulation element of the General Plan (not including public utilities and facilities). Mobility Plan 2035 establishes new street designations, classifies each of the City's arterial streets and incorporates a "complete street" policy framework (i.e., the idea that transportation facilities should be designed for all types of users, including pedestrians, cyclists, and trucks, as well as passenger vehicles), thus providing a foundation for future policies and principles promoting residents' interaction with their streets.

Housing Element 2013 to 2021

The primary goal of the City's Housing Element is to provide policies, objectives, and programs that encourage a range of housing opportunities for all income groups. It proactively directs long-range citywide policy goals and objectives by quantifying growth in terms of housing needs. Pursuant to state law, the Housing Element must identify sites that can accommodate existing and future housing needs identified in the RHNA prepared by SCAG. Sites identified in the Housing Element can be developed with housing without the need for any discretionary zoning action by the City. The City's Housing Element identifies 443 sites in the Central City Community Plan Area and 453 sites in the Central City North Community Plan Area that could provide 17,893 and 11,490 net new units, respectively.

Los Angeles Municipal Code (LAMC)

Development in the City is also governed by the City of Los Angeles Zoning Code (Chapter 1 of the LAMC), which regulates development through zoning designations and development standards. The Comprehensive Zoning Plan of the City of Los Angeles (Zoning Ordinance) set forth in LAMC Section

12.00 et seq. includes development standards for zoning districts in the City. LAMC Section 13.00 et seq. includes development standards for various supplemental use districts in the City that apply to specific parcels. The LAMC is currently undergoing a comprehensive update to all Zoning Code sections as part of the re:code LA effort. re:code LA, which started in 2013 and will continue through 2020, will update the Zoning Code to make the Code more streamlined, visual, and easy to use. The existing Zoning Code regulations are not being repealed as part of this Project. The existing Zoning Code will continue to be located in Chapter 1 of the Los Angeles Municipal Code, while the New Zoning Code will be located in a new Chapter 1A of the Los Angeles Municipal Code. Relevant components of re:code LA are described in detail in Chapter 3.0, *Project Description*.

Affordable Housing Linkage Fee Ordinance

On December 13, 2017, Mayor Eric Garcetti passed the Affordable Housing Linkage Fee Ordinance. The ordinance requires developers to pay a fee for new development projects in order to mitigate the need for affordable housing associated with the new project. The ordinance exempts new development projects with at least 40 percent moderate-income dwelling units, 20 percent low-income households, 11 percent very low, or 8 percent extremely low-income dwelling units, public institution projects, hospitals, grocery stores, and other categories of development.

Residential Hotel Unit Conversion and Demolition Ordinance

The Residential Hotel Unit Conversion and Demolition Ordinance (RHO) prohibits conversion or demolition of dwelling units in a residential hotel without approval from the Housing + Community Investment Department (HCIDLA). The ordinance adds Article 7.1 to Chapter IV of the LAMC and amends Sections 91.106.4.1, 151.06, and 151.09 (City of Los Angeles 2008). The ordinance seeks to preserve dwelling units provided by residential hotels, which often serve as affordable housing for the very low income, elderly, and disabled (HCIDLA 2018).

Rent Stabilization Ordinance

LAMC Chapter XV encodes the City's Rent Stabilization Ordinance (RSO). Generally, the Rent Stabilization Ordinance (RSO) applies to rental properties that were built on or before October 1, 1978, as well as replacement units. The RSO applies to most dwelling units with the exception of single-family homes that solely occupy a parcel and caps annual rent increases for continuing tenants based on the Consumer Price Index averaged for a 12-month period.

Transit Oriented Communities Affordable Housing Incentive Program

The Transit Oriented Communities Affordable Housing Incentive Program (TOC Program) was developed pursuant to Section 6 of Measure JJJ, which was passed by City voters in 2016 (LADCP 2018a). The program provides incentives for developers to build properties that include affordable units within a one-half mile radius of a major transit stop. TOC Program Guidelines were released by the City Planning department on September 22, 2017 and last revised on February 26, 2018.

Development projects can qualify for incentives under one of four tiers (Tier 1 through 4). Each tier has different eligibility requirements related to the type of transit options located in proximity to the property and the composition of affordable units offered. The higher the tier number, the more transit options and affordable housing units a development needs to qualify. All TOC-eligible developments receive baseline incentives, which include an increase in the number of allowable dwelling units, an increase in the allowable floor-area ratio (FAR), and reduced parking requirements. Developments with a higher tier number are also eligible for additional incentives with higher tiers being permitted a greater number of additional incentives.

Value Capture Ordinance

On December 13, 2017, the City Council approved the Value Capture Ordinance (City of Los Angeles 2017). The ordinance requires residential and mixed-use development projects seeking a development density or FAR higher than permitted, through entitlements not subject to Measure JJJ such as Conditional Use Permits (CUPs) to provide a certain percent of restricted affordable dwelling units. The ordinance also provides an additional density bonus for projects that provide restricted affordable units beyond the minimum percentage required (LADCP 2017b).

Citywide Specific Plans, Overlays, Districts, and Master Plans

Specific plans, planning overlays, supplemental use districts, and master plans are used to ensure development throughout the City is compatible with the surrounding environment. These tools customize the regulations of the LAMC to plan the land use and zoning of specific geographic areas and include various types of regulatory limitations. The City includes several types of overlays, districts, and master plans which further implement the General Plan, as summarized below (LADCP 2018b): These overlays, districts, and master plans are applied throughout the City and can be found in various Community Plan areas. However, not all of these overlays are applied within the Downtown Plan Area. See the next section for a summary of overlays that are applied within the Downtown Plan Area.

Overlays, Districts, and Master Plans

- **Specific Plans.** Specific Plans provide supplemental development regulations, including allowed and prohibited uses, tailored development standards, and other regulatory controls tailored to ensure that development enhances the unique qualities of an area. There are currently 52 adopted and active specific plans in the City (LADCP 2020).
- **Community Plan Implementation Overlays.** Community Plan Implementation Overlays (CPIO) serve the same purpose as specific plans but are prepared at Community Plan level and implement supplemental standards through the creation of subareas within the Community Plan. The City has five Community Plan Implementation Overlays (Sylmar, West Adams, South Los Angeles, Southeast Los Angeles and San Pedro).
- **Community Design Overlay Districts.** Community Design Overlay Districts are intended to improve the appearance and enhance the identity of certain areas in the City through the application of design guidelines and standards. The City has 20 Community Design Overlay Districts (LADCP 2020).
- **Pedestrian/Neighborhood Oriented Districts.** Areas within a Pedestrian/Neighborhood Oriented District are subject to specific frontage, setback, access, and use requirements to enhance the pedestrian network. The City has three Pedestrian/Neighborhood Oriented Districts.
- **Streetscape Plans.** Streetscape Plans set forth visions for public corridor improvements. Streetscape Plans direct the implementation of streetscape improvements along designated corridors in several Community Plan areas. The City has 18 Streetscape Plans (LADCP 2020).
- **Local Coastal Programs.** Local Coastal Programs (LCPs) guide development in the coastal zone to protect coastal resources and comply with the California Coastal Act of 1976. Each LCP includes a land use plan and measures to implement the plan (such as a zoning ordinance). The Venice Land Use Plan has been certified by the Coastal Commission; however, the implementation plan has not been certified, therefore, the Venice LCP as a whole has not been certified (LADCP 2018c). The San Pedro LCP is also currently being drafted.

- **Master Plans.** The Port of Los Angeles Master Plan and the Los Angeles International Airport Master Plan regulate land use and establish policies and guidelines to direct future development within their boundaries.
- **Commercial Artcraft Districts.** Commercial Artcraft Districts regulate uses and conditions (i.e., production techniques, area of production, employees, etc.) to create enclaves for artisan segments of the population to live, create, and market their artifacts. The City has one Commercial Artcraft District located in North Hollywood.
- **Community Redevelopment Plan Areas.** Community Redevelopment Areas are areas identified for revitalization through the building of new housing and commercial projects. The City contains 19 Redevelopment Plans that are in effect until they expire or Community Plan updates supersede their provisions as permitted by each adopted redevelopment Plan (LADCP 2020).
- **Sign Districts.** Sign Districts prescribe more permissive sign regulations than the Zoning Code to support unique local characteristics. The City has 14 Sign Districts.
- **Supplemental Use Districts.** The LAMC includes several other supplemental use districts that apply additional regulations beyond those required by base zoning. Supplemental use districts include those for Oil Drilling, Animal Slaughtering, Surface Mining Operations, Residential Planned Development, Equine keeping, Mixed Use, Fence Heights, Neighborhood Stabilization, Residential Floor Area, Modified Parking Requirement, Hillside Standards Overlay, Rear Detached Garage, and Hillside Construction Regulation.

Downtown Plan Area Specific Plans and Overlays

The Downtown Plan Area includes the following specific plans and overlays.

Specific Plans

Los Angeles Sports and Entertainment District Specific Plan

The Los Angeles Sports and Entertainment District (LASED) Specific Plan provides regulations and incentives to support the development of the Specific Plan Area as a major entertainment/ mixed-use area with primarily hotel, retail, entertainment, and residential uses and has the goal of enhancing the existing Convention Center and Staples Center environs (LADCP 2010). The Specific Plan specifies development standards, permitted uses, design guidelines, traffic improvements, parking requirements, and permitted signage. The LASED Specific Plan Area consists of five blocks surrounding the Staples Center along its north and east sides. The Specific Plan went into effect October 2001 and was last amended in 2010.

Bunker Hill Specific Plan

The Bunker Hill Specific Plan, adopted in June 2013, provides a regulatory framework to support development of the Bunker Hill neighborhood into a 24-hour downtown environment with a mix of commercial, retail, residential, and cultural spaces (LADCP 2013b). The Specific Plan Area is bounded generally by the 110 Freeway to the west, Fifth Street to the south, Hill Street to the east, and First Street to the north. The Specific Plan includes development standards, urban design guidelines, and transportation and parking regulations, and also establishes a pedestrian linkage network for the area.

Alameda District Specific Plan

The Alameda District Specific Plan, effective in June 1996, provides a regulatory framework to support the development of the area as a major transit hub for the region with adjacent mixed-uses. The Specific Plan Area includes Union Station and the associated Terminal Annex area and is generally bounded to the south by U.S. 101, to the west by Alameda Street, and to the north and east by Vignes Street. The Specific Plan outlines specific projects to be developed over three phases and provides regulations pertaining to urban design, open space, pedestrian connections, landscaping, transportation, traffic improvements, and parking; it also includes incentives for child care provision.

Cornfield Arroyo Seco Specific Plan

The Cornfield Arroyo Specific Plan, adopted in December 2012, establishes four new zoning districts, zoning standards, and additional requirements for an industrialized area adjacent to the Los Angeles River near the intersection of the Harbor Freeway and I-5 (LADCP 2012b). The Specific Plan Area encompasses the northeast corner of the Downtown Plan Area south and east of the train tracks that run parallel to Broadway, west of the Los Angeles River, and north of College Street, Alhambra Avenue, and Bolero Lane. The four zones introduced by the Specific Plan—Urban Center, Urban Innovation, Urban Village Zone, and Greenway—support a wide variety of uses including light industrial and manufacturing uses, urban agriculture, multi-family residences, public facilities, social and environmental organizations, religious institutions, and schools . Notably, the Specific Plan does not include parking requirements due to the proximity of Metro rail and other public transit, and incentivizes affordable housing (Nettler 2012).

Downtown Design Guide

Adopted in 2009, the Downtown Design Guide (DDG) provides urban design standards and guidelines for new construction (including additions) in the following Downtown neighborhoods: Convention Center, South Park, City Markets, Historic Downtown, Financial Core, Little Tokyo, Civic Center South, Bunker Hill, and Civic Center. These neighborhoods collectively comprise the majority of the Central City Community Plan Area. Topics addressed in the Guide include sustainable design, sidewalks and setbacks, ground floor treatment, parking and access, massing, on-site open space, architectural detail, streetscapes, and signage.

Greater Downtown Housing Incentive Area

Ordinance 179,076 established the Greater Downtown Housing Incentive Area in 2007, providing a range of incentives to develop affordable housing in those portions of the Central City and Southeast Community Plan Areas generally bounded by U.S. 101 to the north, the 110 Freeway and Figueroa Street (south of Adams Boulevard) on the west, Alameda and Grand Avenue (south of 21st Street) to the east, and Washington Boulevard and Martin Luther King, Jr. Boulevard (west of Broadway) to the south. Specific bonuses include increased allowable floor area, reductions in required open space, and reductions in required parking for projects that include minimum affordable housing set-asides.

River Improvement Overlay (RIO) District

The RIO District (Ordinance Nos. 18314 and 183145) went into effect in August 2014 and is intended to help implement the vision and goals of the Los Angeles River Restoration Master Plan (LARRMP) by establishing additional requirements for properties along the riverfront or near the riverfront. These primarily include requirements pertaining to landscaping, fencing, exterior lighting, and ADA accessibility that serve to build a riverfront community and make the riverfront area a more welcoming environment to pedestrians and cyclists. Within the Downtown Plan Area, the RIO District includes all of the Central City North Community Plan Area south of Cesar E. Chavez and the area east of N. Spring Street north of Cesar E. Chavez.

Broadway Theater and Entertainment Design Guide and Community Design Overlay (CDO)

The Broadway CDO applies to Broadway between 1st Street and 12th Street in the Central City Community Plan Area. The Broadway CDO encourages the rehabilitation of existing building and guides the design and development of new buildings. Regulations include guidance for building setbacks, form, roof lines, building articulations, storefront and window transparency, facade materials, and lighting.

Broadway Streetscape Master Plan

The Broadway Streetscape Master Plan applies to properties fronting Broadway from First Street and Twelfth Street. The Master Plan was established to create a multi-modal, pedestrian focused street that can support and revitalize the historic theater district. The Streetscape guidelines call for expanded sidewalks with street elements and limited landscaping to enhance pedestrian interest and activity along the street.

Historic Broadway Sign Supplemental Use District (SUD)

The Historic Broadway SUD applies to Broadway from First Street to Twelfth Street, encompassing the Broadway Theater and Entertainment District and parcels front along intersecting streets. It includes standards for the design, placement, and orientation of signs along Broadway. It allows and provides guidance for sign types that are currently on Broadway, but are not allowed by the existing Code regulation. The Sign District includes an incentive program to spur building activity, revitalization, and to fund streetscape improvements.

Downtown Street Standards

The Downtown Street Standards apply in the Central City Community Plan Area. It establishes a street hierarchy and guidance to balance traffic flow, pedestrian walkability, bicycle routes, and access to create more context-sensitive, *complete streets* in Downtown. The document consists of a series of cross sections establishing future curb and property lines, and in some cases additional sidewalk easements.

Little Tokyo Community Design Overlay (CDO)

The Little Tokyo CDO applies to a portion of the Little Tokyo community in the Central City Community Plan Area. It establishes design and development guidelines to promote a pedestrian-friendly environment and enhance the physical appearance of the area, with a focus on reinforcing the cultural and historic aspects of the neighborhood through a set of Design Guidelines.

Community Redevelopment Project Areas

Community Redevelopment Areas (CRA) are areas identified for revitalization through the building of new housing and commercial projects. Prior to 2012, the Community Redevelopment Agency of Los Angeles (CRA/LA) was the agency in charge of developing, implementing, and overseeing CRA projects in the City (Urban Land Institute, Los Angeles 2012). The passage of AB1x-26 and the California Supreme Court's decision in *California Redevelopment Association v. Matosantos* in 2012 effectively abolished redevelopment agencies in the State. Since the dissolution of the CRA/LA, activities in the redevelopment project areas have been administered through the Designated Local Authority (DLA). The Downtown Plan Area includes three CRAs: Chinatown (expires January 2022), City Center (expires May 2033), and Central Industrial (expires November 2033) (LADCP 2018d).

- The **Chinatown Redevelopment Plan** designates land uses and specifies the Agency's powers and requirements in Plan implementation (CRA/LA 2002a). The Redevelopment Plan Area is generally bounded by Cesar E. Chavez Avenue to the south, Solano Avenue to the north, Alameda Street to the east, and shares the Downtown Plan Area boundary to the west.

- The **City Center Redevelopment Plan** designates land uses, specifies the Agency's powers and requirements in Redevelopment Plan implementation, identifies distinct development areas within the Redevelopment Plan Area (i.e., City Markets, South Park, Historic Downtown), and includes specific requirements for development within the Redevelopment Plan Area. The Redevelopment Plan Area is generally bounded to the south by the I-10; to the west by Figueroa Street, Grand Avenue, and Hill Street; to the north by Second Street; and to the east by Los Angeles Street, San Pedro Street, Stanford Avenue, and Griffith Avenue.
- The **Central Industrial Redevelopment Plan** designates land uses and specifies the Agency's powers and requirements in Redevelopment Plan implementation and includes specific requirements for development within the Redevelopment Plan Area. The Redevelopment Plan Area encompasses most of the area bounded to the south by the I-10; to the west by Stanford Avenue and San Pedro Street; to the north by Third Street; and to the east by Alameda Street. It also encompasses an irregularly shaped area that is generally bounded by Washington Boulevard to the south, the train tracks paralleling the Los Angeles River to the east, Third Street to the North, and Lemon Street, Wilson Street, and Alameda Street to the west.

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the *CEQA Guidelines*, a project would have a significant impact related to land use and planning if it would:

- Physically divide an established community (Threshold 4.10-1)
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? (Threshold 4.10-2)

METHODOLOGY

A community can be physically divided by the construction of a new road, freeway, or railway that effectively isolates a portion of the community from the remainder of the community, or when major land use and zoning changes results in radically different land use patterns that can physically divide a neighborhood by creating a new street pattern that impedes access from one area to another. Therefore, the potential of the Project to physically divide an established community (Threshold 4.10-1) is evaluated by determining whether implementation of the Downtown Plan or New Zoning Code would result in the construction of major new roads, freeways, railways, or other barriers through an existing neighborhood.

The discussion of a significant impact with regard to conflicts with any applicable land use plan, policy, or regulation serves two purposes: identifying significant impacts related to land use and compliance with CEQA Guidelines Section 15125(d), which requires that an EIR include a discussion of any inconsistencies with applicable plans. A conflict between a project and an applicable plan is not necessarily a significant environmental impact under CEQA unless the inconsistency would result in an adverse physical change to the environment (per CEQA Guidelines Section 15382). An excerpt from the legal practice guide CEB, Practice under the California Environmental Quality Act, Section 12.34 illustrates this point:

> …if a project affects a river corridor, one standard for determining whether the impact is *significant* might be whether the project violates plan policies protecting the corridor; the environmental *impact,* however, is the physical impact on the corridor.

Under State Planning and Zoning law (Government Code Section 65000, et seq.) strict conformity with all aspects of a plan is not required. Generally, plans reflect a range of competing interests and agencies are given great deference to determine consistency with their own plans. A proposed project should be considered consistent with a general plan or elements of a general plan if it furthers one or more policies and does not obstruct other policies (Governor's Office of Planning and Research 2017). Generally, given that land use plans reflect a range of competing interests, a project should be compatible with a plan's overall goals and objectives, but need not be in perfect conformity with every plan policy.

The Downtown Plan would comprise a portion of the Land Use Element for the City of Los Angeles and would need to be consistent with other elements in the General Plan. The New Zoning Code would also need to be consistent with the General Plan. In addition, Los Angeles is a member of SCAG and is subject to policies established for the region in the 2016-2040 RTP/SCS. Therefore, the potential of the Downtown Plan or New Zoning Code to conflict with an applicable land use plan, policy, or regulation (Threshold 4.10-2) is evaluated by comparing the Proposed Project to applicable policies and objectives contained in the City's General Plan and the 2016-2040 RTP/SCS. For purposes of identifying significant impacts related to conflict with any applicable land use plan, policy, or regulation, they can be either direct or indirect. Direct impacts interfere with land use plans, including habitat or wildlife conservation plans that result in significant environmental effects. Land use compatibility is typically addressed based on direct physical environmental impacts – primarily noise and air quality but also aesthetics, traffic, hazards, water quality and other physical environmental issues, i.e. where one use generates physical impacts that could significantly adversely affect another use. These issues are generally addressed through existing regulations and policies and are comprehensively addressed in each environmental issue area in this document and summarized as applicable and appropriate in the discussion of Impact 4.10-2, below. As related to impact analysis, this section focuses on direct land use impacts. Indirect impacts are secondary effects resulting from land use policy implementation and are generally addressed in other topical sections of this Draft EIR. For example, air impacts resulting from increased car trips as a result of reasonably anticipated development under the Proposed Plan would be discussed in the air impact section of this Draft EIR; public service impacts resulting from increased demand from increased development under the Proposed Plan is discussed in public services section of this Draft EIR.

DOWNTOWN PLAN

The proposed Downtown Plan is a comprehensive update of the Central City Community Plan and the Central City North Community Plan, the two community plans covering Downtown Los Angeles. These plans are two of the City's 35 Community Plans that make up the City's Land Use Element. The Central City Community Plan was last updated in 2003 and the Central City North Community Plan was last updated in 2000. The Proposed Downtown Plan is intended to guide development through the year 2040. The Downtown Plan creates new employment and housing opportunities throughout Downtown, and particularly in areas near transit, consistent with the Citywide comprehensive growth strategy identified in the City's Framework and Housing Elements. The Plan would guide the physical development in Downtown Plan Area in a sustainable manner while protecting existing neighborhoods, open space areas, and public facilities parcels. The Downtown Plan components are described in more detail below, and can also be found in Chapter 3.0 Project Description.

The Proposed Downtown Plan is comprised of several components including:

(i) General Plan Amendments to the Community Plan (Land Use Element) Text and Land Use Maps

(ii) Zoning Ordinances, including adopting zone changes to amend the Zoning Maps

(iii) Other General Plan Amendments, including to the Framework Element, Mobility Plan, Specific Plans, and other necessary amendments

The Community Plan Text document contains the vision for the Downtown Plan Area and lays out goals, policies, and programs to achieve that vision. The Community Plan Text policies call for providing new housing opportunities at a range of housing affordability levels and unit types, improving the function, design, and economic vitality of Downtown, promoting a range of industries, and preserving and enhancing unique characteristics of existing uses and structures.

The Downtown Plan includes a General Plan Land Use Map that shows the distribution of land uses in the Plan Area, noted in component (i) above. The Proposed Downtown Plan would result in the reallocation of land uses and would adopt land use changes (officially called General Plan Amendments), and zoning ordinances in order to achieve the vision for the Plan area. These zoning ordinances will apply New Zoning Code regulations, developed through re:code LA, the comprehensive revision of the City's zoning code. See Chapter 3.0, *Project Description*, Section 3.7.4 for more details.

Tables 4.10-1 and **4.10-2** summarize the existing and proposed land uses associated with the Downtown Plan. As described above, the Downtown Plan is applying a new set of General Plan Designations and zoning tools to the entire Downtown Plan Area. **Tables 4.10-1** and **4.10-2** include the existing and proposed General Plan Land Use designations, categorized by broader land use categories. See Chapter 3.0, *Project Description*, for a detailed description of the proposed General Plan Designations and corresponding zoning tools.

The Downtown Plan would primarily increase the residential, commercial, and hybrid industrial development potential throughout the Downtown Plan Area, while having the added benefit of creating more compact, walkable neighborhoods that can also accommodate future growth.

The commercial designations allow for a range of land uses, including residential and at intensities that generally complement existing patterns of development and supports a walkable community, where daily services and shopping needs can be met within walking distance of existing and future residential and mixed-use buildings.

The proposed commercial land use designations include Villages, Community Center, Traditional Core, and Transit Core, which recognize the existing mixed use nature of Downtown. These designations permit residential, office, commercial, heavy commercial, and institutional activities, both in neighboring structures, and within individual mixed use developments. This recognizes the mix of uses that exist within areas such as South Park, which is designated High Residential in the existing Central City Community Plan, and contains residential uses, as well as office, commercial, and neighborhood serving activities within mixed use development. Under the Downtown Plan, South Park would be designated Transit Core, which continues to allow for a variety of residential and community-serving activities with greater levels of development capacity to occur in the future.

TABLE 4.10-1 SUMMARY OF EXISTING LAND USE IN THE DOWNTOWN PLAN AREA

Land Use Categories with Existing General Plan Designations	Existing Plan (Acres)
Residential	**212**
Multi-Family	
Low-Medium II	14
Medium Residential	36
High Medium Residential	77
High Residential	85
Commercial	**690**
Community Commercial	103
Regional Commercial	12
Regional Center Commercial	114
General Commercial	461
Industrial	**1,520**
Commercial Industrial	15
Light Industrial	8
Light Manufacturing	559
Heavy Manufacturing	829
Hybrid Industrial	109
Public Facilities	**592**
Public Facilities	487
Public Facilities - Freeway	99
Other Public Open Space	6
Open Space	**224**
Open Space	224
TOTAL	**3,238**

SOURCE: City of Los Angeles Department of City Planning, 2018

Consistent with the General Plan Framework Element, land for industrial uses would be retained under the Downtown Plan. The proposed Production designation would protect and sustain industrial activity and serve as a center of employment for heavy industrial, manufacturing and storage, heavy commercial and light industrial activity, including production, wholesale and distribution uses.

The Downtown Plan proposes to re-designate some of the industrial land as Hybrid Industrial and Markets, which are designed to account for the evolution of land uses and employment activities over time. The proposed designations will continue to allow for light industrial and manufacturing uses, in addition to non-industrial uses, namely limited residential as long a minimum area is set aside for productive uses. Hybrid Industrial and Markets designations would allow for a greater variety of industrial, and employment uses such as office, heavy commercial, and light industrial, and limited residential uses would be permitted only when a minimum area is reserved for productive uses. The higher development potential permitted under the Downtown Plan will enable higher intensity of employment uses within these areas, while accommodating limited residential uses in proximity to job-generating uses.

These designations are being applied in areas with an existing mix of light industrial, wholesale, and limited residential activities. One example is the Arts District, which is designated Heavy Manufacturing in the existing Central City North Community Plan, and contains a variety of housing types, including adaptive reuse and live/work, as well as office, commercial, light industrial and assembly, and light manufacturing uses. The Hybrid Industrial and Markets designations would allow for a limited amount of residential and live-work use not previously allowed by-right in the industrial designated areas.

This would help transition the existing employment emphasis areas to the surrounding mixed-use neighborhoods. The changes in designations, zoning, and associated increase in allowable floor area would allow a greater range of uses and higher development potential within the Hybrid Industrial and Markets area, and promote reuse of existing structures, creating more vibrant neighborhoods that link surrounding areas to transit resources. These changes would allow the intensification of land uses in an urbanized area

of the city, promote a greater mix of uses that would foster more walkable and compact development patterns, and allow the City to meet growth demands for jobs and housing in the area.

TABLE 4.10-2 SUMMARY OF PROPOSED LAND USE IN THE DOWNTOWN PLAN AREA

Land Use Categories with Proposed General Plan Designations	Downtown Plan (Acres)
Residential	**100**
Neighborhood Medium Residential	100
Commercial	**923**
Villages	85
Community Center	195
Traditional Core	127
Transit Core	516
Industrial	**1,372**
Production	557
Hybrid Industrial	426
Markets	389
Public Facilities	**625**
Public Facilities	428
Public Facilities Freeways	197
Open Space	**214**
Open Space	214
	3,234/a/

/a/ Total acreage for each land use designation and proposed designation reflects rounding to the nearest whole number, which results in a slight difference from 3,238 acres under existing land uses.
SOURCE: City of Los Angeles Department of City Planning, 2018

PROPOSED PLAN GENERAL PLAN LAND USE DESIGNATIONS

The following General Plan Designations have been created in order to implement this land use strategy and achieve the Downtown Plan underlying purpose and objectives stated in Chapter 3.0, *Projection Description*. The following designations replace the existing designations for the Downtown Plan Area. For more details about the proposed designations and zoning regulations, see Chapter 3.0, *Project Description*.

These designations recognize the mixed use nature and varying scales of development that exist within the Downtown Plan Area, and they have been designed to reinforce and better accommodate a mixed-use environment.

Transit Core

Transit Core areas are dense centers of activity built around regional transit hubs that connect pedestrians, cyclists, and transit users to a variety of attractions. The building form ranges from Moderate Scale to High Rise, with ground floor treatments that contribute to an enhanced and walkable streetscape. A diverse mix of office, residential, retail, cultural, and entertainment uses makes these places centers of activity around the clock.

Community Center

Community Centers are vibrant places of activity typically located along commercial corridors, in concentrated nodes, or adjacent to major transit hubs. The building form ranges from Low Scale to Mid Rise, and may extend to Moderate Rise in the Downtown Community Plan. The use range is broad and may include commercial, residential, institutional facilities, cultural and entertainment facilities, and neighborhood-serving uses.

Traditional Core

Traditional Core areas have a time-honored urban development pattern and a collection of historically-significant buildings. The building form ranges from Moderate Scale to High Rise. Traditional Core areas often include residential and office use, neighborhood-serving uses, as well as dining and entertainment that draw visitors and tourists, supporting activity around the clock. New development contributes to a pedestrian-oriented environment with active alleys and inviting shopfronts.

Markets

Markets are bustling centers of commercial activity, each with its own mini-economy of specialized commercial uses, including wholesale. The building form generally ranges from Very Low Rise to Low Rise, and Mid Rise to Moderate Rise. Adaptive-reuse and rehabilitation of structures and warehouses maintain the built environment and support sustainable development. Uses also include retail, limited housing, and goods movement activities.

Hybrid Industrial

Hybrid Industrial areas preserve productive activity and prioritize employment uses, but may accommodate live/work uses or limited residential uses. The building form ranges from Very Low Scale to Mid Rise. Uses include light industrial, commercial, and office, with selective live/work uses.

Medium Neighborhood Residential

Medium Neighborhood Residential areas are primarily residential and may integrate limited local-serving commercial uses; these neighborhoods are adjacent and connected to commercial and employment areas. The building form is Low Scale, and buildings are typically oriented toward the street.

Villages

Villages are characterized by walkable and fine-grained block patterns that serve as historic and cultural regional niche market destinations. The building form is Very Low Scale, Low Scale, or Mid Scale. Commercial uses, such as restaurants, retail, services, and small offices may be interspersed with a range of housing types; commercial uses on the ground floor help promote a pedestrian atmosphere. Adaptive reuse of historic buildings and infill development is responsive to the historic and cultural legacy of these areas.

Production

Production areas preserve and sustain industrial activity while serving as a regional jobs base. The building form ranges from Very Low Scale to Low Rise. Site layout and development in these areas are flexible to accommodate goods movement, loading, and distribution needs. Uses include heavy industrial and evolving and innovative industries, such as light assembly and manufacturing, clean technology, incubators, and research and development facilities, are accommodated. Housing is generally not permitted in Production areas but limited residential uses may be allowed, for example, through adaptive reuse of existing buildings.

Open Space. Open Space areas primarily serve as public recreational sites or parks but can include reservoirs and nature reserves. These largely open areas are intended for passive and active outdoor recreation, public gathering, and education. The building form, if there are accessory structures or buildings on site, typically facilitates recreational and/or communal activities, such as playground equipment, restrooms, and community centers. The Open Space designation does not allow residential uses.

Public Facilities. Public Facilities areas serve as centers of civic life, promoting governmental, institutional, and cultural functions. These areas provide for the use and development of land typically owned by government agencies. The building form varies in size and structure, from Residential Agriculture to High Rise, with a variety of site layouts and flexible building designs that support civic activity and an active public realm. Uses include government offices, libraries, schools, and service systems. Housing is not typically associated with Public Facilities but may be permitted on a limited basis.

PROJECT IMPACTS

Threshold 4.10-1	Physically divide an established community

Impact 4.10-1

Downtown Plan: The Downtown Plan does not include any features that would physically divide an established community. Therefore, ***no impact*** would occur.

New Zoning Code: The New Zoning Code does not include any standards that would divide an established community. Furthermore, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area. For these reasons, any indirect impacts from the use of the New Zoning Code would be speculative. Impacts would be ***less than significant*** citywide.

Downtown Plan Impact

Downtown is an established regional center. With the exception of its open space areas, including Grand Park, the State Historic Park, and Pershing Square, the Downtown Plan area is urbanized with a mix of commercial, residential, light industrial, and institutional uses at varying densities and intensities. The open space areas are preserved by the Downtown Plan as undeveloped open space and recreation space. As described previously, the Downtown Plan Area is also the hub of the regional transportation system that terminates at Los Angeles Union Station.

The Proposed Downtown Plan would include amendments to the community plan land use map designations, zoning, and the community plan goals, policies, and programs, which are intended to support connectivity between districts, and improve transitions in land use, building scale, and urban design within the Downtown Plan Area.

Proposed Land Use and Zoning Strategies

The Downtown Plan would update the General Plan land use designations in the existing Central City and Central City North Community Plans with an entirely new set of General Plan Designations and associated zoning; these are detailed in Chapter 3.0 *Project Description*, which also includes definitions for the different forms and use districts, and **Figure 3-6** provides a General Plan map for the Downtown Plan Area.

The land use and zoning changes proposed in the Downtown Plan are intended to guide development through 2040 and largely continue the land use patterns envisioned in the existing Central City and Central City North Community Plans. The Downtown Plan does not introduce land uses that would include barriers that would divide existing neighborhoods. Rather, it would encourage land uses that complement and enhance the existing neighborhoods and district, thus maintaining and improving community cohesiveness. For example, land in the Fashion District, Flower District, and Toy District would be designated as Market or Hybrid Industrial, which would continue to accommodate the types of uses currently present in these areas and envisioned in existing plans; the commercial areas of Chinatown, which are more moderately sized, would remain zoned for moderate and mid-scale buildings, while Chinatown's residential areas

would be designated for low-scale and residential uses; and some areas with a concentration of existing industrial uses would be designated for Hybrid Industrial uses. Rather than fundamentally altering land use patterns in the Downtown Plan Area, the Downtown Plan designations generally allow for greater flexibility in land uses and higher development density and intensity, and also explicitly promote mixed-use and transit-oriented development. The Downtown Plan applies Form District and Frontage regulations, as well as building design guidelines that would create a more pedestrian-friendly environment and ensure compatibility between new and existing development. These zoning tools address how the building meets the street by regulating building orientation, scale, entrance spacing, and the amount of transparency (such as windows) and would not allow for the introduction of barriers that would divide or otherwise hinder access to individual neighborhoods or portions thereof. Requirements such as maximum building widths and required pedestrian connections through large blocks contribute to a more porous built environment that prioritizes walkability. Together, these tools encourage connectivity by linking new uses with the surrounding neighborhood and transit stations.

Proposed Policies and Programs

Downtown-Wide Policies; Chapter 1. Land Use & Urban Form

The Downtown Plan policies and programs acknowledge and preserve the character of neighborhoods, and promote connectivity and transitions between districts, including the following, taken from Chapter 2. Land Use and Urban Form:

Urban Form

- LU 9.1: Strategically concentrate the highest densities and intensities within the Plan area to respond to historic development patterns and match infrastructure investment.
- LU 9.2: Reinforce the distinct qualities of each neighborhood and ensure that growth complements and is compatible with existing character and historic resources; and supports community needs.

Arts District

As a formerly industrial and wholesale district, the Arts District first began to evolve into a neighborhood as artists began using industrial buildings as working and living spaces. The community has since evolved into a hub of galleries, educational institutions, creative production and light industry uses, commercial and retail uses, and business incubation spaces.

- LU 33.7: Introduce shared street typologies for Arts District streets that preserve historic industrial characteristics while promoting access and safety for all users.
- LU 33.8: Promote productive, creative, manufacturing, fabrication, and light industrial activities as a principal characteristic of the Arts District neighborhood.

Fashion District/South Markets

A highly diverse major fashion, retail, wholesale distribution, and creative center. This area is the hub for garment sales, retailing, manufacturing, the flower wholesale industry, and regional distribution.

- LU 37.10: Support specialty industry clusters, such as fashion and flowers, while allowing for evolution and innovation.

Little Tokyo

Little Tokyo is a historic-cultural neighborhood and symbolic center for the Japanese-American community. The neighborhood contains a variety of religious and cultural institutions and a mix of residential, commercial, and institutional uses. Small-scale shops, restaurants, and storefronts contribute to the pedestrian-oriented nature of the area, as well as a unique architectural and building design.

- LU 41.7: Retain, support, and reinforce the historic and cultural elements of Little Tokyo, including the businesses and cultural institutions within the community.

Chinatown

Chinatown is home to a long-standing multi-generational residential community, a variety of small and family owned businesses, family associations, and institutional services that serve the Chinese American as well as other communities. The historic neighborhood is characterized by walkable commercial corridors and internally oriented courtyard developments. A Metro Gold Line station sits at the northeastern corner of the neighborhood, and there has been a growing cluster of restaurant and nighttime activity.

- LU 41.10: Support and reinforce the historic and cultural components of Chinatown, including architectural design, and the long-standing local businesses and legacy institutions that serve the local community.
- LU 41.11: Promote courtyard-style commercial developments that are characteristic of the area and reinforce the neighborhood's historic pedestrian orientation and reflect the community's cultural heritage.

Toy District

The Toy District is a predominantly wholesale and retail district, distinct among other neighborhoods for its unique scale and uniform development pattern. The collection of narrow blocks consist of one and two story brick buildings with many shop front entrances, creating a system of narrow and curving pedestrian alleys.

- LU 41.13: Facilitate new development that will reinforce patterns of bay entrances and fine-grained narrow retail spaces within the Toy District.
- LU 41.14: Prohibit alley and street vacations to protect small blocks and lots.

Downtown-Wide Policies; Chapter 5. Mobility & Connectivity

The Downtown Plan Area is a fully developed, major urban center already served by extensive vehicle and transit services and infrastructure, including the I-10, U.S. 101, and I-110 freeways, national (Amtrak) and regional (Metrolink) rail service, many local and rapid bus lines, and the Metro Red, Purple, Gold, Blue, and Expo rail lines. Downtown Plan policies and programs do not propose any new freeways or major roadways that could physically divide or isolate existing neighborhoods in the Downtown Plan Area, although it does support the development of new transit infrastructure, such as:

- Advance efforts to plan for the future integration of high speed rail[3] and other transit projects, such as the West Santa Ana Branch line and Link US, to reinforce Union Station and Downtown as the hub of regional transit. (Downtown Places & Neighborhoods, LU 21.16)

[3] Based on recent changes in direction at the State level, the High Speed Rail Station appears unlikely to be built in the foreseeable future.

- Support the development of the Downtown Streetcar System to better connect districts. (Mobility & Connectivity, MC 5.4)
- Find opportunities to install bus platforms along key corridors to facilitate transit boarding and reduce conflicts with other modes. (Mobility & Connectivity, MC 5.6)
- Support the expansion of light and heavy rail transit service to Eastern Downtown to serve the expanding resident, worker, and visitor populations. (Mobility & Connectivity, MC 5.7)

The Downtown Streetcar System is intended to better integrate the Downtown area and would likely be built along major arterials with adequate space to support streetcar infrastructure and improve local circulation, rather than within the Downtown Plan Area's few truly residential communities, which lie north of the main Downtown area. Future expansion of light rail would likely occur along major arterials and integrated into the existing transportation system, rather than dividing a neighborhood, while heavy rail would be primarily below street level. Installation of bus platforms would occur along key corridors for existing transit and thus would not act as a dividing barrier in communities. In addition, an extensive transit system of bus and rail is a defining feature of metropolis centers all over the world and contributes to the creation of an integrated urban community, rather than its division.

The Downtown Plan would also support the development of two major rail enhancement projects, the High Speed Rail (HSR) and Link Union Station (LinkUS) Projects, through policies LU21.16 and LU21.17. The HSR Project would bring HSR service to Union Station. The HSR alignment would parallel existing and proposed Metrolink and Amtrak alignments in the Downtown Plan Area, which primarily run along the Los Angeles River, veering briefly west near the Men's Central Jail, and then briefly south to reach Union Station.

Currently, Union Station is a dead-end station where all commuter and inter-city trains enter and exit through a five-track "throat," or station entry, at the north end of the station, which results in idling times of 20 minutes or longer (Metro 2017). To address this issue and increase station capacity, the LinkUS Project would extend the tracks that currently dead-end at Union Station south over the US-101 freeway and then east above E. Commercial Street to merge back south with existing alignments along the Los Angeles River, as well as merge back north along existing alignments to loop back into Union Station. The tracks along E. Commercial Street would be above grade. The LinkUS project would also include an expanded passenger concourse that would connect with the Patsaouras Transit Plaza to the east and the historic Union Station to the west (Metro 2017).

Due to the proposed siting of these projects, they are not anticipated to contribute to the physical division of an existing community. The proposed LinkUS tracks would run along the northern boundary of an existing community (Little Tokyo) that is bounded by the US-101 to the north, before merging with existing tracks along the Los Angeles River. In addition, the LinkUS tracks would be located above-grade in the portion of the alignment along E. Commercial Street. The HSR would run along existing alignments and the proposed LinkUS alignment, and the passenger concourse is proposed to be built in an area currently used for transit infrastructure. In addition, these projects fall outside of the City's authority and will undergo environmental review by their respective lead agencies, the California High-Speed Rail Authority (HSR Project) and Metro (LinkUS).

While the Downtown Plan would accommodate an increase in residential density and development intensity, future development would occur in a manner that is consistent with existing neighborhood characteristics and would not physically divide an established community.

The Downtown Plan does not propose major transportation infrastructure that would physically divide the Downtown Plan Area and generally maintains and supports current land use development patterns, such as the continued transition of the Downtown Plan Area to a more mixed-use environment, which began with

the previous Community Plan updates. Proposed land uses would not involve physical barriers that would divide the community. Therefore, the Downtown Plan would have ***no impact*** related to the division of an established community.

New Zoning Code Impact

Land uses in the City are diverse and vary widely by community planning area and consist of residential, commercial, industrial, open space, and public facilities. The New Zoning Code does not propose any standards that could divide an established community.

The New Zoning Code would allow for a variety of new zone districts that could be applied elsewhere in the City through future community plan updates or amendments. In the more urbanized areas of the City, the New Zoning Code is unlikely to be applied through a community plan update or amendment in a way that would divide an established community as urbanized areas are already largely developed with a mix of uses and infrastructure. For less developed areas of the City, the New Zoning Code would include a range of Form Districts that could be applied in the planning process to transition from more intense to less intense areas, where there is a policy intent to do so.

The New Zoning Code includes Use Districts that can be applied in the planning process to allow for selected, new uses in some areas of the City. For example, a new Use District (Neighborhood Medium Residential Amenity) would allow for small restaurants, personal service, or other nonresidential uses in addition to residential uses. These nonresidential uses currently exist in neighborhoods throughout the City although they are considered legally non-conforming in many cases. By creating this new Use District, the City, through future community plan updates or amendments, could apply the New Zoning Code to describe and encode the existing character of the neighborhood, thereby avoiding dividing these established communities. The New Zoning Code could also allow new types of uses to be introduced to an area if such uses would meet the scale and policy intent of the Downtown Plan or amendment vision. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Since the New Zoning Code only applies to properties where a community plan is being updated or amended to utilize the new zoning, impacts related to the division of established communities would be analyzed pursuant to CEQA as part of the community plan update process. As a result, a ***less than significant impact*** would occur.

Mitigation Measures

Significant impacts related to the division of an established community have not been identified; therefore, mitigation is not required.

Threshold 4.10-2	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact 4.10-2 **Downtown Plan:** The Downtown Plan would generally be consistent with the overall intent of applicable land use policies, goals, strategies, and/or objectives, including those contained in the City of Los Angeles General Plan and SCAG's 2016-2040 RTP/SCS. Impacts related to the Downtown Plan would be ***less than significant.***

New Zoning Code: The New Zoning Code would generally be consistent with the overall intent of applicable land use policies, goals, strategies, and/or objectives, including those contained in the City of Los Angeles General Plan and SCAG's 2016-2040 RTP/SCS. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area. Any indirect impacts from the use of the New Zoning Code would be ***less than significant.***

Downtown Plan Impact

In addition to analyzing the threshold questions above, which is intended to focus on whether environmental impacts will result from the Downtown Plan conflicting with applicable plans, policies or regulations, the following evaluation is also intended to satisfy the requirements of Guidelines Section 15125(d) to identify any inconsistencies between the Proposed Project and the applicable general, specific or regional plans.

The Central City and Central City North Community Plans are two of the 35 Community Plans that collectively comprise the Land Use Element of the Los Angeles General Plan. Pursuant to State Planning Law, the policies and programs included in the Downtown Plan would need to be consistent with policies and programs included in other elements of the General Plan. **Table 4.10-3** provides a consistency analysis of the Downtown Plan with applicable policies contained in the General Plan that were adopted for the purpose of minimizing any environmental effect. General Plan Policies related to topics not considered under CEQA, such as economic policies, are not included.

As demonstrated in **Table 4.10-3**, the Downtown Plan would generally be consistent with policies contained in the City's General Plan. As identified in **Table 4.10-3** for Framework Element Policy, 3.14, the Downtown Plan may be in partial conflict with policies related to protection of industrial land, including 3.14.4. However, those policies were not adopted for the purpose of avoiding or mitigating an environmental effect, but instead for protecting jobs, which is a social economic impact. To the extent that the conflict resulted in a loss of industrial uses that were displaced, it would be highly speculative. There is little demand for new heavy industrial uses in this area of the City. Additionally, if existing uses moved, it is unclear where they would go as there are many areas in the Southern California region that can accommodate industrial uses, in and outside the City, such as the San Gabriel Valley andthe Harbor Gateway Corridor. Displacement of uses can result in impacts to air, GHG or transportation if employee or work trips are longer or if it results in new construction and the new construction has impacts. However, without knowing a particular project, it would not be possible to determine whether such a displacement would result in impacts. Based on the above, any impact from a conflict of the Proposed Plan to Framework Element Policy 3.14 is less than significant.

Additionally, growth under the Downtown Plan is expected to generate air pollutant emissions exceeding SCAQMD significance thresholds, as discussed in Section 4.2, *Air Quality*, the Downtown Plan would facilitate infill, transit-oriented and mixed-use development, and improve public transit and infrastructure supporting active transport. As such, the project is designed to reduce vehicle trips to, from, and within the Downtown Plan Area, which would have a beneficial effect on air quality. Therefore, the Downtown Plan would be consistent overall with applicable policies and objectives contained in the City's General Plan.

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
Framework Element (1995, 1996, 2001)	
Chapter 3. Land Use	
3.7 Provide for the stability and enhancement of multi-family residential neighborhoods and allow for growth in areas where there is sufficient public infrastructure and services and the residents' quality of life can be maintained or improved.	**Consistent** The Downtown Plan includes the Villages and Neighborhood Medium Residential designations that specifically provide for the stability and enhancement of existing multifamily residential neighborhoods. As discussed in Section 4.17, *Utilities and Service Systems*, and Section 4.13, *Public Services*, the Downtown Plan Area would be served by sufficient public infrastructure and services. The Downtown Plan is intended to accommodate a substantial share of the City's growth because Downtown has the infrastructure and services that can support growth.
3.8 Reinforce existing and establish new neighborhood districts which accommodate a broad range of uses that serve the needs of adjacent residents, promote neighborhood activity, are compatible with adjacent neighborhoods, and are developed as desirable places to work and visit.	**Consistent** See response to Policy 3.7. Downtown is already characterized by a significant mix of uses that will be reinforced by the Downtown Plan. In addition, the Downtown Plan includes the Community Center and Traditional Core designations that would support the development of new neighborhood and community mixed uses in the Downtown Plan Area. These designations allow for the development of multi-unit residences and community-serving uses, as well as offices and entertainment uses.
3.11 Provide for the continuation and expansion of government, business, cultural, entertainment, visitor-serving, housing, industries, transportation, supporting uses, and similar functions at a scale and intensity that distinguishes and uniquely identifies the Downtown Center.	**Consistent** The Downtown Plan supports the continuation and expansion of a variety of uses through its proposed General Plan designations. The Civic Public Facilities designation accommodates government uses, and these uses are permitted in additional proposed General Plan designations ; Transit Core and Traditional Core allow for a mix of uses, including entertainment and visitor-serving uses, as well as housing and business uses, at a higher density and scale reflective of a downtown area. The Village and Neighborhood Medium Residential designations accommodate residential and community-serving mixed use also at a higher density and scale; the Markets, Production, and Hybrid-Industrial designations accommodate industrial uses and a wide range of jobs.
3.12 Generally, maintain the uses, density, and character of existing low-intensity commercial districts whose functions serve surrounding neighborhoods and/or are precluded from intensification due to their physical characteristics.	**Consistent** The Villages designation maintains existing low-intensity commercial districts in the Downtown Plan Area, such as the Chinatown commercial district, Little Tokyo, and the Toy District.
3.14 Provide land and supporting services for the retention of existing and attraction of new industries.	**Partially Consistent and Partially Inconsistent** Land for industrial uses would be retained under the Downtown Plan, while allowing new residential uses in those areas planned for Hybrid Industrial and Markets designation. The Markets, Production and Hybrid Industrial designations are intended to provide space for, and support retention of, existing industries while encouraging attraction of new industries, as well as limited residential and commercial spaces. As described above under Methodology, the Production designation in the proposed Plan would reserve land for industrial and employment uses. The proposed Hybrid

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
	Industrial and Markets designations would continue to allow for industrial and manufacturing uses. The re-designation of industrial to Hybrid Industrial and Markets would allow for a greater variety of industrial, and employment uses such as office, heavy commercial, and light industrial, and limited residential uses would be permitted only when a minimum area is reserved for productive uses. In addition, the higher development potential permitted under the Downtown Plan will enable higher intensity of employment uses within these areas, while accommodating limited residential uses in proximity to job-generating uses. Allowing new residential uses would potentially be in conflict with Framework Element Policy 3.14.4 which encourages the City to "limit the introduction of new commercial and other non-industrial uses in existing commercial manufacturing zone to uses which support the primary industrial function of the location in which they are located." Additionally, it may be in conflict with the language in the Framework Element that calls to "preserve industrial lands for the retention and expansion of existing and attraction of new industrial uses that provide job opportunities for the City's residents." Accordingly, the Downtown Plan has recommended unique land use and zoning strategies that are aimed to ensure that new uses introduced into existing industrial areas bolster employment opportunities. Such strategies include requirements that new development set aside floor area within the project for uses that are currently allowed under present-day zoning and allow for job opportunities. Such uses include manufacturing, heavy commercial, and office uses, among others. In addition, the Downtown Plan proposes requirements for live/work residential uses, in lieu of traditional housing uses in certain portions of the CPA. Such live/work uses, as proposed, would be required to meet specific size, configuration, and employment occupational standards that do not apply to standard residential uses. Lastly, the Downtown Plan proposes substantial floor area incentives for development that provides an additional proportion of employment-related floor area, in addition to the base requirements described above.
3.15 Focus mixed commercial/residential uses, neighborhood-oriented retail, employment opportunities, and civic and quasi-public uses around urban transit stations, while protecting and preserving surrounding low-density neighborhoods from the encroachment of incompatible land uses.	**Consistent** The Downtown Plan Area is well served by public transit including regional rail service, many local and rapid bus lines, and the Metro Red, Purple, Gold, Blue, and Expo rail lines. Also, see responses to Policy 3.7, 3.12 and 4.2.
3.16 Accommodate land uses, locate and design buildings, and implement streetscape amenities that enhance pedestrian activity.	**Consistent** See response to Policy 2.11 under the Health and Wellness Element. In addition, form district and frontage regulations would require development projects contribute to inviting streetscapes and pedestrian activity with requirements relating to building setbacks, ground floor transparency, and entrance spacing requirements.

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
3.17 Maintain significant historic and architectural districts while allowing for the development of economically viable uses.	**Consistent** As discussed in Section 4.4, *Cultural Resources*, the Downtown Plan may result in significant and unavoidable impacts to individual historic resources. However, the Downtown Plan includes policies to protect historic resources, which would provide for the protection of such resources to the degree feasible such as: LU 12.1 Protect and support the rehabilitation of historic resources designated at the local, state, or national level. LU 12.2 Incentivize the preservation, rehabilitation, and adaptive reuse of one of the largest and most distinguished stock of historic buildings in the United States for a variety of uses. LU 12.3 Prevent the unnecessary loss of resources of historic significance, special character, cultural, or social significance. LU 14.1 Ensure that where new development occurs, it responds to and augments the physical qualities and distinct features of existing historic resources. LU 14.2 Retain the integrity of historic resources, while achieving a balance between preservation and the need to accommodate housing and jobs in Downtown. LU 14.3 Preserve and promote the distinct qualities and features of historically and culturally significant neighborhoods and communities. LU 14.5 Support efforts to preserve and restore the rich inventory of culturally significant murals and public art found throughout Downtown. LU 14.6 Encourage new development to incorporate culturally relevant and community-driven public art along building facades and in outdoor areas.
3.18 Provide for the stability and enhancement of multi-family residential, mixed-use, and/or commercial areas of the City and direct growth to areas where sufficient public infrastructure and services exist.	**Consistent** See responses to Policies 3.7 and 3.8.
Chapter 4. Housing	
4.1 Plan the capacity for and develop incentives to encourage production of an adequate supply of housing units of various types within each City subregion to meet the projected housing needs	**Consistent** The Downtown Plan would allow for the development of additional residences in the Downtown Area. The Plan also includes the Downtown Plan Community Benefits Program, which offers development incentives for residential buildings in exchange for providing affordable housing. In addition, the

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
by income level of the future population to the year 2010.	Plan includes policies to ensure that a variety of housing types are provided, such as: LU 3.1 Recognize additional housing unit options to accommodate a variety of household sizes, including larger households, such as those with children, multigenerational living, and special needs populations. LU 4.2 Find opportunities to create affordable housing options for middle income and workforce populations. LU 4.6 Incentivize the creation of housing options that are affordable to and occupied by low income households, especially housing at the deepest levels of affordability, near transit. As discussed in Section 4.12, *Population and Housing*, Downtown Plan development would meet and exceed projected housing needs of the future population.
4.2 Encourage the location of new multi-family housing development to occur in proximity to transit stations, along some transit corridors, and within some high activity areas with adequate transitions and buffers between higher-density developments and surrounding lower-density residential neighborhoods.	**Consistent** The entire Downtown Plan Area is well-served by existing and planned transit and many of the mixed-use development permitted would occur in high activity areas, such as in proximity to transit corridors and along major arterials. Unlike other areas of the City, where residences are typically buffered from higher-density development. Downtown Los Angeles is intended to accommodate the highest development densities in the City, as recognized in the GPF's "Downtown Center" designation. The Downtown Plan would support high-rise residential development in high-density areas of the Downtown area through General Plan designations such as Transit Core, and form districts that allow for high FAR and Height. Consistent with existing conditions, relatively lower-density residential neighborhoods would be supported primarily in the northeast areas of the Downtown Plan Area, which are currently buffered from the high-rises of Downtown by the mid- and low-rises of Downtown's civic core buildings. Existing low-scale areas would be preserved through General Plan designations such as Neighborhood Medium Residential and Villages, and form districts tailored for low to moderate scale buildings.
4.3 Conserve scale and character of residential neighborhoods.	**Consistent** As the urban core of Los Angeles, the Downtown Plan Area currently contains few fully residential neighborhoods. The Downtown Plan would preserve existing residential neighborhoods through the Villages and Neighborhood Medium Residential General Plan designations. In addition, as discussed under Threshold 4.10-1, the Downtown Plan would not divide an existing community and would include specific policies and Form and Frontage zoning regulations to retain the character of some of Downtown's iconic neighborhoods, including Chinatown, which remains a largely residential neighborhood with community-serving uses.

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
4.4 Reduce regulatory and procedural barriers to increase housing production and capacity in appropriate locations.	**Consistent** The Downtown Plan would alter the existing General Plan land use designations and zoning in the Downtown Plan Area to allow for an increase in housing capacity and encourage production of new housing. As discussed in Section 4.12, *Population and Housing*, development facilitated by the Downtown Plan would increase the available stock of housing in the Downtown Plan Area by an estimated 100,000 units approximately.
Chapter 5. Urban Form and Neighborhood Design	
5.2 Encourage future development in centers and in nodes along corridors that are served by transit and are already functioning as centers for the surrounding neighborhoods, the community or the region.	**Consistent** The GPF "Downtown Center" designation recognizes the unique nature of Downtown Los Angeles as an area accommodating the highest development densities and serving as the principal transportation hub for the City and the region. The Downtown Plan General Plan designations and corresponding zoning reinforce these development patterns and increase the intensities in much of the Downtown Plan area and concentrates the greatest intensities in the most transit served areas of Downtown. This vision is incorporated into the project's objectives, which include the following: "To concentrate development opportunity in Downtown's most transit-served areas." Transit-oriented development would be supported in the Downtown Plan through the Community Center designation, as well as the Transit Core designation, which allow for high-rise development in proximity to transit.
5.5 Enhance the liveability of all neighborhoods by upgrading the quality of development and improving the quality of the public realm.	**Consistent** The Downtown Plan includes a number of policies to improve the quality of the public realm and urban design, including policies to create public spaces for social connectedness (see the response to Health & Wellness Element Policy 2.2), policies to enhance public safety along streets and public spaces (see the response to Health & Wellness Element Policies 2.11 and 3.5), and creation of new public spaces (see the response to Health & Wellness Element Policy 3.2).
5.6 Conserve and reinforce the community character of neighborhoods and commercial districts not designated as growth areas.	**Consistent** As described in the GFP, the City's Downtown area is intended for high-density growth. Nevertheless, the Downtown Plan would conserve and reinforce the community character of existing neighborhoods and commercial districts through its General Plan designations and application of the proposed zones. The new zoning code classifications, discussed in greater detail in Chapter 3.0 *Project Description* Section 3.7.4, New Zoning Code, would consist of a number of components, including a form district and frontage module. The form district governs the allowable shape, size, height and placement of buildings, while the frontage module governs how a site or building addresses the street or right of way, such as through height, amount of transparency required, pedestrian entry requirements, and allowable building elements. In addition, the zoning code would include development standards that include regulations tailored to specific contexts, such as Downtown and Production. New zoning regulations would be applied with the adoption of the Downtown Plan to ensure that new development would be compatible with the existing context, such as having

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
	consistent street walls, building datum lines, and building frontage transparency. See Impact 4.10-1 for a discussion of policies contained in the Downtown Plan to support preservation of existing neighborhoods.
5.8 Reinforce or encourage the establishment of a strong pedestrian orientation in designated neighborhood districts, community centers, and pedestrian-oriented subareas within regional centers, so that these districts and centers can serve as a focus of activity for the surrounding community and a focus for investment in the community.	**Consistent** As discussed above, the proposed zoning tools would govern the building forms and features of future development and would be utilized to establish strong pedestrian orientation throughout Downtown. These regulations include ground and upper story transparency, street-facing building entrances, and articulation methods to encourage safe and active streets. In addition, the Downtown Plan includes a number of policies to support the establishment of a pedestrian-oriented environment, such as those discussed in the responses to Health and Wellness Element Policies 2.2, 2.11, and 3.5.
5.9 Encourage proper design and effective use of the built environment to help increase personal safety at all times of the day.	**Consistent** See the responses to Health and Wellness Element Policies 2.11 and 3.5.
Chapter 6. Resource Conservation and Development	
6.1 Protect the City's natural settings from the encroachment of urban development, allowing for the development, use, management, and maintenance of each component of the City's natural resources to contribute to the sustainability of the region.	**Consistent** The Downtown Plan Area is entirely urbanized and encompasses a major metropolitan center. The Downtown Plan would allow for greater growth and development in an urban environment, thus avoiding impacts to the City's remaining natural settings. In addition, the Downtown Plan includes policies to support the revitalization of the Los Angeles River as envisioned in the Los Angeles River Revitalization Master Plan (LARRMP), as discussed in the response to Health & Wellness Element Policy 3.3. The LARRMP proposes to enhance and create riparian habitat along the sides of the LA River, which could occur in the Downtown Plan Area. A long-term goal of the LARRMP is to restore the ecological and hydrological functioning of the river, through the creation of a riparian habitat corridor within the channel, and through the removal of concrete walls where feasible.
6.2 Maximize the use of the City's existing open space network and recreation facilities by enhancing those facilities and providing connections, particularly from targeted growth areas, to the existing regional and community open space system.	**Consistent** The Downtown Plan includes policies to expand parks, enhance existing parks, and improve the safety of open spaces within the Plan Area, which would encourage greater use of the open space network. In addition, the Downtown Plan Area includes major transit hubs that currently or will in the future provide access to major community and regional open spaces; for example, the Expo line provides direct access to downtown Santa Monica, a short walk away from Santa Monica Beach.
6.4 Ensure that the City's open spaces contribute positively to the stability and identity of the communities and neighborhoods in which they are located or through which they pass.	**Consistent** The Downtown Plan includes policies to promote safety and the use of parks and open spaces, as well as policies to promote the identity of a riverfront community as discussed in the responses to Health and Wellness Element Policies 3.3 and 3.5.
Chapter 9. Infrastructure and Public Services	
9.5	**Consistent**

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
Ensure that all properties are protected from flood hazards in accordance with applicable standards and that existing drainage systems are adequately maintained.	Downtown Plan development would not occur in flood hazard areas, as discussed in Section 4.9, *Hydrology and Water Quality.*
9.6 Pursue effective and efficient approaches to reducing stormwater runoff and protecting water quality.	**Consistent** Downtown Plan policies, in combination with federal, state, and local requirements pertaining to stormwater runoff control, would reduce stormwater runoff and protect water quality. See Section 4.9, *Hydrology and Water Quality*, for a more detailed discussion.
9.7 Continue to develop and implement a management practices based stormwater program which maintains and improves water quality.	**Consistent** Downtown Plan Development would be required to comply with National Pollutant Discharge Elimination System (NPDES) permit requirements and the City's stormwater requirements. See Section 4.9, *Hydrology and Water Quality*, for a more detailed discussion.
9.9 Manage and expand the City's water resources, storage facilities, and water lines to accommodate projected population increases and new or expanded industries and businesses.	**Consistent** See Section 4.9, *Hydrology and Water Quality*, Threshold 4.9-2, for a discussion of groundwater use as it relates to the Downtown Plan Area and Section 4.17, *Utilities and Service Systems*, for a discussion of water availability and Downtown Plan Area use. As discussed in these sections, LADWP plans to expand the City's water resources and will be able to meet future demand generated by development levels proposed by the Downtown Plan.
9.10 Ensure that water supply, storage, and delivery systems are adequate to support planned development.	**Consistent** See the response to Policy 9.9.
9.40 Ensure efficient and effective energy management in providing appropriate levels of lighting for private outdoor lighting for private streets, parking areas, pedestrian areas, security lighting, and other forms of outdoor lighting and minimize or eliminate the adverse impact of lighting due to light pollution, light trespass, and glare.	**Consistent** Future development would be required to comply with energy efficiency lighting and light pollution reduction requirements included in the 2016 California Building Code, including the CALGreen Code, and the Los Angeles Building Code and Los Angeles Green Building Code (LAMC Chapter IX); the Los Angeles Building Code and Green Building Code largely incorporate and amend the 2013 California Building Code and CALGreen Code, respectively, For example, Subsection 99.05.106.8 of the Los Angeles Green Building Code sets restrictions on residential outdoor lighting, and Section 99.04.211.4 requires residences to be constructed with solar-ready features as specified in the California Energy Code. Lighting requirements and potential light pollution and glare impacts would be less than significant, as discussed in Section 4.1, *Aesthetics*.
Plan for a Healthy Los Angeles: Health and Wellness Element (2015)	
1.5 Plan for Health Improve Angelenos' health and well-being by incorporating a health perspective into land use, design, policy, and zoning decisions through existing tools, practices, and programs.	**Consistent** Future development would be required to comply with use adjacency buffers regulated by zoning under the Development Standard Set. These buffers are required when industrial or heavy commercial Use Districts are adjacent to Use Districts allowing for residential uses. The Downtown Plan also incorporates numerous goals and policies to support healthy communities, such as policies promoting active transport through the development of walkable communities, expansion of bike and pedestrian networks, and improvement of safety, comfort, and aesthetics of the pedestrian environment. In addition, the Downtown

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
	Plan includes policies to support availability of healthier food, such as: LU 8.7 Support street vending and create vending districts to increase access to economic opportunity and healthy food and reinforce Downtown's active street life. LU 15.2 Promote public health and environmental sustainability outcomes consistent with the City's Plan for Healthy Los Angeles and the Sustainable City pLAn. LU 15.4 Facilitate access to affordable, fresh food for all Downtown residents and support community serving small businesses that sell affordable, fresh, and culturally relevant food
2.2 Healthy Building Design and Construction Promote a healthy built environment by encouraging the design and rehabilitation of buildings and sites for healthy living and working conditions, including promoting enhanced pedestrian-oriented circulation, lighting, attractive and open stairs, healthy building materials and universal accessibility using existing tools, practices, and programs.	**Consistent** The Downtown Plan includes a number of policies to support the development of a pedestrian-oriented environment with universal accessibility, including: LU 17.5 Encourage trees and architectural elements that provide shade; cooling stations; and seating areas for pedestrians along primary corridors in Downtown. LU 15.6 Encourage sustainable building design and construction standards that can increase building energy and water efficiency. LU 10.3 Incentivize the inclusion of paseos through large sites to improve pedestrian access. LU 10.11 Line the ground floor of stand-alone garages with active uses and require that upper levels be screened to increase street life and pedestrian activity, and improve the aesthetic quality of buildings and neighborhoods LU 17.1 Promote a pedestrian environment that enhances thermal, visual, and audible comfort and provides opportunities for resting and socializing. In addition, the Downtown Plan would encourage redevelopment of sites with older structures that may contain hazardous building materials, such as asbestos, lead, and other contaminants. As discussed in Section 4.8, *Hazards & Hazardous Materials*, demolition of existing structures would be required to comply with federal, State and local regulations that would prevent hazardous levels of exposure during demolition. New construction would not have the same levels of hazardous materials, and as subject to existing hazard mitigation requirements, redevelopment would also contribute to a healthier built environment.
2.11 Foundation for Health Lay the foundation for healthy communities and healthy living by promoting infrastructure	**Consistent** See responses to Policies 1.5 and 2.2. In addition, the Downtown Plan includes policies to enhance safety for active

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN

Objective	Downtown Plan Consistency
improvements that support active transportation with safe, attractive, and comfortable facilities that meet community needs; prioritize implementation in communities with the greatest infrastructure deficiencies that threaten the health, safety, and well-being of the most vulnerable users.	transport and identifies areas to target for safety improvements, including: LU 10.6 Require that pedestrian bridges minimize visual impacts, be architecturally integrated into building design, and include maintenance and safety programs with connection to public entrances, lighting, and directional signage, and include maintenance and safety programs LU 29.14 Target San Pedro, 3rd, 4th, 5th, 6th, and 7th streets for improvements to increase safety, connectivity, and access for the Skid Row community.
3.2 Expand Parks Improve Angelenos' mental and physical health by striving to equitably increase their access to parks, increasing both their number and type throughout the city; prioritize implementation in the most park-poor areas of the city.	**Consistent** As discussed in Section 4.14, *Recreation*, Downtown Plan development would generate demand exceeding City standards for park land. However, developers of residential development projects in the Downtown Plan Area would be required to pay park impact fees, Quimby in-lieu fees, or dedicate land for parks, which would support the provision of new park facilities inside and outside the Downtown Plan Area. In addition, the Downtown Plan includes a zoning incentive system that allows developers to build at a higher FAR if their project includes public benefits, such as open space or community facilities. This would incentivize the creation of new open space areas and community amenities. The Downtown Plan includes policies that support the development of new parks, particularly in priority areas, and preservation of existing parks: LU 37.3 Expand the amount of open space resources with parks, paseos, parklets, and enhanced pedestrian amenities on public streets. SO (Streets and Open Space) 1.1 Find opportunities to create new parks and other open spaces through tools such as the transfer of development rights, public outdoor amenity space incentives, and non-traditional interventions in the public right-of-way, and as a part of major public projects. SO 1.2 Prioritize the development of public open space in underserved communities to improve access to open space. SO 1.7 Support the development of catalytic new parks and reinvestment into existing parks. Namely: ● Pershing Square ● Park 101 ● 6th Street Park ● A new large park in the Fashion District ● Gil Lindsey Plaza
3.3 Los Angeles River Continue to support the implementation of the Los Angeles River Revitalization Master Plan to create a continuous greenway of interconnected	**Consistent** The eastern boundary of the Downtown Plan Area abuts the channelized Los Angeles River. The area along the river is currently occupied primarily by railroad tracks, Union Station, and a variety of industrial uses. The Downtown Plan both

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
parks and amenities to extend open space and recreational opportunities.	preserves the existing industrial nature of the river-adjacent area and allows for mixed uses in the areas adjacent to the River with the Hybrid Industrial designation. The Downtown Plan also encourages greater connectivity to the River through pedestrian infrastructure improvements, the development of 4th, 6th, and 7th Streets, which provide River access, as primary east-west corridors. The Downtown Plan includes policies to encourage the development of a more public-facing riverfront community in its Streets and Open Space Chapter with SO Goal 9 and 10. Policies under these goals include: SO 8.4 Identify physical interventions, such as decking over rail lines that can improve connectivity and access to the River. SO 9.2 Activate space adjacent to the Los Angeles River with active and passive recreational amenities and access points to the River. SO 9.4 Support the recommendations of the Los Angeles River Design Guidebook. SO 10.1 Support the implementation of the Los Angeles River Revitalization Master Plan and the Los Angeles River Ecosystem Restoration Project.
3.5 Park Safety Encourage greater community use of existing parks and open spaces by improving safety and access in and around parks and open spaces by encouraging land use, design, and infrastructure improvements that promote healthy and safe community environments and park design, programming, and staff-levels that meet local community safety-needs.	**Consistent** The Downtown Plan includes a number of policies to improve safety and access throughout the Downtown Plan Area, such as those included under SO Goal 5, Public open space that is inviting and engaging for community gathering and recreation: SO 5.1 Develop design guidelines to promote alleys as shared, and multipurpose public spaces that are welcoming to a range of users. SO 5.2 Encourage the use of creative lighting, public art, and seating treatments. SO 5.4 Provide family-friendly activities and spaces, as well as programming for children, youth, and seniors. SO 5.5 Support walkability and safety with appropriate lighting, and legible wayfinding. As discussed in Section 4.14, *Recreation*, Downtown Plan residential development projects would be required to pay park impact fees, which would help support improvements to existing facilities. In addition, the Downtown Plan includes a zoning incentive system that allows developers to build at a higher FAR if their project includes public benefits, such as open space or community facilities. This would incentivize the creation of new open space areas and community amenities.
4.1	**Consistent**

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
Land for urban agriculture and healthy food Encourage and preserve land for urban agriculture in the city to ensure a long-term supply of locally produced healthy food, promote resiliency, green spaces, and healthy food access; increase the number of urban agriculture sites including but not limited to: community gardens, parkway gardens, urban farms and rooftop gardens in low-income and undeserved areas.	The Markets designation allows for a mix of uses, including urban agriculture. In addition, the Downtown Plan includes a zoning incentive system that allows developers to build at a higher FAR if their project includes open space or community facilities such as community gardens to improve access to healthy food options.
5.1 Air pollution and respiratory health Reduce air pollution from stationary and mobile sources; protect human health and welfare and promote improved respiratory health.	**Consistent** Reasonably anticipated development under the Downtown Plan would generate emissions exceeding SCAQMD significance thresholds, as discussed in Section 4.2, *Air Quality*. However, growth is consistent with the RTP/SCS. In addition, as discussed in Section 4.15, *Transportation and Traffic*, VMT per service population that accounts for both residents and employee trips for the Downtown Plan would be less than or equal to the projections for the 2040 RTP/SCS, which would limit vehicular emissions and associated regional air quality impacts and contribute toward attainment of state and federal air quality standards. In addition, stationary and mobile sources in the Downtown Plan Area would be subject to local, state, and national regulations to reduce air pollutant emissions, including California's clean car standards (i.e., Pavley regulations), ARB diesel engine requirements, and SCAQMD rules and regulations. The Downtown Plan would also include policies to reduce air pollution from stationary and mobile sources, protect human health and welfare, and promote improved respiratory health, such as the following: LU 15.1 Plan for sustainable land use patterns that leverage transit and open space resources and access to housing and jobs to improve the overall quality of the environment. LU 15.5 Encourage the use of native flora that maximizes the capture of pollutants near freeways and industrial facilities. LU 16.6 Prioritize infrastructure and landscape treatments that absorb pollutants and support stormwater infiltration. LU 16.7 Reduce the urban heat island effect by installing cool pavement and cool roofs throughout Downtown. LU 16.9 Support local, regional, state, and federal programs seeking to reduce greenhouse gas emissions, in an effort to minimize pollution sources and to improve air quality. LU 17.5 Encourage trees and architectural elements that provide shade; cooling stations; and seating areas for pedestrians along primary corridors in Downtown. In addition, the Downtown Plan supports reduced air pollution from mobile sources and improved respiratory health by

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
	supporting development of public transit, the development of residences and employment centers near transit, expanding and improving the safety of active transport infrastructure, and improving pedestrian and bike access to buildings. Relevant policies include those under Mobility and Connectivity (MC) Goal 1, A safe transportation system that accommodates the needs of all people; MC Goal 3, A safe and inviting pedestrian environment; and MC Goal 4, A safe and integrated bicycle network that provides access to transit and key destinations. Also see response to Policy 2.11.
5.2 People Reduce negative health impacts for people who live and work in close proximity to industrial uses and freeways through health promoting land uses and design solutions.	**Consistent** Land uses supported by the Downtown Plan include light industrial uses, such as research and development, clean technology, and light manufacturing, and limits heavy industrial uses typically associated with high levels of negative health impacts to the south portion of the Plan Area. In addition, the Downtown Plan does not allow heavy industrial uses where residential and live/work uses are permitted. Industrial uses would be generally concentrated together in the southern portion of the Downtown Plan Area where residential uses will be prohibited. This would reduce exposure of residents and workers not employed by industry to potential health impacts from industrial activities. The Downtown Plan also includes the following policy to reduce negative health impacts from industrial uses: The Downtown Plan Area is bounded by, and encompasses, portions of a number of freeways (I-10, U.S. 101, I-110). The Plan permits residential and commercial development in proximity to freeways. As discussed in Section 4.2, *Air Quality*, uses within 500 of freeways could be exposed to elevated levels of diesel particulate matter, but such projects would generally incorporate air filtration systems that achieve interior air quality that does not result in deleterious long-term health effects.
5.7 Land use planning for public health and GHG emission reduction Promote land use policies that reduce per capita greenhouse gas emissions, result in improved air quality and decreased air pollution, especially for children, seniors, and others susceptible to respiratory diseases.	**Consistent** See response to Policy 5.1.
7.2 Safe passages Continue to promote the development and implementation of comprehensive strategies that foster safe passages in neighborhoods with high crime and gang activity to ensure that all Angelenos can travel with confidence and without fear.	**Consistent** The Downtown Plan includes a number of policies to improve safety and access throughout the Downtown Plan Area, such as those included under SO Goal 5, Public open space that is inviting and engaging for community gathering and recreation: SO 5.1 Develop design guidelines to promote alleys as shared, and multipurpose public spaces that are welcoming to a range of users. SO 5.2 Encourage the use of creative lighting, public art, and seating treatments. SO 5.4

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
	Provide family-friendly activities and spaces, as well as programming for children, youth, and seniors SO 5.5 Support walkability and safety with appropriate lighting, and legible wayfinding.
Air Quality Element (1992)	
1.1 Reduce air pollutants consistent with the Regional Air Quality Management Plan (AQMP), increase traffic mobility, and sustain economic growth citywide.	**Consistent** As discussed in Section 4.2, *Air Quality*, Downtown Plan development would generate emissions exceeding SCAQMD significance thresholds. However, growth under the Downtown Plan would be consistent with SCAG forecasts upon which the AQMP is based. In addition, the Downtown Plan Area includes a wide range of transportation options and consequently, as discussed in Section 4.15, *Transportation and Traffic*, vehicle miles traveled (VMT) per service population in the Downtown Plan Area are forecast to remain well below city and regional averages.
2.1 Reduce work trips as a step towards attaining trip reduction objectives necessary to achieve regional air quality goals	**Consistent** The Downtown Plan would reduce work trips by promoting development near major transit hubs, promoting development of residences near employment, improving and expanding pedestrian, bicycle, and transit facilities, and supporting complete communities with a mix of residences and community-serving uses. Therefore, the Downtown Plan would generally promote land use and development patterns that reduce vehicle trips, and would maximize and improve the link between land use and multi-modal transportation to encourage the use of a range of transit modes. In addition, as discussed in Section 4.15, *Transportation and Traffic*, service population VMT that also accounts for employment-related VMT for the Downtown Plan would be less than or equal to the projections for the 2040 RTP/SCS.
2.2 Increase vehicle occupancy for non-work trips by creating disincentives for single passenger vehicles and incentives for high occupancy vehicles	**Consistent** The Downtown Plan promotes higher vehicle occupancy with the following policy: MC 7.4 Expand programs that offer access to carpools and vanpools for Downtown workers to reduce the commute mode share of single occupancy vehicles. As discussed in Section 4.15, *Transportation and Traffic*, the Downtown Plan would also enhance access to transit, through applying new land use and zoning regulations to encourage mixing and implementing transportation improvements within the framework established in MP 2035.
3.1 Increase the portion of work trips made by transit to levels that are consistent with the goals of the AQMP and Congestion Management Plan (CMP).	**Consistent** See the response to Policy 2.1.
3.2 Reduce vehicular traffic during peak periods.	**Consistent** See the response to Policy 2.1.
4.2 Reduce vehicle trips and vehicle miles traveled associated with land use patterns.	**Consistent** See the response to Policy 2.1.
4.3	**Consistent** Reasonably anticipated development from the Downtown Plan would primarily be residential, commercial, and light

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
Ensure that land use plans separate major sources of air pollution from sensitive receptors, such as schools, hospitals and parks.	industrial development that would not be a major source of air pollution. The Downtown Plan does not propose zoning that would permit development of heavy industrial uses in the Downtown Plan Area and concentrates production, wholesalers, and light industrial uses in the eastern and southern portions of the Downtown Plan Area. See the response to Health and Wellness Element Policy 5.2.
Conservation Element (2001)	
Archaeological and paleontological Protect the city's archaeological and paleontological resources for historical, cultural, research and/or educational purposes.	**Consistent** As discussed in Section 4.4, *Cultural Resources*, with mitigation, Downtown Plan development would not result in significant impacts to archaeological and paleontological resources.
Cultural and historical Protect important cultural and historical sites and resources for historical, cultural, research, and community educational purposes.	**Consistent** Future development under the Downtown Plan could potentially result in modifications to or loss of historic resources due to their ubiquity in the Downtown Plan Area, as discussed in Section 4.4, *Cultural Resources*, under Impact 4.4-1. However, the Downtown Plan includes various policies to protect the area's important cultural and historical sites, as discussed in the response to Framework Element Policy 3.17. In addition, implementation of the Downtown Plan would incorporate Mitigation Measures 4.4-1, 4.4-2, and 4.4-3, which would require future development projects to take steps to identify, protect, and/or document historical, archaeological, and paleontological resources that would be impacted by the project.
Land form and scenic vistas Protect and reinforce natural and scenic vistas as irreplaceable resources and for the aesthetic enjoyment of present and future generations.	**Consistent** As discussed in Section 4.1, *Aesthetics*, Impact 4.1-1, the Downtown Plan Area is already urbanized and lacks major identified scenic resources. Impacts to land forms and scenic vistas from Downtown Plan development would be less than significant.
Housing Element (2013)	
2.2 Promote sustainable neighborhoods that have mixed-income housing, jobs, amenities, services and transit.	**Consistent** See the responses to Framework Element Policies 3.8, 4.1, 4.2, and 5.2.
2.3 Promote sustainable buildings, which minimize adverse effects on the environment and minimize the use of non-renewable resources.	**Consistent** Downtown Plan development would be required to comply with the Los Angeles Green Building Code, which largely incorporates and amends the 2013 CALGreen Code, and also 2016 CALGreen Code requirements, which include standards to enhance energy efficiency and resource conservation. The Downtown Plan would also include policies to promote sustainable buildings, such as the following: LU 15.6 Encourage sustainable building design and construction standards that can increase building energy and water efficiency. Also see the responses to GPF policies 6.1 and 9.40.
2.4 Promote livable neighborhoods with a mix of housing types, quality design and a scale and character that respects unique residential neighborhoods in the City.	**Consistent** See the responses to Framework Element Policies 3.8, 4.1, 4.2, and 5.2, and the discussion under Impact 4.10-1.

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
Noise Element (1999)	
3 Reduce or eliminate noise impacts associated with proposed development of land and changes in land use.	**Consistent** Future development in the Downtown Plan Area would be required to reduce noise impacts in accordance with the City's Noise Ordinance and incorporate mitigation provided in Section 4.11, *Noise*, as applicable.
Open Space Element (1973)	
The provision of malls, plazas, green areas, etc., in structures or building complexes and the preservation and provision of parks shall be encouraged.	**Consistent** See the response to Health and Wellness Element Policy 3.2 regarding the provision of parks. In addition, the Downtown Plan includes a zoning incentive system that allows developers to build at a higher FAR if their project includes public benefits, such as open space or community facilities. This would incentivize the creation of new open space and parks. The Downtown Plan includes numerous policies to encourage the provision of plazas, green areas, and other open spaces, such as: LU 4.3 Promote shared on-site amenities, including usable open space in new development projects. LU 21.6 Encourage new developments to contribute to the pedestrian and open space network with publicly-accessible plazas and paseos. Design these spaces with appropriate shading and landscaping. SO 4.4 Promote green spaces as inviting urban streetscapes that attract and serve all those who visit, live, and work Downtown.
Service Systems Element/ Public Recreation Plan	
Recreational facilities and services should be provided for all segments of the population on the basis of present and future projected needs, the local recreational standards, and the City's ability to finance.	**Consistent** See the response to Health and Wellness Element Policy 3.2.
Mobility Element – Mobility Plan 2035 (2016)	
Chapter 3: Access for All Angelenos	
3.1 Access for All Recognize all modes of travel, including pedestrian, bicycle, transit, and vehicular modes - including goods movement - as integral components of the City's transportation system.	**Consistent** The Downtown Plan would support transit-oriented development and includes a number of policies to support all modes of travel, as well as goods movement.
	Pedestrian Mode See the responses to Health and Wellness Policy 2.11 *Bicycle* MC 4.1 Promote the development of protected bicycle facilities, with dedicated signals, along key corridors to improve safety, comfort, and access for cyclists of all abilities.

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
	MC 4.2 Encourage residential and office buildings to provide bicycle related amenities such as repair stations and showers to facilitate cycling for residents, workers, and visitors. MC 4.3 Support the expansion of bike share throughout Downtown and adjacent areas, especially as a means to connect areas that are less served by transit. MC 4.4 Facilitate the integration of bikes on transit to improve first-last mile connections. MC 4.5 Identify gaps in bicycle facilities and prioritize network completion to achieve significant gains in bicycle mode share. *Public Transit* LU 21.2 Foster and reinforce a cohesive, pedestrian-friendly, and inviting streetscapes that promote walking, bicycling, and transit use. Encourage the creative infill of landscaped setbacks and inoperative spaces, such as those resulting from inconsistent streetwalls. LU 21.3 Pursue the implementation of a legible and consistent wayfinding system that guides pedestrians to destinations of interest and transit portals, such as Metro Stations. LU 21.12 Facilitate efforts to improve transit operations at the Pico Station through signal priority for transit vehicles and grade separation of transit facilities. LU 21.16 Advance efforts to plan for the future integration of high speed rail and other transit projects, such as the West Santa Ana Branch line and Link US, to reinforce Union Station and Downtown as the hub of regional transit. LU 21.17 Support the implementation of the ConnectUS Action Plan to improve pedestrian and cyclist linkages between Union Station and surrounding districts. *Goods Movement* LU 47.1 Prioritize space for jobs by preserving existing industrial functions, allowing production sectors to cluster, and facilitating goods movement with access to freeways and transportation corridors. LU 48.2 Guide the development of structures that are oriented and conducive to goods movement and new industry, while balancing pedestrian needs, and supporting transit use.

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
3.2 People with Disabilities Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.	**Consistent** The Downtown Plan includes the following policy to acknowledge the needs of people with disabilities: MC 1.1 Implement physical improvements and education programs to ensure safe access throughout Downtown's districts for users of all ages and abilities. SO 7.3 Maintain safety for all users, with appropriate traffic control infrastructure and ADA accessibility.
3.3 Land Use Access and Mix Promote equitable land use decisions that result in fewer vehicle trips by providing greater proximity and access to jobs, destinations, and other neighborhood services.	**Consistent** The proposed Downtown Plan designations support mixed uses throughout almost the entirety of the Downtown Plan Area providing greater proximity and access to jobs, destinations, and neighborhood services. As discussed in Section 4.15, *Transportation and Traffic*, VMT per service population in the Downtown Plan Area are forecast to remain below City and regional averages.
3.4 Transit Services Provide all residents, workers and visitors with affordable, efficient, convenient, and attractive transit services.	**Consistent** The Downtown Plan Area is well-served by existing and planned public transit. The Downtown Plan includes policies that support further transit improvements as discussed under Impact 4.10-1.
3.5 Multi-Modal Features Support "first-mile, last-mile solutions" such as multi-modal transportation services, organizations, and activities in the areas around transit stations and major bus stops (transit stops) to maximize multi-modal connectivity and access for transit riders	**Consistent** The Downtown Plan supports first-mile, last mile solutions through its Community Center and Transit Core designations, which promote mixed-use development near transit areas, as well as policies supporting active transport and transit (see the response to Policy 3.1).
3.6 Regional Transportation & Union Station Continue to promote Union Station as the major regional transportation hub linking Amtrak, Metrolink, Metro Rail, and high-speed rail service.	**Consistent** Policies in the Downtown Plan addressing Union Station include the following: LU 21.15 Encourage a mix of uses that intensifies and activates Union Station and surrounding neighborhoods. LU 21.16 Advance efforts to plan for the future integration of high speed rail and other transit projects, such as the West Santa Ana Branch line and Link US, to reinforce Union Station and Downtown as the hub of regional transit. LU 21.17 Support the implementation of the ConnectUS Action Plan to improve pedestrian and cyclist linkages between Union Station and surrounding districts.
3.7 Regional Transit Connections Improve transit access and service to major regional destinations, job centers, and inter-modal facilities.	**Consistent** See the responses to Policies 3.4 and 3.6.
Chapter 5: Clean Environments & Healthy Communities	
5.1 Sustainable Transportation Encourage the development of a sustainable transportation system that promotes environmental and public health.	**Consistent** The Downtown Plan supports development of active and alternative modes of transport. See the response to Policy 3.1.

TABLE 4.10-3 CONSISTENCY ANALYSIS WITH THE CITY OF LOS ANGELES GENERAL PLAN	
Objective	**Downtown Plan Consistency**
5.2 Vehicle Miles Traveled (VMT) Support ways to reduce vehicle miles traveled (VMT) per capita.	**Consistent** The Downtown Plan Area includes a variety of transportation options and reasonably anticipated development from the Downtown Plan would include a mix of uses that supports the use of alternative transportation modes, such as transit, walking, and bicycling. As discussed in Section 4.15, *Transportation and Traffic*, vehicle miles traveled (VMT) per service population in the Downtown Plan Area are forecast to remain well below city and regional averages.
5.5 Green Streets Maximize opportunities to capture and infiltrate stormwater within the City's public right-of-ways.	**Consistent** The Downtown Plan includes policies to support capture and infiltration of stormwater, such as: LU 15.3 Create a network of public and private green infrastructure by incentivizing the use of trees, eco roofs, vertical gardens, stormwater facilities, and landscaped amenity areas. LU 16.5 Support Citywide water use reduction goals by focusing on water management practices, and stormwater capture and treatment in Downtown that can increase local water supply. LU 16.6 Prioritize infrastructure and landscape treatments that absorb pollutants and support stormwater infiltration. LU 17.2 Maintain and expand the tree canopy to provide shade, improve air and water quality, reduce heat-island effect, and create habitat for birds and pollinators. SO 6.1 Require sustainable best practices relating to pollution reduction, stormwater management, heat reduction, and material recycling.

Los Angeles is a SCAG member and subject to SCAG's current regional transportation and land use planning strategies and goals for Southern California, which are established in the 2016-2040 RTP/SCS. **Table 4.10-4** provides a consistency analysis of the Downtown Plan with applicable goals contained in the 2016-2040 RTP/SCS. The Downtown Plan would be consistent with applicable actions and strategies contained in SCAG's 2016-20140 RTP/SCS

TABLE 4.10-4 CONSISTENCY ANALYSIS WITH THE SCAG 2016-2040 RTP/SCS	
Actions/Strategies	**Downtown Plan Consistency**
Land Use	
Focus new growth around transit The 2016 RTP/SCS land use pattern reinforces the trend of focusing growth in the region's High Quality Transit Areas (HQTAs). Concentrating housing and transit in conjunction concentrates roadway repair investments, leverages transit and active transportation investments, reduces regional life cycle infrastructure costs, improves accessibility, avoids greenfield development, and has the potential to improve public health and housing affordability. HQTAs provide households	**Consistent** The Downtown Plan would concentrate future growth in areas well-served by transit, including bus lines, light rail, heavy rail, and regional rail. See the response to Framework Element Policy 5.2. As discussed in Section 4.15, *Transportation and Traffic*, VMT per service population in the Downtown Plan Area are forecast to remain below City and regional averages.

TABLE 4.10-4 CONSISTENCY ANALYSIS WITH THE SCAG 2016-2040 RTP/SCS	
Actions/Strategies	**Downtown Plan Consistency**
with alternative modes of transport that can reduce VMT and GHG emissions.	
Provide more options for short trips 38 percent of all trips in the SCAG region are less than three miles. The 2016 RTP/SCS provides two strategies to promote the use of active transport for short trips. Neighborhood Mobility Areas are meant to reduce short trips in a suburban setting, while "complete communities" support the creation of mixed-use districts in strategic growth areas and are applicable to an urban setting.	**Consistent** See the response to Mobility Element Policy 3.5.
Transportation	
Preserve our existing transit system Ensuring that the existing transportation system is operating efficiently is critical for the success of HQTAs, Livable Corridors, and other land use strategies outlined in the 2016 RTP/SCS.	**Consistent** As discussed in Section 4.15, *Transportation and Traffic*, the Downtown Plan would enhance access to all modes in the local circulation system, improving access on transit, roadways, bicycle and pedestrian facilities. This is accomplished through applying new land use and zoning regulations to encourage mixing and scales of use as well as site design supportive of all modes. In addition, the types of transportation improvements envisioned as part of the Downtown Plan are within the framework established in MP 2035.
Transit Initiatives	
Improve accessibility and connectivity This strategy includes establishing rail connections to our region's airports, and improving transit, bicycling and walking accessibility and connectivity to rail stations.	**Consistent** As discussed in the responses to Health & Wellness Element Policies 1.5, 2.2, and 2.11, the Downtown Plan includes policies to support improvements to transit, bicycling and pedestrian facilities and enhance safety for active transport. As discussed in the response to Mobility Element Policy 3.5, the Downtown Plan also supports transit-oriented development through its proposed General Plan designations.
Active transport Strategies for achieving active transport include transit integration strategies-incorporation of first/last mile (to transit) strategies, livable corridors, and bike share services; short trip strategies-enhanced sidewalk quality, local bikeway networks, and neighborhood mobility areas; and education/encouragement strategies, including safe routes to schools.	**Consistent** As discussed in the response to Health & Wellness Element Policy 2.11 and Mobility Element Policy 3.5, the Downtown Plan includes policies to support improvements to transit, bicycling and pedestrian facilities and enhance safety for active transport, and would establish General Plan designations that facilitate transit-oriented development. In addition, the Downtown Plan includes the following policy to support safe routes to schools: MC 1.5 Facilitate the development of Safe Routes to School programs to ensure safe, multimodal access to Downtown schools.
Support complete streets opportunities where feasible and practical.	**Consistent** The Downtown Plan would support the creation of streets that provide safe mobility for all users. As delineated in the response to Mobility Element Policy 3.1, the Downtown Plan would include policies to enhance safety and access for pedestrians and bicyclists and promote bicycle and transit use.

Specific Plans and Other Plans/Standards

As discussed in the Regulatory Setting, a number of specific plans and other plans apply to portions of the Downtown Plan Area. These include:

- Los Angeles Sports and Entertainment District (LASED) Specific Plan
- Bunker Hill Specific Plan
- Alameda District Specific Plan
- Cornfield Arroyo Specific Plan
- Downtown Design Guide
- Greater Downtown Housing Incentive Area
- River Improvement Overlay (RIO) District
- Broadway Theater and Entertainment Design Guide Community Design Overlay (CDO)
- Historic Broadway Sign Supplemental Use District (SUD)
- Downtown Street Standards
- Little Tokyo Community Design Overlay (CDO)

The LASED Specific Plan Area consists of five blocks surrounding the Staples Center along its north and east sides. The Specific Plan provides regulations and incentives to support the development of the Specific Plan Area as a major entertainment/ mixed-use area with primarily hotel, retail, entertainment, and residential uses and has the goal of enhancing the existing Convention Center and Staples Center environs. The Downtown Plan includes minor amendments to address consistency with the New Zoning Code as to form, numeration, cross-references and implementation. The Transit Core designation of the Downtown Plan would accommodate the types of uses and intensities envisioned in the Specific Plan, thus furthering the Specific Plan goal of enhancing the area around the Convention Center and Staples Center.

The Bunker Hill Specific Plan Area is bounded generally by the 110 Freeway to the west, Fifth Street to the south, Hill Street to the east, and First Street to the north. The Specific Plan provides a regulatory framework to support development of the Bunker Hill neighborhood into a 24-hour downtown environment with a mix of commercial, retail, residential, and cultural spaces. The Bunker Hill Specific Plan will be repealed as part of the Proposed Downtown Plan. The purpose and provisions of the Bunker Hill Specific Plan will be implemented through the New Zoning Code provisions. The Transit Core designation of the Downtown Plan would accommodate the types of uses and intensities envisioned in the Specific Plan, thus furthering Specific Plan goals.

The Alameda District Specific Plan Area includes Union Station and the associated Terminal Annex area and is generally bounded to the south by U.S. 101, to the west by Alameda Street, and to the north and east by Vignes Street. The Specific Plan provides a regulatory framework to support the development of the area as a major transit hub for the region with adjacent mixed-uses. The Transit Core designation of the Downtown Plan would accommodate the transit hub envisioned in the Specific Plan, thus furthering Specific Plan goals.

The Cornfield Arroyo Specific Plan Area encompasses the northeast corner of the Downtown Plan Area south and east of the train tracks that run parallel to Broadway, west of the Los Angeles River, and north of College Street, Alhambra Avenue, and Bolero Lane. The Specific Plan established four new zoning districts, zoning standards, and additional requirements for an industrialized area. The four zones introduced by the Specific Plan—Urban Center, Urban Innovation, Urban Village Zone, and Greenway—support a wide variety of uses, including light industrial and manufacturing uses, urban agriculture, multi-family

residences, public facilities, social and environmental organizations, religious institutions, and schools. The Hybrid Industrial designation of the Downtown Plan would accommodate the mix of uses envisioned in the Specific Plan.

The Downtown Design Guide (DDG) provides urban design standards and guidelines for new construction (including additions) in the following Downtown neighborhoods: Convention Center, South Park, City Markets, Historic Downtown, Financial Core, Little Tokyo, Civic Center South, Bunker Hill, and Civic Center. Topics addressed in the Guide include sustainable design, sidewalks and setbacks, ground floor treatment, parking and access, massing, on-site open space, architectural detail, streetscapes, and signage. As discussed in the Chapter 3, Project Description, the DDG would be updated to reflect standards and guidelines in these existing documents that would now be regulated through the New Zoning Code. Content within the existing Design Guide that is redundant to proposed New Zoning Code provisions, such as Form District, Frontage, or Development Standards, is proposed to be removed. The Design Guide will include additional content that would provide best practices that are responsive to specific neighborhood character. These neighborhood best practices will serve as an informational resource for new infill development to reinforce the unique identity of these neighborhoods and complement existing built patterns. The Downtown Plan incorporates the concepts contained in the current DDG and updates it to better complement proposed zoning regulations with an intent to help create a cohesive, pedestrian and transit friendly community while reinforcing the unique identity of neighborhoods. Thus, it would further the goals of DDG.

Ordinance 179,076 established the Greater Downtown Housing Incentive (GDHI) Area in 2007, providing a range of incentives to develop affordable housing in those portions of the Central City and Southeast Community Plan Areas generally bounded by U.S. 101 to the north, the 110 Freeway and Figueroa Street (south of Adams Boulevard) on the west, Alameda and Grand Avenue (south of 21st Street) to the east, and Washington Boulevard and Martin Luther King, Jr. Boulevard (west of Broadway) to the south. Specific bonuses include increased allowable floor area, reductions in required open space, and reductions in required parking for projects that include minimum affordable housing set-asides. The GDHI applies for only a portion of the Downtown Plan Area.

The Downtown Plan includes the new Downtown Community Benefits Program designed to promote the provision of affordable housing and will apply to the entirety of the Plan Area. The GDHI ordinance will be amended to exclude the Downtown Plan Area. However, the Downtown Community Benefits Program will further the intent of GDHI by expanding affordable housing incentives for all of the Downtown Plan Area.

The RIO District (Ordinance Nos. 18314 and 183145) is intended to help implement the vision and goals of the Los Angeles River Restoration Master Plan (LARRMP) by establishing additional requirements for properties along the riverfront or near the riverfront. These primarily include requirements pertaining to landscaping, fencing, exterior lighting, and ADA accessibility that serve to build a riverfront community and make the riverfront area a more welcoming environment to pedestrians and cyclists. Within the Downtown Plan Area, the RIO District includes all of the Central City North Community Plan Area south of Cesar E. Chavez and the area east of N. Spring Street and north of Cesar E. Chavez. Applicable development regulations and measures to protect sensitive biological resources in the RIO will be incorporated into Frontage Districts and development standard rules of the New Zoning Code. In addition, the RIO will be amended to remove portions that are currently in the Downtown Plan Area to avoid redundancy with the New Zoning Code provisions. The Downtown Plan would accommodate a range of uses in the vicinity of the RIO District and includes zoning regulations that are generally consistent with those of the LARRMP. The Downtown Plan would thus further the goal of building a riverfront community.

The Broadway CDO applies to Broadway between 1st Street and 12th Street in the Central City Community Plan Area. The Broadway CDO encourages the rehabilitation of existing building and guides the design and development of new buildings. Regulations include guidance for building setbacks, form, roof lines,

building articulations, storefront and window transparency, facade materials, and lighting. The Traditional Core designation of the Downtown Plan similarly encourages rehabilitation of existing buildings and includes design standards that maintain the current character of this area. Some of the standards and guidelines in the existing Broadway CDO would now be regulated through the New Zoning Code. The Broadway CDO will be amended to remove content that is redundant to proposed New Zoning Code provisions, such as Form District, Frontage, or Development Standards. The Broadway Streetscape Master Plan applies to properties fronting Broadway from First Street and Twelfth Street. The Master Plan was established to create a multi-modal, pedestrian focused street that can support and revitalize the historic theater district. The Streetscape guidelines call for expanded sidewalks with street elements and limited landscaping to enhance pedestrian interest and activity along the street. The Traditional Core designation would maintain the character of Broadway while Downtown Plan design standards would implement the ideas contained in the Streetscape guidelines.

The Broadway SUD applies to Broadway from First Street to Twelfth Street, encompassing the Broadway Theater and Entertainment District and parcels front along intersecting streets. It includes standards for the design, placement, and orientation of signs along Broadway, providing guidance for sign types that are currently on Broadway. The Sign District includes an incentive program to spur building activity, revitalization, and to fund streetscape improvements. Again, the Traditional Core designation includes standards that are generally consistent with those of the Broadway SUD.

The Downtown Street Standards apply throughout the Central City Community Plan Area, establishing a street hierarchy and guidance to balance traffic flow, pedestrian walkability, bicycle routes, and access to create more context-sensitive, complete streets in Downtown. The mobility components of the Downtown Plan are consistent with these standards as they are specifically aimed at enhancing walking, bicycling, and transit opportunities through, among other things, the creation of complete streets.

The Little Tokyo CDO applies to a portion of the Little Tokyo community, establishing design and development guidelines to promote a pedestrian-friendly environment and enhance the physical appearance of the area, with a focus on reinforcing the cultural and historic aspects of the neighborhood through a set of Design Guidelines. The Villages designation of the Downtown Plan would accommodate land uses and development standards that would be consistent with the Design Guidelines and are aimed at preserving and reinforcing the cultural and historic character of Little Tokyo. Similar to the Broadway CDO, standards and guidelines in the Little Tokyo CDO would now be regulated through the New Zoning Code. Thus, the Downtown Plan would further the goals of the little Tokyo CDO.

Redevelopment Plans

The Downtown Plan Area contains three active redevelopment plans that were formerly managed by the Community Redevelopment Agency of the City of Los Angeles (CRA/LA). In 2012, with the passage of AB 1x-26 by the California Legislature, the CRA/LA was abolished but the City's redevelopment plans continue to exist until they expire under their own terms. Since the dissolution of the CRA/LA, activities in the redevelopment project areas have been administered through the Designated Local Authority (DLA). The active redevelopment plans within the Downtown Plan Area are:

- Redevelopment Plan for the Chinatown Redevelopment Project Area (Chinatown Redevelopment Plan): The Chinatown Redevelopment Plan includes policies for neighborhood revitalization and to guide new development to meet the needs of the community, promote housing for various age, income and ethnic groups, encourage the diversification of the Chinatown commercial base to promote its economic wellbeing and to increase employment opportunities, develop an industrial environment that is compatible with adjacent land uses, preserve historic monuments and landmarks and enhance the distinctive character and identity of the community. The Redevelopment Plan will sunset in January 2022.

- The proposed Downtown Plan has similar goals and policies for the Chinatown Redevelopment Plan area. The Downtown Plan would generally increase the development potential of commercial uses in exchange for public benefits in the Chinatown Redevelopment Plan, including neighborhood-serving uses that are subject to area limitations as well as commercial uses such as entertainment, institutional and limited light industrial uses. This would encourage a wide variety of commercial uses and thereby strengthen the economic and employment base of the community. The Downtown Plan also includes policies to facilitate housing that is accessible to all income levels and ages and reinforce the historic and cultural identity of Chinatown. Therefore, the Downtown Plan would be generally consistent with the overall goals and policies of the Chinatown Redevelopment Plan.
- Redevelopment Plan for the Central Industrial Redevelopment Project Area (Central Industrial Redevelopment Plan): The Central Industrial Redevelopment Plan aims to eliminate and prevent the spread of blight and deterioration. Other main objectives of the plan is to encourage a healthy industrial environment that generates job opportunities and tax revenues; provision of a sound housing stock appropriate for all income levels, including artists-in–residence and live-work residents; provision of community services to meet the needs of stakeholders of the plan area and maintenance of a thriving commercial environment to serve businesses, employees, residents and visitors. The Redevelopment Plan will sunset in November, 2033.
- The policies, goals and zoning designations in the Downtown Plan for the Central Industrial Redevelopment Plan area are generally consistent with the goals and policies identified in the Central Industrial Redevelopment Plan. The Downtown Plan includes Hybrid Industrial districts, designed to promote productive industries and entrepreneurial activities and allows for a range of light industrial, office and commercial uses in addition to live/work units. The Plan reserves a significant portion of the Plan Area south of the I-10 for industrial and employment activities.
- Redevelopment Plan for the City Center Redevelopment Project Area (City Center Redevelopment Plan): City Center Redevelopment Plan provides policies to eliminate and prevent the spread of blight and deterioration, create an environment that will allow the Central City to accept its share of regional growth and development. The plan also includes policies to promote the development and rehabilitation of economic enterprises that are intended to provide employment and improve the area's tax base, and a full range of round-the clock activities and uses, such as recreation, sports, entertainment and housing. The Redevelopment Plan will sunset in May, 2033.
- The Downtown Plan allows for a wide mix of land uses in this Redevelopment Plan area to promote a range of employment opportunities, which generally align with the types of uses allowed under the City Center Redevelopment Plan. The Plan allows for the development of office, retail, entertainment and residential uses to facilitate growth in proximity to transit and expand the mix of uses and hours of activity and reinforce Downtown as the primary center of urban activity in the Southern California region.

Based on the above, the Downtown Plan would be generally consistent with the overall goals and policies of the three Redevelopment Plans. However, the Downtown Plan differs with the above Redevelopment Plan in terms of 1) land use regulations and 2) project review and approval procedures. Although the broad goals and policies between the Redevelopment Plans and the Downtown Plan are similar, certain regulations and procedures in the Redevelopment Plans are inconsistent or conflict with goals, objectives, and policies of the Downtown Plan:

1) Land Use Regulations

The Redevelopment Plans have regulations and numerical caps on floor area ratio, building height, and types of land uses that are not consistent with the Downtown Plan. These types of limits would deter the implementation of the Downtown Plan and incentives for affordable housing, which would allow

for more housing development, including affordable units in the Redevelopment Plan Areas than envisioned by the Redevelopment Plans. For certain properties, the maximum floor area ratio allowed under the Redevelopment Plans would be less than what the Downtown Plan would permit, impeding the implementation of the Downtown Plan's policies and goals, including ones that promote housing and jobs near transit.

For example, the City Center Redevelopment Plan limits FAR to a maximum of 6:1 in the Historic Downtown Area and the South Park Area, north of Pico, and a maximum of 3:1 in South Park Area, south of Pico, although maximum floor area ratios may be exceeded through Transfer of Floor Area Ratio. The maximum allowable FAR generally ranges from 10:1 to 13:1 for these areas in the Downtown Plan. The primary objective of the Downtown Plan is to accommodate employment, housing, and population growth projections forecasted through the planning horizon year of 2040 to ensure that the Downtown continues to grow in a sustainable, equitable, healthy, and inclusive manner, and implement policies of the City of Los Angeles General Plan Framework Element, by focusing new job-generating uses and residential development around transit stations. The caps on development in the Redevelopment Plans would not allow for full implementation of the policies and goals of the Downtown Plan for meeting growth consistent with the Framework Element and the 2016-2040 RTP/SCS.

The requirements related to FAR programs and reporting in the three Redevelopment Plans are inconsistent with the project objectives, goals, and policies of the Downtown Plan and updated implementation programs (see Appendix C, Chapter 5.0 *Implementation*). The Downtown Plan includes modernized and improved zoning tools to address scale and design in multiple formats that include regulations on building heights, ground floor ceiling height, transparency, open space, parking, character frontage requirements and vehicular access to address pedestrian orientation, historic preservation, and open space. In addition, there are implementation tools such as the Downtown Design Guidelines to promote best practices in the design of buildings and the public realm.

As such, the Downtown Plan includes requirements and programs that the City finds are better able to meet the goals and policies of the Framework Element and the 2016-2040 RTP/SCS and the underlying purpose of the Proposed Project than those in the Redevelopment Plans. The regulations and caps in the Redevelopment Plans that would conflict with the policies, objectives, goals, and express allowed zoning in the Downtown Plan are in conflict with the Downtown Plan.

2) Project Review and Approval Procedures

Both the Redevelopment Plan and the Los Angeles Municipal Code have procedures for review and approval of proposed developments. However, the Redevelopment Plan generally has additional project review and approval procedures that would not be needed with the implementation of the Downtown Plan and the extra process involved may hinder the creation of additional housing units and jobs needed to meet existing demand and anticipated growth. In several instances, the Redevelopment Plan requires the CRA to approve a development or participation agreement for uses that the Downtown Plan would allow through the proposed zoning or other existing zoning regulations, which could cause unnecessary hardships inconsistent with the purpose and intent of the Downtown Plan.

For example, the Downtown Plan allows for residential units on certain Commercial-Mixed Use zoning designations such as the Commercial-Mixed Community 1 (XC1) (CX1) in the Chinatown Redevelopment Project Area. LAMC also permits housing units on lots with commercial zones. Although the Chinatown Redevelopment Plan allows for residential uses within commercial areas, the project applicant must meet design and location criteria in addition to any other conditions specified by the CRA, which would require such developments to secure a development or participation agreements from the CRA. Another example is that the Downtown Plan allows for restaurants and retail of a certain

size in selected industrial areas such as Industrial Restricted 1 (MR1) and Industrial Heavy 1 (MH1) to generally support industry patrons and employees who work in the area; the Central Industrial Redevelopment Plan could permit commercial uses in these industrial areas but not without meeting the criteria as determined by the CRA.

Such requirements for the Redevelopment Plans would lead to additional review processes that could delay or present obstacles to the implementation of the Downtown Plan, which would otherwise explicitly permit such uses through the zoning. In addition, the dissolution of the CRA/LA has hampered the CRA's authorities to enter into agreements and significantly reduced its administrative resources. As such, the Redevelopment Plan is in conflict with the goals and policies of the Downtown Plan.

The Downtown Plan does not support carrying forward the requirements in the three Redevelopment Plans that are in conflict with the Downtown Plan. For example, the Downtown Plan will be implemented in accordance with the FAR limitations identified in the Plan, instead of the caps in the Redevelopment Plans. This may arguably result in the Downtown Plan conflicting with the Redevelopment Plans, with the Downtown Plan allowing more residential units than contemplated by the Redevelopment Plans. However, under the terms of the Central Industrial and City Center Redevelopment Plans, the City's plans and zoning are intended to control in any conflict between the two, and as such, as a legal matter there cannot be a conflict between these two Redevelopment Plans and the Downtown Plan in relation to land use plans or zoning requirements (See Section 502 of the Central Industrial and City Center Redevelopment Plans).

Section 502 of the Central Industrial and City Center Redevelopment Plans states that the land uses permitted in their respective Project Areas shall be those permitted by the General Plan, applicable Community Plan, and any applicable City zoning ordinance, as they existed when the Redevelopment Plans were adopted or as thereafter amended or supplemented. Therefore, the land use designations and zoning ordinances of the Downtown Plan would supersede the policies and provisions of the Central Industrial and City Center Redevelopment Plans that are inconsistent with the Downtown Plan.

The Chinatown Redevelopment Plan does not explicitly state the language of Section 502, included in the Central Industrial and City Center Redevelopment Plans. Nevertheless, even if the Downtown Plan were found to conflict with any substantive or procedural land use requirements in any of the Redevelopment Plans, that do or do not include the language in Section 502 discussed above, there would be no significant impact from that conflict that is not otherwise identified in this Draft EIR.

Some of the requirements in the Redevelopment Plans, including FAR caps may have been imposed to avoid or mitigate environmental impacts under prior CRA environmental documents, including without limitations, the EIRs for the Redevelopment Plans within the Downtown Plan Area. This EIR analyzes all of the environmental impacts based on the reasonably anticipated development of the Downtown Plan, which includes the three Redevelopment Plan areas, without CRA limitations. The City does not find that the elimination of any of these conflicting Redevelopment Plan's land use policies or requirements would result in a new or different impact from those already analyzed in this EIR. Based on above, there is no basis to find any new or different significant impact under this threshold due to a conflict with the Redevelopment Plans.

Mitigation Measures in the EIRs for the Chinatown, Central Industrial and City Center Redevelopment Plans. Some of the policies in the three Redevelopment Plans within the Downtown Plan Area that will be in conflict with the Downtown Plan are those that may have been incorporated into the Redevelopment Plans to reflect the mitigation measures in the environmental documents. Mitigation measures from prior EIRs or MNDs may be deleted or modified provided the lead or responsible agency prepares a new environmental clearance, which demonstrates that the agency considered the continuing need for the mitigation measure, states the reason for the change to the mitigation measure, and supports the decision to

remove or modify the mitigation measure with substantial evidence, and analyzes any significant impacts resulting from deletion or modification of the mitigation measure. To the extent the City is responsible for implementing some or all of the mitigation measures as the successor to the land use plans and functions in November 2019, the City's rationale and evidence for deleting or modifying the mitigation measures in the CEQA Clearances for the three Redevelopment Plans, including those related to the inconsistencies discussed above, as well as all other mitigation measures, and the analysis of impact resulting from modifying or deleting those mitigation measures, are provided in Appendix H.

Conclusion

Based on the above, the Downtown Plan would be consistent with applicable local and regional plans and policies. Thus, impacts related to inconsistency with land use plans and policies would be ***less than significant***.

New Zoning Code Impact

As described in Chapter 3.0, *Project Description*, Section 3.7.4, the Downtown Plan would utilize new General Plan Designations to better accommodate and correspond with the new zone districts, while still meeting the policy goals of the Framework Element. These changes would require minor updates to the General Plan Framework Element to allow the New Zoning Code to be applied to other areas of the City through a community plan update or amendment. The changes would have no effect on the existing policies and goals of the existing General Plan Framework Element.

The New Zoning Code would provide tools that facilitate future development that complies with the goals and policies of applicable land use plans. For example, new mixed-use zone districts are being developed for use around transit to improve access to jobs and commercial destination and reduce the use of vehicles (Mobility Plan Policy 3.3). The New Zoning Code can also be applied to expand bonus and incentive provisions for affordable units within walking distance of transit, which is consistent with the SCAG 2016-2040 RTP/SCS policy to focus new growth around transit, and consistent with the General Plan Framework Element policy, to encourage the location of new multi-unit residential development to occur in proximity to transit stations (Framework Element Policy 4.2). The New Zoning Code would support the use of transit by incentivizing pedestrian-oriented building design. For example, the New Zoning Code exempts active ground floor uses that wrap around parking areas from Floor Area calculations, while including above-grade parking in Floor Area calculations. These code standards have the potential to result in the creation of additional residential density and non-residential square footage, which may lead to population growth where the New Zoning Code is applied. However, it is expected that the development capacity of communities undergoing future community plan updates and amendments would be developed in accordance with SCAG projections and the proposed vision for the community as established in the City's adopted General Plan Framework Element.

Furthermore, the outdoor amenity space standard includes an incentive to make privately-owned open space publicly accessible. in line with the General Plan goal of improving Angelenos' access to parks. The New Zoning Code would also allow for the adaptive reuse of existing parking structures or parking areas constructed (at least 15 years) prior in certain commercial and residential areas of the City. The adaptive use of parking structures could increase population capacity and square footage of non-residential uses, where the New Zoning Code is applied. However, if an existing parking structure or Commercial-Mixed Community 1 (XC1) parking area were converted to another use, it would still be required to meet the density limits allowed by the zone. Further, if parking structures are converted, it is expected that the development capacity of communities undergoing future community plan updates and amendments would be developed in accordance with SCAG projections and the proposed vision for the community as established in the City's adopted General Plan Framework Element.

The City's Specific Plans, Overlays, Districts, and Master Plans would continue to operate as they currently do. However, elements of many of the City's existing overlays would be incorporated into the zones of the New Zoning Code through Frontage standards and Community Plan Implementation Overlays. The incorporation of these elements into the New Zoning Code would facilitate transparency and clarity and would not affect the enforceability of the policies. For example, parts of the City's existing Los Angeles River Implementation Overlay would be incorporated into the New Zoning Code by creating certain Form and Frontage Districts that could be used adjacent to the LA River to help implement the LA RIO overlay and the Los Angeles River Revitalization Plan. As such, the New Zoning Code is consistent with the goals and policies of the City's Specific Plans, Overlays, and Districts.

The New Zoning Code does not prescribe where zone districts would be applied in future community plan updates or amendments. As such, projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified. The New Zoning Code only applies to properties where a community plan is updated or amended in order to allow use of new zone districts, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone districts would analyze potential community- and site-specific impacts related to consistency with goals and policies of local plans. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. ***A less than significant impact*** would occur.

Mitigation Measures

Neither the Downtown Plan would nor the New Zoning Code would conflict with applicable City or SCAG policies; therefore, impacts would be ***less than significant*** and mitigation is not required.

CUMULATIVE IMPACTS

Cumulative impacts related to land use and planning consider Citywide development through 2040, which would add about 659,000 new residents, 293,000 new households, and 345,000 new employees (SCAG 2016-2040 RTP/SCS).

Division of an Established Community

Future development throughout Los Angeles may include the construction of new roadways or transit infrastructure that would physically divide an established community, and changes in land use and zoning that could potentially isolate a portion of an existing community. However, because the exact size, nature, and location of future developments and associated infrastructure improvements are not known at this time, it would be speculative to predict exactly what impacts may occur. Regardless, as discussed under Impact 4.10—1, the Downtown Plan does not include any features that would physically divide the Downtown Plan Area. To the contrary, certain improvements to transit facilities are expected to generally improve connectivity in the Downtown Plan Area as well as between the Downtown Plan Area and the rest of the region. The New Zoning Code does not include any specific provisions that would divide a community and any possible impacts related to division of a community would be addressed as part of individual community plan updates. As such, neither component of the Proposed Project would have impacts that are cumulatively considerable related to division of an established community. Cumulative impacts are ***less than significant***.

Consistency with Land Use Plans/Policies

Future projects throughout the City may conflict with policies contained in the General Plan and 2016-2040 RTP/SCS that would result in adverse physical impacts to the environment. However, as discussed

under Impact 4.10-2, the Downtown Plan is consistent with applicable land use policies and the New Zoning Code only applies to properties where a community plan is updated or amended in order to allow use of new zones. The New Zoning Code would not be implemented outside of the Downtown Plan Area until applicable community plans are updated; therefore, any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Based on these facts, neither the Downtown Plan nor the New Zoning Code would have impacts that are cumulatively considerable as related to consistency with plans and policies. Cumulative impacts are ***less than significant.***

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4.11 NOISE

This section evaluates noise and groundborne vibration impacts resulting from the construction and operation of the Proposed Project. Noise monitoring data and calculations are included in Appendix J. Topics addressed include short-term construction and long-term operational noise and vibration.

FUNDAMENTALS OF NOISE AND VIBRATION

Noise is defined as unwanted sound that disturbs human activity. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

NOISE DEFINITIONS

This noise analysis discusses sound levels in terms of Community Noise Equivalent Level (CNEL), Day-Night Noise Level (Ldn), and Equivalent Noise Level (Leq).

Community Noise Equivalent Level (CNEL). CNEL is an average sound level during a 24-hour period. CNEL is a noise measurement scale, which accounts for noise source, distance, single event duration, single event occurrence, frequency, and time of day. Human reaction to sound between 7:00 p.m. and 10:00 p.m. is as if the sound were actually 5 dBA higher than if it occurred from 7:00 a.m. to 7:00 p.m. From 10:00 p.m. to 7:00 a.m., humans perceive sound as if it were 10 dBA higher due to the lower background level. Hence, the CNEL is obtained by adding an additional 5 dBA to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and 10 dBA to sound levels in the night from 10:00 p.m. to 7:00 a.m. Because CNEL accounts for human sensitivity to sound, the CNEL 24-hour figure is always a higher number than the actual 24-hour average.

Day-Night Noise Level (Ldn). Ldn is similar to CNEL except that a 10 dBA penalty is added from 10:00 p.m. to 7:00 a.m. There is no 5 dBA penalty that exists for the CNEL calculation.

Equivalent Noise Level (Leq). Leq is the average noise level on an energy basis for any specific time period. The Leq for one hour is the energy average noise level during the hour. The average noise level is based on the energy content (acoustic energy) of the sound. Leq can be thought of as the level of a continuous noise which has the same energy content as the fluctuating noise level. The equivalent noise level is expressed in units of dBA.

CHARACTERISTICS OF NOISE

Sound pressure level is measured on a logarithmic scale with the 0 dBA level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dBA, and a sound that is 10 dBA less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dBA greater than the ambient noise level to be judged as twice as loud. In general, a 3 dBA change in the ambient noise level is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while areas

adjacent to arterial streets are typically in the 50-60+ dBA range. Normal conversational levels are usually in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels from different sources attenuate (or drop off) at different rates. Noise from point sources, such as individual pieces of machinery, typically attenuates at a rate of 6 dBA per doubling of distance from the noise source. Noise from linear transportation sources typically attenuates at a lower rate because such sources actually consist of a number of individual noise generators (such as automobiles or train cars). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance. Noise attenuation over distance applies to both ground distance and elevation. In other words, noise also attenuates as height increases, such as across a multi-story building. Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces noise levels by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA (Federal Transit Administration [FTA] 2006). The manner in which homes in California are constructed generally provides a reduction of exterior-to-interior noise levels of approximately 20 to 25 dBA with closed windows (FTA 2006). The materials of older buildings constructed before the introduction of modern insulation standards, such as some buildings in the Downtown Plan Area, may have less effective exterior-to-interior noise reduction.

In areas where traffic noise is the predominant noise source, the relationship between peak hourly Leq values and associated Ldn/CNEL values depends on the distribution of traffic over the entire day. There is no precise way to convert a peak hour Leq to Ldn or CNEL. However, in urban areas near heavy traffic, the peak hour Leq is typically 2-4 dBA lower than the daily Ldn/CNEL (California State Water Resources Control Board 1999). Because the Downtown Plan Area is an urban area, the Ldn/CNEL in the area would be approximately 2-4 dBA higher than peak hour Leq in areas where traffic is the primary noise source. In more suburban areas, the peak hour Leq is typically roughly equal to the Ldn/CNEL. **Figure 4.11-1** shows typical noise levels generated by various activities.

HEALTH EFFECTS OF ENVIRONMENTAL NOISE

The degree to which noise can impact the human environment ranges from levels that interfere with speech and sleep (annoyance and nuisance) to levels that cause adverse health effects (hearing loss and psychological effects). Human response to noise is subjective and can vary greatly from person to person. Factors that influence individual response include the intensity, frequency, and pattern of noise, the amount of background noise present before the intruding noise, and the nature of work or human activity that is exposed to the noise source. The World Health Organization's *Guidelines for Community Noise* details the adverse health effects of noise, including hearing impairment, speech intelligibility, sleep disturbance, physiological functions (e.g. hypertension and cardiovascular effects), mental illness, performance of cognitive tasks, social and behavioral effects (e.g. feelings of helplessness, aggressive behavior), and annoyance (Berglund et al 1999).

CHARACTERISTICS OF VIBRATION

Vibration refers to groundborne noise and perceptible motion. Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise; for example, the rattling of windows from passing trucks. This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S.

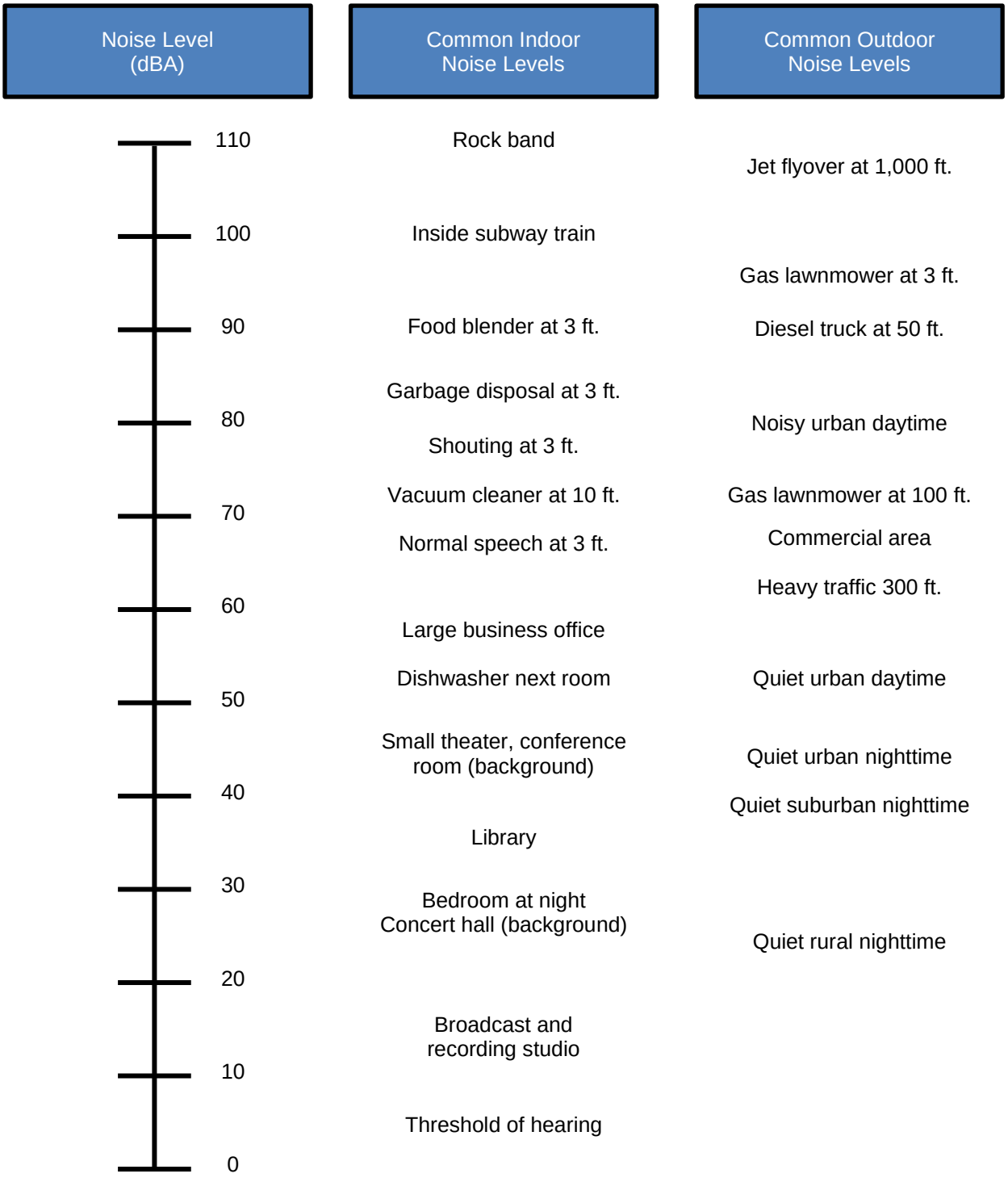
Typical human reactions to vibration are summarized in **Table 4.11-1**. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity level, to 90 VdB, which is the general threshold where minor damage can occur in fragile buildings. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel wheeled trains, and traffic on rough roads.

TABLE 4.11-1 HUMAN RESPONSE TO DIFFERENT LEVELS OF GROUNDBORNE VIBRATION

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

SOURCE: FTA 2006.

Figure 4.11-1 Examples of Typical Noise Levels



SOURCE: California Department of Transportation 1998.

ENVIRONMENTAL SETTING

CITYWIDE EXISTING CONDITIONS

Noise Sources

The City is affected by a variety of noise sources, including mobile and stationary sources. Mobile noise is primarily generated by automobiles, trucks, trains, and airplanes. Mobile-source noises generally affect numerous receptors along lengths of roadways, railroad tracks, or flight paths. Stationary source noise is primarily generated by industrial and commercial land uses; however, all land uses can generate some type of noise.

Chapter XI, Noise Regulation, of the Los Angeles Municipal Code (LAMC) addresses sources of noise other than construction activities. Chapter XI is intended to prohibit unnecessary, excessive, and annoying noises from all sources within the City. A noise level increase from certain regulated noise sources of 5 dBA over the existing or presumed ambient noise level at an adjacent property line is considered a violation of the Noise Regulations. The 5-dBA increase above ambient is applicable to City-regulated noise sources (e.g., mechanical equipment – LAMC Section 112.02), and it is applicable any time of the day. The LAMC states that the baseline ambient noise shall be the actual measured ambient noise level or the City's presumed ambient noise level, whichever is greater. The actual ambient noise level is the measured noise levels averaged over a period of at least 15 minutes. The LAMC indicates that in cases where the actual measured ambient conditions are not known, the City's presumed noise levels, as shown in **Table 4.11-2** should be used.

TABLE 4.11-2 PRESUMED EXISTING AMBIENT NOISE LEVEL

		dBA	
Type	**Zones**	**Daytime (7:00 a.m. to 10:00 p.m.)**	**Nighttime (10:00 p.m. to 7:00 a.m.)**
Residential	A1, A2, RA, RE, RS, RD, RW1, RW2, R1, R2, R3, R4, and R5	50	40
Commercial	P, PB, CR, C1, C1.5, C2, C4, C5, and CM	60	55
Industrial	M1, MR1, and MR2	60	55
	M2 and M3	65	65

SOURCE: LAMC, Section 111.03.

Vibration Sources

Sources of vibration are dominated by vehicular movement. Like mobile-source noises, vibration by vehicular movement generally affects numerous receptors along lengths of roadways and depends on pavement and type and weight of the vehicle. Other sources of vibration may be generated by construction equipment (e.g., earth-moving equipment and pile driving); however, these sources are temporary and would vary on a project-by-project basis. The FTA estimates that, at 50 feet, the typical background vibration in urban areas is 52 VdB, vibration from buses and trucks is about 63 VdB, and vibration from bulldozers is about 93 Vdb.

There are three public use airports in the City of Los Angeles: Los Angeles International Airport (LAX), Van Nuys Airport, and Whiteman Airport (Federal Aviation Administration 2017). LAX is located southwest of downtown Los Angeles and is the second busiest airport in the United States and fourth busiest in the world (Airports Council International 2017). Van Nuys Airport and Whiteman Airport are located in

the San Fernando Valley in the northern portion of the City. In addition to the public use airports, there are 51 private use airports, all of which are heliports.

Sensitive Receptors

Noise and vibration sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Sensitive uses typically include residences, transient lodgings, schools, libraries, churches or other places of assembly, concert halls, hospitals, and long-term care facilities, playgrounds, and parks. These areas are generally described in Section 4.10, *Land Use and Planning*. Refer to Section 4.13, *Public Services*, for a discussion of schools and libraries in the City, and Section 4.14, *Recreation*, for a discussion of parks and recreational facilities in the City. Also, refer to Section 4.4, *Cultural Resources*, for a discussion of historic properties, which may be sensitive to increases in noise and vibration levels. Noise and vibration in the City is regulated by the LAMC and siting of sensitive land uses is guided by the City's General Plan.

DOWNTOWN PLAN AREA EXISTING CONDITIONS

Noise Sources

Similar to the rest of the City, the Downtown Plan Area includes a variety of noise sources, including mobile and stationary sources. Sources of mobile noise include automobiles, trucks, and freight and passenger trains. Industrial and commercial activities are the primary stationary noise sources affecting the Downtown Plan Area; however, all land uses can generate noise and the high levels of human activity throughout the Downtown Plan result in relatively high ambient noise levels typical of an urban environment.

A series of daytime sound measurements were taken on October 19, October 20, and December 15, 2017 to characterize existing conditions in the Downtown Plan Area. Sound Measurements were taken using Casella CEL-633C model and Extech 407780A model Type 2 integrating sound level meters calibrated before and after the measurements. Noise monitoring locations are shown in **Figure 4.11-2**.

The locations were selected to represent the range of noise conditions in the Downtown Plan Area. Measurements 1-3 were taken in predominantly industrial areas, measurement 4 was taken in a mixed industrial/commercial area, measurements 5-6 were taken in commercial areas with high concentrations of residential uses, and measurements 7-11 were taken in predominantly commercial areas. However, residential uses are located intermittently throughout the Downtown Plan Area. **Table 4.11-3** shows measured noise levels in the Downtown Plan Area, which ranged from about 70 to 79 dBA Leq. All measurements were taken at ground level along local roadways and reflect worst exposed receivers. Exterior noise levels exceeding 70 dBA are generally considered "normally unacceptable" for uses such as single and multi-family homes, schools, hospitals, hotels and playgrounds, while noise levels exceeding 75 dBA Leq are considered "normally unacceptable" for commercial and industrial uses according to policies provided in the Noise Element to the City's General Plan (Exhibit I).

Vibration Sources

Common sources of vibration in the Downtown Plan Area include heavy vehicles on rough roads and construction activities (e.g., earth-moving equipment and pile driving). In addition, commercial or industrial activities may generate vibration (e.g., businesses that recycle construction debris and use heavy equipment). Most of the industrial activities in the Downtown Plan Area are limited to the entertainment and sales industry and do not involve these kinds of activities.

TABLE 4.11-3 DOWNTOWN PLAN AREA NOISE MONITORING RESULTS

Measurement ID No.	Noise Monitoring Location	Existing Land Use	Measured Sound Level (dBA, Leq)
1	Intersection of S Santa Fe Ave. and E Washington Blvd.	Industrial/Commercial	77.0
2	Intersection of S Santa Fe Ave. and E Olympic Blvd.	Industrial/Commercial	76.6
3	Intersection of S Alameda St. and E 7th St.	Industrial/Commercial	76.6
4	Intersection of S Alameda St. and E First St.	Residential/Commercial	78.9
5	Intersection of N Alameda St. and N Vignes St	Industrial/Commercial	73.5
6	Intersection of W Sunset Blvd. and N. Figueroa St.	Residential/Commercial	73.4
7	Intersection of W 4th St. and S Grand Ave.	Commercial	69.9
8	Intersection of S Figueroa St. and W Pico Blvd.	Residential/Commercial	71.5
9	Intersection of S San Pedro St. and E Pico Ave.	Commercial	76.0
10	Intersection of 6th St. and Main St.	Residential/Commercial	76.0
11	Intersection of 4th St. and Hewitt	Commercial/Industrial	68.1

NOTE: Due to the nature of short term measurements, noise levels are more variable than measurements taken over longer time periods.

Sensitive Receptors

The Downtown Plan Area encompasses approximately 4,000 acres of land (6.25 square miles). The Downtown Plan Area currently contains a mix of uses with residential spread throughout, but there is a residential emphasis in South Park and the Arts District, while the Victor Heights and Figueroa Terrace areas are almost exclusively residential. The Convention Center Area and Little Tokyo are also experiencing substantial residential development. These areas are described in detail in Section 4.10, *Land Use and Planning*, and illustrated on **Figure 3-4** in Chapter 3.0, *Project Description***.** As described in Section 4.13, *Public Services*, there are also four LAUSD schools, three libraries, and 14 parks and recreational facilities in the Downtown Plan Area. Also, refer to Section 4.4, *Cultural Resources*, for a discussion of historic properties, which may be sensitive to increases in noise and vibration levels. **Figure 4.11-3** shows the locations of schools and libraries in the Downtown Plan Area. Additionally, the Downtown Plan Area includes a variety of single- and multi-family residential uses; multiple hotels and motels; auditoriums, concert halls, and amphitheaters, such as the Lexington, located at the southeast intersection of East 3rd Street and South Los Angeles Street, and the Mark Taper Forum, located at 135 North Grand Avenue; parks and outdoor recreational land uses such as Grand Park and Pershing Square; and hospitals/long-term care facilities such as the Dignity Health – California Hospital Medical Center.

Figure 4.11-2 Noise Measurement Locations

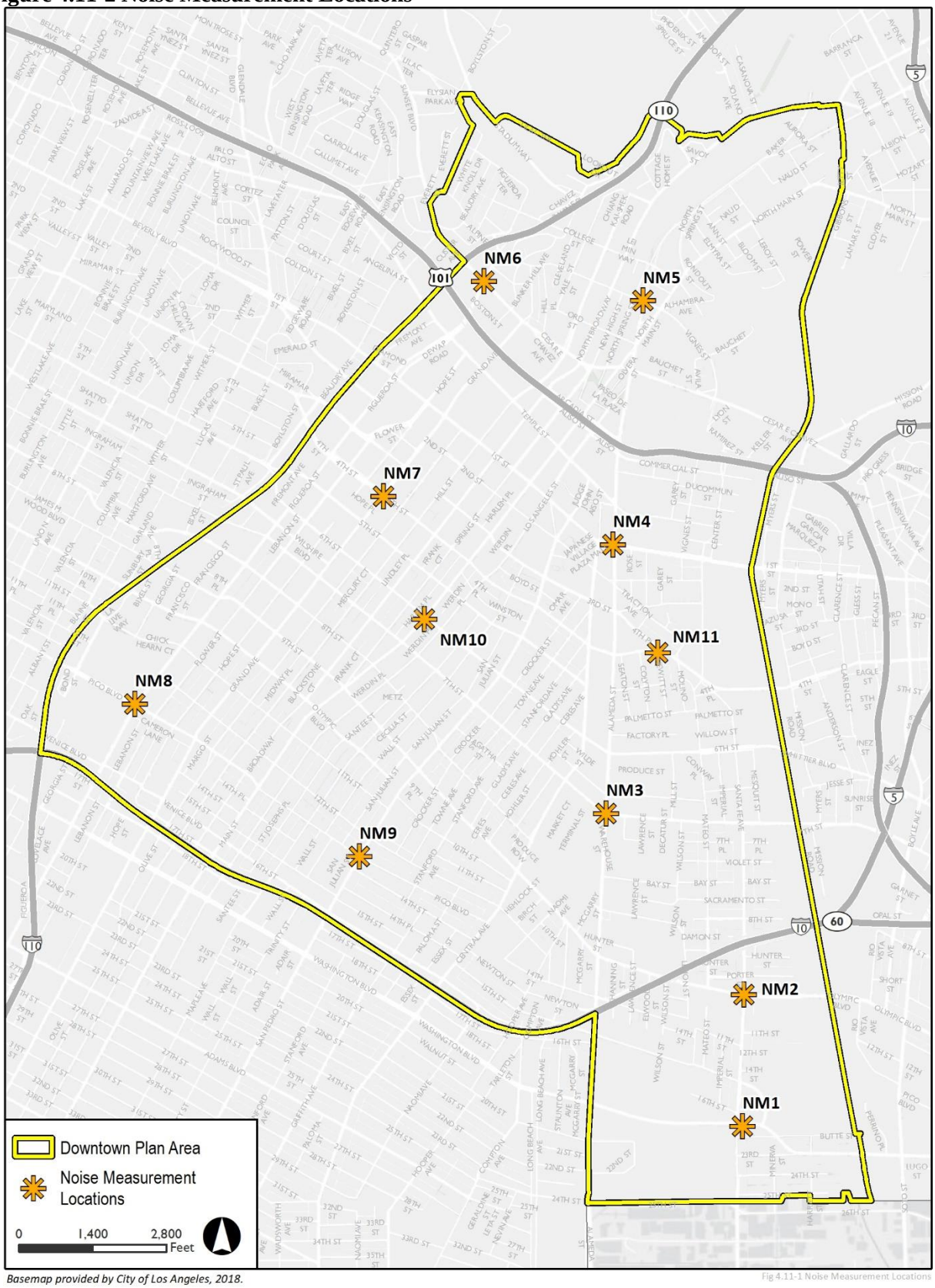
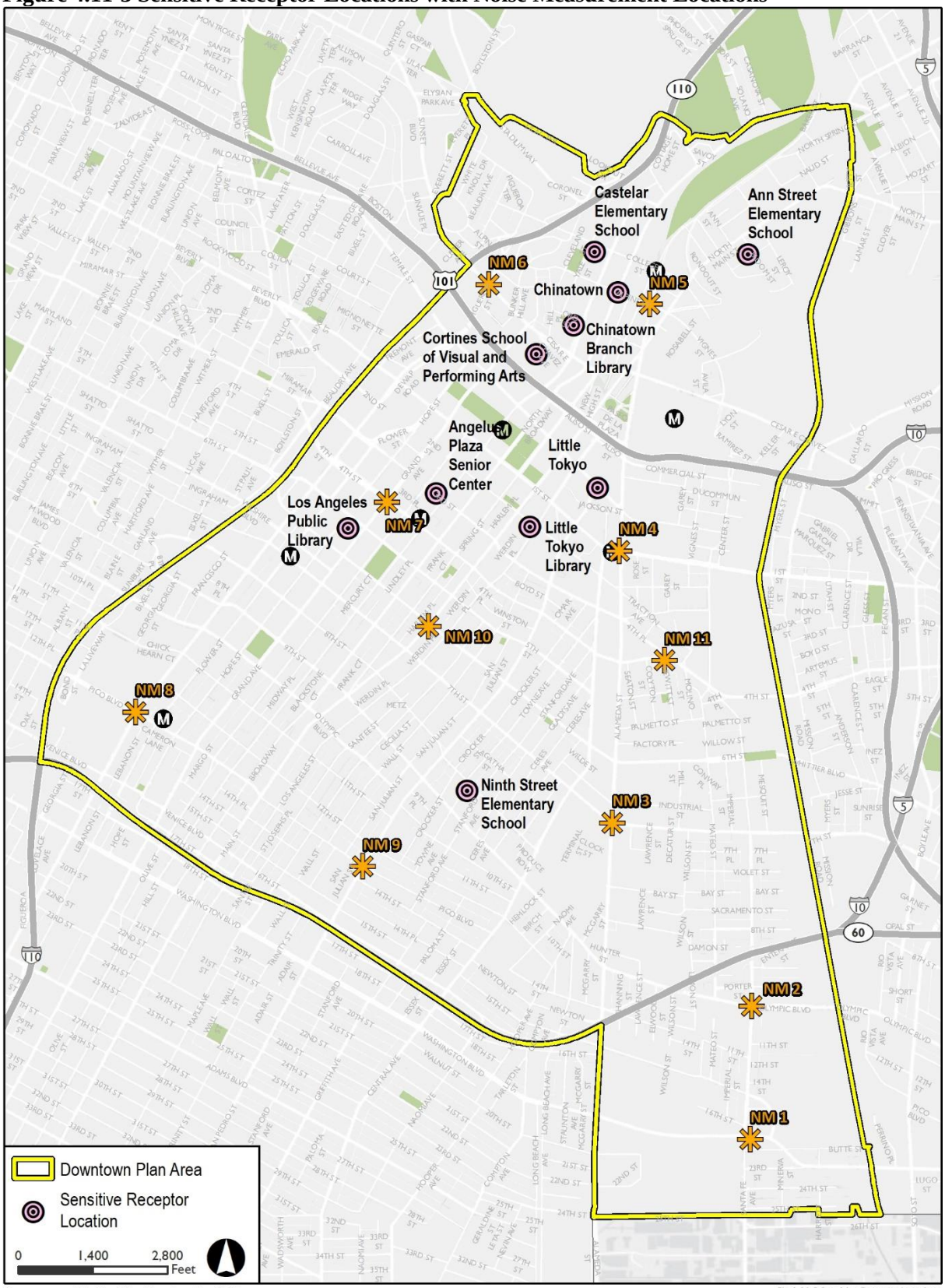


Figure 4.11-3 Sensitive Receptor Locations with Noise Measurement Locations



REGULATORY FRAMEWORK

FEDERAL

No federal noise standards directly regulate environmental noise related to the construction or operation of the Proposed Project. However, the Office of Safety and Health Administration (OSHA) regulations safeguard the hearing of workers exposed to occupational noise.

The FTA has adopted vibration standards that are used to evaluate potential annoyance or interference with vibration-sensitive activities due to construction vibration. According to the FTA, vibration impacts associated with human annoyance would be significant if vibration caused by new development exceeds 85 VdB, which is the vibration level that is considered to be acceptable only if there are an infrequent number of events per day (FTA 2006). In terms of ground-borne vibration impacts on structures, the FTA vibration damage threshold is approximately 90 VdB for buildings extremely susceptible to building damage (e.g., historic structures) and 98 VdB for engineered concrete and masonry buildings without plaster (e.g., typical urban development). These limits can be used as thresholds, but FTA standards only apply to FTA actions.

STATE

The former California Department of Health Services established guidelines for determining the compatibility of land uses as a function of community noise exposure. These guidelines, which have been incorporated into the State of California General Plan Guidelines and the City of Los Angeles General Plan Noise Element, are shown in **Table 4.11-4**.

The California Noise Insulation Standards in Title 24 of the California Code of Regulations establish uniform minimum noise insulation performance standards to protect persons in new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings from the effects of excessive noise. According to the Noise Insulation Standards, interior community noise equivalent levels attributable to exterior sources are not to exceed a CNEL of 45 dBA in any habitable room with windows and doors closed. Residential buildings or structures to be located in areas exposed to an exterior CNEL of 60 dBA or higher requires an acoustical analysis showing that the proposed building has been designed to limit intruding noise to 45 dBA CNEL.

The California Department of Transportation published the Transportation and Construction Vibration Guidance Manual in September 2013. The manual provides guidelines for determining the potential vibration damage to various types of buildings. These guidelines range from 0.08 to 0.12 inches per second for extremely fragile historic buildings, ruins and ancient monuments, and from 0.50 to 2.0 inches per second for modern industrial and commercial buildings.

The state noise and vibration guidelines are to be used as guidance with respect to planning for noise, not standards and/or regulations to which the City of Los Angeles must adhere.

REGIONAL

Los Angeles County Airport Land Use Commission Comprehensive Land Use Plan

In Los Angeles County the Regional Planning Commission has the responsibility for acting as the Airport Land Use Commission and for coordinating the airport planning of public agencies within the county. The Airport Land Use Commission coordinates planning for the areas surrounding public use airports. The Comprehensive Land Use Plan provides for the orderly expansion of Los Angeles County's public use

airports and the area surrounding them. It is intended to provide for the adoption of land use measures that will minimize the public's exposure to excessive noise and safety hazards. In formulating this plan, the Los Angeles County Airport Land Use Commission has established provisions for safety, noise insulation, and the regulation of building height within areas adjacent to each of the public airports in the County.

LOCAL

City of Los Angeles General Plan Noise Element

The Noise Element of the City of Los Angeles General Plan, adopted in 1999, identifies sources of noise and provides objectives and policies that ensure that noise from various sources does not create an unacceptable noise environment for different land uses. The Noise Element describes the noise environment (including noise sources) in the City, addresses noise mitigation regulations, strategies, and programs, and delineates the authority of federal, State, and City bodies in regulating rail, automotive, aircraft, and nuisance noise. **Table 4.11-5** identifies the Noise Element goals, objectives, and policies that are relevant to the Proposed Project.

The Noise Element does not include any mandatory standards for land use planning or quantitative thresholds for construction or operational groundborne vibration.

City of Los Angeles Municipal Code

Section 91.1207.11 of the Los Angeles Municipal Code (LAMC) limits interior noise levels attributable to exterior sources to 45 dBA Ldn or CNEL in any habitable room. Worst-case noise levels, either existing or future, are to be used as the basis for determining compliance with this requirement. Future noise levels are to be predicted for a period of at least ten years from the time of building permit application.

Conditional use permits (CUPs) and variances allow the planning commission, zoning administrators and, on appeal, City Council to assess potential inconsistencies and impose conditions to control noise for certain uses that may need special conditions to ensure compatibility with surrounding land uses. CUPs are required for various land uses in certain zones, including, but not limited to, schools, churches, alcohol sales, parks, mixed-use development, and automobile repair facilities. In most cases, the uses are allowed by right in less restrictive zones (e.g., industrial). Some are prohibited entirely in residential zones. Permitting procedures include site investigations, notice to neighbors and hearings to assist decision makers in determining if the use should be permitted and, if permitted, allow imposition of appropriate conditions of approval. Typical conditions include specific site design, setbacks, use limitations on all or parts of the site, walls and hours of operation so as to minimize noise and other impacts.

Section 112.05 of the LAMC limits noise from construction, industrial, and agricultural equipment located within 500 feet of a residential zone to 75 dBA Lmax between 7:00 AM and 10:00 PM, as measured at a distance of 50 feet from the source, unless compliance is technically infeasible. Technical infeasibility means that noise limitations cannot be met despite the use of mufflers, shields, sound barriers and/or other noise reduction devices or techniques during the operation of construction equipment.

Section 41.40 of the Los Angeles Municipal Code (LAMC) also restricts construction activity to the hours below:

- Monday through Friday between 7:00 AM to 9:00 PM;
- Saturdays and National Holidays between 8:00 AM to 6:00 PM;
- Sundays, no construction except for residents.

TABLE 4.11-4 GUIDELINES FOR NOISE COMPATIBLE LAND USE (DBA CNEL)

Land Use	Normally Acceptable[1]	Conditionally Acceptable[2]	Normally Unacceptable[3]	Clearly Unacceptable[4]
Single-Family, Duplex, Mobile Homes	50-60	55-70	70-75	Above 75
Multifamily Homes	50-65	60-70	70-75	Above 75
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-70	60-70	70-80	Above 80
Transient Loading – Motels, Hotels	50-65	60-70	70-80	Above 75
Auditoriums, Concert Halls, Amphitheaters	--	50-70	--	Above 70
Sports Arenas, Outdoor Spectator Sports	--	50-75	--	Above 75
Playgrounds, Neighborhood Parks	50-70	--	70-80	Above 80
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-75	--	70-80	Above 80
Office Buildings, Business and Professional Commercial	50-70	67-77	Above 75	--
Industrial, Manufacturing, Utilities, Agriculture	50-75	70-80	Above 75	--

[1] Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

[2] New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

[3] New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

[4] New construction or development should generally not be undertaken.

SOURCE: Office of Planning and Research, State of California General Plan Guidelines and California Department of Health Services, October 2003; City General Plan Noise Element, February 1999.

According to the LAMC, a noise level increase of 5 dBA over the existing ambient noise level at an adjacent property line is a noise violation. This standard applies to radios, television sets, air conditioning, refrigeration, heating, pumping and filtering equipment, powered equipment intended for repetitive use in residential areas, and motor vehicles driven on-site. Section 113.01 of the LAMC limits rubbish and garbage collection to between the hours of 6:00 AM and 9:00 PM if the site is within 200 feet of a residence. Section 114.03 of the LAMC limits vehicle loading or unloading (deliveries) to between the hours of 7:00 AM and 10:00 PM if the site is within 200 feet of a residence.

TABLE 4.11-5 RELEVANT GENERAL PLAN NOISE GOALS, OBJECTIVES, AND POLICIES	
Goal/Objective/Policy	**Goal/Objective/Policy Description**
Non-Airport	
P5	Continue to enforce, as applicable, city, state, and federal regulations intended to abate or eliminate disturbances of the peace and other intrusive noise.
P6	When processing building permits, continue to require appropriate project design and/or insulation measures, in accordance with the California Noise Insulation Standards (Building Code Title 24, Section 3501 et seq.), or any amendments thereto or subsequent related regulations, so as to assure that interior noise levels will not exceed the minimum ambient noise levels, as set forth in the City's noise ordinance (LAMC Section 111 et seq., and any other insulation related requirements) for a particular zone or noise sensitive use, as defined by the California Noise Insulation Standards.
Land Use Development	
P11	For a proposed development project that is deemed to have a potentially significant noise impact on noise sensitive uses, require mitigation measures, as appropriate, in accordance with California Environmental Quality Act and City procedures.
P12	When issuing discretionary permits for a proposed noise-sensitive use or subdivision of four or more detached single-family units and which use is determined to be potentially significantly impacted by existing or proposed noise sources, require mitigation measures, as appropriate, in accordance with procedures set forth in the California Environmental Quality Act so as to achieve an interior noise level CNEL of 45 dB, or less, in any habitable room as required by LAMC Section 91.
P13	Continue to plan, design and construct or oversee construction of public projects, and projects on City owned properties, so as to minimize potential noise impacts on noise sensitive uses and to maintain or reduce existing ambient noise levels.
P15	Continue to take into consideration, during updating/revision of the City's general plan community plans, noise impacts from freeways, highways, outdoor theaters and other significant noise sources and to incorporate appropriate policies and programs into the plans that will enhance land use compatibility.
P16	Use, as appropriate, the "Guidelines for Noise Compatible Land Use", or other measures that are acceptable to the City, to guide land use and zoning reclassification, subdivision, conditional use and use variance determinations and environmental assessment considerations, especially relative to sensitive uses within a CNEL of 65 dB airport noise exposure areas and within a line-of-sight of freeways, major highways, railroads or truck haul routes.
SOURCE: City of Los Angeles, *Noise Element of the Los Angeles City General Plan*, February 3, 1999.	

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance were developed based on Appendix G of the CEQA Guidelines. Impacts would be significant if the Proposed Project would result in:

- Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (Threshold 4.11.1)
- Generation of excessive groundborne vibration or groundborne noise levels (Threshold 4.11.2)
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the area to excessive noise levels (Threshold 4.11.3)

METHODOLOGY

The City relies on the Appendix G questions as the threshold of significance. Below are the methods and criteria used by the City to analyze and answer those questions.

Construction Noise

Construction noise is assessed in context of the provisions of the LAMC discussed in the Regulatory Setting, including allowable hours of construction and maximum equipment noise levels. Redevelopment in urban infill locations is very common and usual within urban locations, such as the City and the Downtown Plan Area, as are the associated short-term construction activities and noise created by those activities. Construction noise from typical projects is intermittent throughout the day during the duration of construction activity. Construction noise levels may fluctuate dependent on type of equipment being used, construction phase, or equipment location. Although some individuals may find construction noise of any kind or of any duration very disturbing, as a general matter, typical construction, including with the imposition of the regulatory measures described in the Regulatory Setting, does not result in and would not be considered a significant impact.

Projects on urban infill sites are not likely to result in substantial construction noise impacts because construction activities at these sites are inherently limited by the size of the project site. The size of urban infill project sites typically limits the use of the largest (i.e., noisiest) pieces of heavy-duty equipment. The size of a project site also typically limits the size of the development and the related duration of construction activities. Therefore, while urban infill projects that meet the following criteria could result in disturbance to residents and employees at adjacent properties, resulting noise levels are not considered to be potentially significant physical impacts to the overall environment:

- One subterranean level or less (approximately 20,000 cubic yards of material);
- Construction durations of 18 months or less (excluding interior finishing);
- Equipment rated 300 horsepower or less, typically small and medium backhoes, bulldozers, etc.; and
- No potential for impact pile driving.

Larger projects that require extended construction or heavy-duty equipment could expose sensitive uses and users in the surrounding environment to more continuous and/or louder noise impacts and result in significant short-term noise exposure. When noise-sensitive land uses (e.g., residences, schools, libraries, hospitals) are located within 500 feet of a project site, projects that meet one or more of the characteristics below are considered to have the potential to result in significant impacts.

- Two subterranean levels or more (approximately 20,000 cubic yards of material);
- Construction durations (excluding interior finishing) of 18 months or more;
- Use of large, heavy-duty equipment rated 300 horsepower or greater; or
- The potential for impact pile driving.

Operational Noise

The following thresholds take into account incremental changes in 24-hour noise levels as well as potential regular occurrences of single event, impulsive noise. As noted above, the LAMC defines impulsive sound as sound of short duration, usually less than one second, with an abrupt onset and rapid decay. Such single event noise generating activities could be of short duration but permanently reoccurring depending on the

source and associated land use (e.g., movie studios). The Proposed Project would have significant impact on noise levels from operations if:

- Permanent ambient noise level measured at the property line of affected uses increases by 3 dBA CNEL to or within the "normally unacceptable" or "clearly unacceptable" categories, as shown in **Table 4.11-4**, or any 5 dBA CNEL or more increase in noise level.

The land use and noise compatibility guidelines in the Noise Element are not adopted standards relevant to determining the significance of incremental increases in permanent noise levels. Exhibit I of the Noise Element includes criteria or general guidance associated with incremental increases in noise. Exhibit I is shown in **Table 4.11-4**. This Exhibit was developed in 1990 to help guide determination of appropriate land use and mitigation measures related to existing or anticipated ambient noise levels. This guidance is applicable to assessing if a land use is compatible with the existing noise environment (i.e. impact of the environment on a project), but is not useful alone for assessing if a project would significantly increase existing noise levels. This is particularly true in urban environments like the Downtown Plan Area, where existing noise levels often exceed the guidelines shown in **Table 4.11-4**. In addition, sound transmission control requirements are included in the International Building Code, which are the basis for the 2016 CBC and which in turn are incorporated into the City of Los Angeles Building Code (LAMC Section 91). The CBC provides noise insulation standards (CBC Title 24, Section 1207.4). The standards require that intrusive noise not exceed 45 dBA in any habitable room.

Construction and Operational Vibration

Consistent with FTA *Transit Noise and Vibration Impact Assessment Manual*, vibration impacts associated with human annoyance would be significant if:

- Vibration caused by new reasonably anticipated development from the Proposed Project exceeds 85 VdB, which is the vibration level that is considered to be acceptable only if there are an infrequent number of events per day; and/or
- Groundborne vibration caused by new reasonably anticipated development from the Proposed Project exceeds the FTA vibration damage threshold of approximately 98 VdB for engineering concrete and masonry building, 94 VdB for fragile buildings (i.e., non-engineered timber and masonry buildings) and approximately 90 VdB for extremely fragile historic buildings (i.e., buildings extremely susceptible to vibration damage).

Construction noise levels are based on example equipment levels provided in standard technical references. Construction noise levels are also identified for various phases of construction activity based on the same sources. Construction vibration levels are based on example equipment levels provided in FTA's *Transit Noise and Vibration Impact Assessment* guidance document. Mobile source noise levels are estimated using the U.S. Department of Housing and Urban Development's Day/Night Noise Level Calculator (HUD DNL) and methodology that accounts for traffic volumes, roadway width, and vehicle mix. Although HUD DNL reports noise levels in Ldn, because Ldn and CNEL are used interchangeably, for the purposes of this analysis, noise levels from HUD DNL are reported as CNEL. The analysis also discusses operational mechanical equipment noise (e.g., HVAC), land use compatibility, and operational vibration.

Noise levels are a direct function of both mobile sources (traffic in the Downtown Plan Area), stationary sources (e.g., HVAC), other operational sources (e.g., rooftop entertainment spaces), and construction activity throughout the Downtown Plan Area.

Threshold 1 addresses consistency with standards, and noise associated with permanent traffic increases, long-term operation and construction; threshold 2 addresses construction vibration; and threshold 3 addresses noise associated with airports/airstrips.

PROJECT IMPACTS

Threshold 4.11-1	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies

Impact 4.11-1

Downtown Plan: Future reasonably anticipated development from the Downtown Plan would include mechanical equipment, loading, trash pick-up, and other noise-generating activities. However, such activities would be typical of the urban environment within the Downtown Plan Area. In addition, any on-site activities would be required to comply with applicable provisions of the LAMC. Future reasonably anticipated development from the Downtown Plan would increase vehicle trips in the Downtown Plan Area that would generate mobile noise. However, mobile noise would not increase noise levels to be within the "normally unacceptable" category for land uses adjacent to these corridors. Permanent noise increases due to stationary and mobile operational activities would be ***less than significant***. All construction would be required to comply with the appropriate Regulatory Compliance Measures as well as LAMC Chapter 41.40, Section 112.05. However, reasonably anticipated development from the Downtown Plan would potentially result in construction with lengthy durations, substantial soil movement, use of large, heavy-duty equipment, and/or pile driving near noise-sensitive land uses that would result in significant impacts that cannot be feasibly mitigated. Therefore, the impact generated by temporary construction noise would be ***significant and unavoidable***.

New Zoning Code: The New Zoning Code does not include any standards that would expose people to or generate noise levels in excess of established standards, nor would it result in a substantial permanent or temporary increase in ambient noise levels. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area. Any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Additionally, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid these impacts. As such, impacts related to a substantial temporary or periodic increase in ambient noise levels would be ***less than significant***.

This section analyzes impacts related to operational stationary and mobile noise sources, and temporary construction noise.

Downtown Plan Impact

The Noise Element of the General Plan does not include construction related quantitative standards that would apply to the Downtown Plan. The LAMC includes multiple standards associated with long-term and permanent noise sources. Relevant standards are discussed above within Regulatory Framework and include:

- Section 112.01 - Radios, Television Sets, and Similar Devices
- Section 112.02 - Air Conditioning, Refrigeration, Heating, Pumping, Filtering Equipment
- Section 112.04 - Powered Equipment Intended for Repetitive Use in Residential Areas and Other Machinery, Equipment, and Devices

- Section 112.06 - Places of Public Entertainment
- Section 113.01 - Rubbish and Garbage Collection and Disposal
- Section 114.03 - Vehicles – Loading and Unloading
- Section 114.04 - Audible Signaling Devices

The City actively enforces the LAMC and it is presumed that all persons would follow legal requirements set forth in the LAMC related to long-term and permanent source of noise. Therefore, there would be *no impact* related to compliance with operational noise standards in the LAMC.

The Noise Element of the General Plan does not include operation-related quantitative standards that would apply to the Downtown Plan.

Permanent Noise Impacts

Operational Stationary Noise

Regarding operational noise, the Downtown Plan would accommodate new residential, commercial, and light industrial development at increased intensity and density throughout the Downtown Plan Area. For the residential, commercial, and light industrial land uses anticipated, typical noise sources include stationary mechanical equipment and on-site vehicle movement (e.g., parking structure activity, loading/unloading, trash pick-up). Certain commercial uses, such as bars and restaurants, may also include outdoor activities and use of amplified sound systems. However, Outdoor Amenity Space provided on rooftops are required to be stepped back from the edge of the roof that abuts a residential use, and heavy commercial and industrial use projects would be required to comply with buffering requirements when cited adjacent to more sensitive uses. A substantial permanent increase in noise would result if the ambient noise level measured at the property line of affected uses increases by 3 dBA CNEL to or within the "normally unacceptable" or "clearly unacceptable" categories, as shown in **Table 4.11-4**, or any 5 dBA CNEL or more increase in noise.

Mechanical Equipment

For mechanical equipment, residential and most commercial uses are generally limited to HVAC and pool equipment. Industrial and manufacturing land uses can contain significant sources of stationary mechanical equipment noise. Noise levels from commercial rooftop HVAC systems typically range from about 60 to 70 dBA Leq at a distance of 15 feet from the source (Illingworth & Rodkin, Inc. 2015). Thus, noise generated by HVAC equipment generally would not exceed ambient noise levels in much of the Downtown Plan Area, which have been measured at 70 to 79 dBA Leq (see **Table 4.11-3**).

The design of mechanical equipment must comply with Section 112.02 of the LAMC, which prohibits noise from air conditioning, refrigeration, heating, pumping, and filtering equipment from exceeding the ambient noise level on the premises of other occupied properties by more than 5 dBA. Further, residential uses, schools and other noise sensitive uses are typically separated from noisy industrial uses. On-site equipment would be designed such that it would be shielded by sound barriers that block the line-of-sight to sensitive receptors, and appropriate noise-muffling devices would be installed in the equipment to reduce noise. In addition, nighttime noise limits would apply to any equipment required to operate between the hours of 10:00 PM and 7:00 AM (e.g., HVAC units, exhaust fans, refrigeration, heating, pumping, and filtering equipment, etc.). Further, noise increases would be incremental given the already urbanized nature of the Downtown Plan Area, where ambient noise levels are in the 69 to 79 dBA Leq range (see **Table 4.11-3**). Mechanical equipment would have a ***less than significant*** noise impact.

Vehicle Activity (Loading/Unloading, Trash Hauling, Parking Structure Vehicles

Future Downtown Plan Area development would increase the number of delivery and trash hauling trucks traveling through the Downtown Plan Area and to individual development sites. Increased delivery and trash hauling trucks along roadways could impact various sensitive receptors located intermittently throughout the Downtown Plan Area. Section 23130 of the California Motor Vehicle Code establishes maximum sound levels of 86 dBA Leq at 50 feet for trucks operating at speeds less than 35 miles per hour. Noise at this level exceeds ambient noise levels throughout most of the Downtown Plan Area (see **Table 4.11-3**); therefore, individual truck pass-bys and/or loading or trash pick-up operations would likely be audible at nearby properties. However, truck-related noise would be an intermittent noise source that would not increase the 24-hour CNEL by 3 dBA or more. Moreover, California State law prohibits trucks from idling for longer than five minutes. In addition, per the LAMC, truck loading/unloading activity is prohibited between the hours of 10:00 PM and 7:00 AM when located within 200 feet of a residential land use. Because trash and delivery trucks would be required to comply with LAMC standards and would be subject to state regulations, impacts would be ***less than significant***.

Parking areas/garages are the other potential source of vehicular noise. Typical noise sources associated with parking lots include tire squealing, door slamming, car alarms, horns, and engine start-ups. **Table 4.11-6** shows typical sound levels at this distance from various noise sources on parking lots.

TABLE 4.11-6 MAXIMUM NOISE LEVELS FROM PARKING LOT ACTIVITY

Noise Source	Noise Level at 50 feet (dBA Leq)
Autos at 14 mph	50
Car Alarm Signal	69
Car Alarm Chrip	54
Car Horns	69
Door Slams or Radios	64
Talking	36
Tire Squeals	66

SOURCE: Atkins 2012. Estimates are based on actual noise measurements taken at various parking lots.

Intermittent parking lot noise could reach an estimated 69 dBA Leq, which would not exceed ambient noise levels in much of the Downtown Plan Area (which, as shown in **Table 4.11-3**, range from about 70-79 dBA Leq). In addition, parking structures located within 200 feet of any residential use would be constructed with a solid wall abutting the residences and utilize textured surfaces on garage floors and ramps to minimize tire squeal. Further, most future parking structures would likely be subterranean, which would have little to no effect on adjacent sensitive uses. Because parking lot/garage design and placement would be required to comply with LAMC standards, impacts would be ***less than significant***.

Outdoor Activity Areas

Reference noise levels for outdoor patios and roof decks are based on noise levels from a certified EIR for the Citrus Heights City Hall and Medical Office Building, which included an outdoor patio area that would have on average 25 people conversing. Noise levels associated with this comparable outdoor patio area were 50 dBA Leq at a distance of 50 feet (City of Citrus Heights 2015). To provide a conservative analysis, this analysis assumes that 50 people would be conversing in an outdoor restaurant or bar area in a development accommodated by the Downtown Plan. Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dBA. Therefore, it is assumed that an outdoor bar or restaurant with

an average of 50 people conversing would have an estimated noise level of 53 dBA Leq at a distance of 50 feet.

Based on a noise level of 53 dBA Leq and due to the urbanized nature of the Downtown Plan Area with ambient noise in the 70-79 dBA range (see **Table 4.11-3**), noise generated by outdoor bars and restaurants would not exceed ambient noise or result in a 3 dBA increase above ambient levels. Further, amplified noise would be required to comply with Chapter 11 Section 115.02 of the LAMC, which prohibits amplified noise within 500 feet of a residential zone and restricts amplified noise to between 7:00 AM – 10:00 PM in commercial zones. Outdoor activity noise, such as noise generated by outdoor bars and restaurants, and all amplified noise would be required to comply with LAMC standards and, therefore, would have a ***less than significant*** impact on surrounding land uses.

Operational Mobile Noise

The transportation analysis, on which the noise analysis is based, evaluates reasonably anticipated development that is expected to occur by 2040 as a result of the Downtown Plan (see Section 4.15, Transportation and Traffic). The reasonably anticipated development is based on the acreage of land designated for each type of land use, allowable densities and intensities for each land use designation, reasonably expected levels of development through the life of the Downtown Plan. Actual noise levels that could result under the Downtown Plan may not be as high as noise levels calculated in this analysis.

Primary objectives of the Downtown Plan include: 1) maximizing development opportunities around existing transit systems to encourage sustainable land use, and 2) directing growth towards transit hubs and corridors. Therefore, while the Downtown Plan would result in higher densities than existing conditions, this increase would be focused in areas around transit that allow for mixed-use development. Concentrating growth in existing urban areas and along transit corridors would reduce the length and number of vehicle trips, which would in turn reduce mobile-source noise levels. As such, noise levels in many areas would be reduced by these policies; not all of these reductions are accounted for in the following analysis.

For mobile sources, an analysis was completed to determine whether reasonably anticipated development from the Downtown Plan would significantly increase mobile noise levels in the Downtown Plan Area. **Table 4.11-7** shows predicted mobile source noise levels in terms of CNEL. The roadway segment locations were selected to represent a wide variety of noise conditions in the Downtown Plan Area (e.g., busy roadways and residential neighborhoods). In addition, roadway segments with the greatest change in traffic volumes were included, as these segments are the most likely to have increases in mobile source noise levels.

Conservatively assuming that the entire increase in noise in the future would be attributable to the Downtown Plan, the ambient noise level as a result of traffic increases under the Downtown Plan (Future with Project compared to Existing) would increase. As shown in **Table 4.11-7**, future mobile noise levels would increase by more than 3 dBA CNEL on all evaluated roadways, except W College Street between Yale Street and N Hill Street; 3rd Street between S Los Angeles Street and San Pedro Street; S Figueroa Street between 7th Street and 8th Street; and 7th Street between Spring Street and Broadway.

Although there are up to nine evaluated locations where increases above 3 dBA could occur, none of the locations would result in noise levels that are within the "normally unacceptable" category for land uses adjacent to these corridors, including residential, school, and commercial uses.[1] Mobile noise source increases would result in future noise levels within the "conditionally acceptable" category for residential,

[1] Exterior noise levels exceeding 70 dBA are generally considered "normally unacceptable" for uses such as single and multi-family homes, schools, hospitals, hotels and playgrounds, while noise levels exceeding 75 dBA Leq are considered "normally unacceptable" for commercial and industrial uses according to standards outlined in the City's General Plan (see **Table 4.11-3**).

school, and commercial land uses, but would not result in a significant impact. Therefore, mobile noise impacts would be ***less than significant***.

TABLE 4.11-7 OPERATIONAL MOBILE SOURCE NOISE LEVELS

Roadway Segment	Estimated dBA, CNEL				
	Existing (2017)	Future (2040) No Project/ Existing Plan[1]	Future (2040) with Project	Future (2040) With Project Compared to Existing	Future (2040) With Project Compared to Future (2040) No Project[1]
Hope St. between W Pico Blvd. and Venice Blvd.	54.8	61.9	62.8	8.0	0.9
W 12th St. between Flower St. and Figueroa St.	59.2	63.5	65.8	6.6	2.3
W Pico Blvd. between S Main St. and Broadway	52.5	57.3	58.0	5.5	0.7
N Broadway between W Cesar E Chavez Ave. and Ord St.	64.1	67.3	68.3	4.2	1.0
S Los Angeles St. between Venice Blvd. and 17th St.	58.0	63.5	65.8	7.8	2.3
W 2nd St. between Hope St. and Grand Ave.	45.7	50.4	53.2	7.5	2.8
North Spring St. between College St. and Apline St.	56.6	62.1	63.3	6.7	1.2
Mateo St. between Palmetto St. and 6th St.	52.0	57.0	58.7	6.7	1.7
East Olympic Blvd. between Maple Ave. and San Julian St.	57.2	62.1	64.1	6.9	2.0
W College St. between Yale St. and N Hill St.	60.5	61.1	61.4	0.9	0.3
3rd St. between S Los Angeles St. and San Pedro St.	66.6	67.9	68.1	1.5	0.2
S Figueroa St. between 7th St. and 8th St.	65.4	65.7	65.8	0.4	0.1
7th St. between Spring St. and Broadway	67.0	67.2	67.5	0.5	0.3

[1] Future (2040) No Project/Existing Plan scenario is included for informational purposes and not used for impact analysis or conclusions

Temporary Noise Impacts

Future construction activity occurring in the Downtown Plan Area would result in temporary increases in ambient noise levels on an intermittent basis. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers. Construction activities typically require the use of a variety of noise-generating equipment. Typical noise levels at 50 feet from various types of equipment that may be used during construction are listed in **Table 4.11-8**. The loudest noise levels are typically generated by impact equipment (e.g., pile drivers) and heavy-duty equipment (e.g., scrapers and graders). Construction noise would occur intermittently throughout construction and, in some instances, multiple pieces of equipment may operate simultaneously, generating overall noise levels that are incrementally higher than what is shown in **Table 4.11-8**.

TABLE 4.11-8 MAXIMUM NOISE LEVELS OF COMMON CONSTRUCTION EQUIPMENT	
Noise Source	**Noise Level at 50 feet (dBA)**
Front Loader	73-86
Trucks	82-95
Cranes (moveable)	75-88
Cranes (derrick)	86-89
Vibrator	68-82
Saws	72-82
Pneumatic Impact Equipment	83-88
Jackhammers	81-98
Pumps	68-72
Generators	71-83
Compressors	75-87
Concrete Mixers	75-88
Concrete Pumps	73-95
Back Hoe	73-107
Tractor	77-98
Scraper/Grader	80-93
Paver	85-88
SOURCE: *City of Los Angeles, LA CEQA Thresholds Guide, 2006.*	

Table 4.11-9 shows noise levels by construction phase at 50 feet. The grading/excavation and finishing phases typically generate the loudest noise levels at 89 dBA Leq without equipment mufflers, and 86 dBA Leq with equipment mufflers.

TABLE 4.11-9 OUTDOOR CONSTRUCTION NOISE LEVELS		
Construction Phase	**Noise Level at 50 Feet (dBA, L_{eq})**	**Noise Level at 50 Feet with Mufflers (dBA, L_{eq})**
Ground Clearing	84	82
Grading/Excavation	89	86
Foundations	78	77
Structural	85	83
Finishing	89	86
SOURCE: USEPA, *Noise from Construction Equipment and Operations, Building Equipment and Home Appliances*, PB 206717, 1971.		

Construction activities occurring in the Downtown Plan Area are subject to the Regulatory Compliance Measures adopted pursuant to the City's noise ordinances. These include:

- Compliance with the Noise Ordinance No. 161.574, and any subsequent ordinances, which prohibit the emission or creation of noise beyond certain levels at adjacent uses unless technically infeasible.
- Compliance with Section 41.40 of the LAMC, which restricts construction activities to the hours of 7:00 AM to 6:00 PM Monday through Friday, and 8:00 AM to 6:00 PM on Saturday and federal holidays, and prohibits activities on Sundays.
- Compliance with the City's Building Regulations Ordinance No. 178.048, which requires a construction site notice to be provided that includes the following information: job site address, permit number, name and phone number of the contractor and owner or owner's agent, hours of construction allowed by code or any discretionary approval for the site, and City's telephone numbers where violations can be reported. The notice shall be posted and maintained at the

construction site prior to the start of construction and displayed in a location that is readily visible to the public and approved by the City's Department of Building and Safety.

- LAMC Chapter 41.40, Section 112.05 establishes performance standards for powered equipment or tools. The maximum allowable noise level for most construction equipment within 500 feet of any residential zone is 75 dBA measured at 50 feet from the noise source. This restriction holds unless compliance is not technically feasible even with the use of noise "mufflers, shields, sound barriers, and/or other noise reduction devices or techniques."

Sensitive receptors are located throughout the Downtown Plan Area and could be exposed to noise associated with construction activities related to reasonably anticipated development from the Downtown Plan. Sensitive receptors that could potentially be affected by construction noise include:

- Ninth Street Elementary School (located in the southern-central section of the Downtown Plan Area
- Ann Street Elementary School, located in the northeastern section of the Downtown Plan Area
- Castelar Elementary School, located in the northern section of the Downtown Plan Area
- Cortines School of Visual and Performing Arts, located in the northern section of the Downtown Plan Area
- Central Library, located in the central-western section of the Downtown Plan Area
- Little Tokyo Branch Library, located in the central section of the Downtown Plan Area
- Chinatown Branch Library, located in the northern section of the Downtown Plan Area

In addition, various parks and recreational uses, transient lodgings, churches or other places of assembly, concert halls, hospitals and long-term care facilities, and residential uses are located intermittently throughout the Downtown Plan Area (including several mixed commercial/residential uses).

As discussed in the Methodology section, projects that could result in significant construction noise impacts include those located on relatively large sites. These projects tend to include relatively lengthy construction durations (longer than 18 months), use heavier equipment, and generally include noisier activities. Such larger projects are not considered usual and could potentially result in significant noise impacts. When noise-sensitive land uses are located within 500 feet of the project site (e.g., residences, schools, hospitals, and parks), projects that meet one of the characteristic below would have the potential to result in disturbing and disruptive impacts to ambient noise levels that would be potentially significant:

- Two subterranean levels or more (approximately 20,000 cubic yards of material);
- Construction durations of 18 months or more (excluding interior finishing);
- Use of large, heavy-duty equipment rated 300 horsepower or greater; and
- The potential for impact pile driving.

Because specific development projects have not yet been determined at individual sites, this analysis assumes that sensitive receptors could be as close as 50 feet from where construction would take place. As shown in **Table 4.11-8**, sensitive receptors would experience maximum noise levels ranging from about 71 to 107 dBA. Construction noise levels would vary depending on the type of equipment, the duration of use, and the distance to receptors. Engine noise reduction technology, including mufflers, continues to improve, but heavy construction equipment remains noisy.

It is difficult to determine whether or not construction noise levels at various sensitive land uses would result in significant noise impacts without a detailed noise analysis. The above criteria can serve as guidelines in determining whether or not an impact is anticipated to occur based upon the type and size of

project being constructed. Based on the allowed uses in the Downtown Plan, it is reasonably foreseeable that there would be some construction projects that would exceed the criteria above. A review of the City's published CEQA documents for 2018 indicates that in the Downtown Plan Area Mitigated Negative Declarations (MNDs) were prepared for four projects; Draft EIRs were prepared for nine projects; and a Sustainable Community Environmental Assessment (SCEA) was prepared for one project (City of Los Angeles N.D.)[2] The 15 projects requiring a MND, EIR, or EA reflect a relatively high development activity year. Out of the 15 projects, two projects were determined to result in significant and unavoidable construction noise impacts despite the imposition of feasible mitigation measures (5th and Hill Project and the 713 E. 5th Street Project) and the remaining projects had construction noise impacts that were either less than significant or less than significant with mitigation. Although noise levels generated by construction typically do not vary greatly from project to project, the proximity of sensitive receivers and the overall duration of construction are typically key factors in determining whether construction-related noise is significant. Based on this conservative data from a year of high development activity, it is reasonable to anticipate that one or two projects per year would require a level of construction duration or equipment activity that could result in significant construction noise impacts to nearby sensitive receptors.

Based on the above, construction activity associated with reasonably anticipated development under the Downtown Plan could result in ***potentially significant*** temporary noise impacts.

New Zoning Code Impact

Permanent Noise Impacts

The New Zoning Code would allow for a variety of new zone districts that could be applied elsewhere in the City through future community plan updates or amendments. For example, new Industrial Use Districts and new Mixed-Use Entertainment Use Districts could potentially generate noise levels higher than existing conditions. However, other provisions in the New Zoning Code would help to reduce ambient noise levels. For example, the requirement that Outdoor Amenity Space provided on rooftops be stepped back from the edge of the roof that abuts a residential use is a standard that could reduce noise impacts. Also, the use of screening walls and landscaping to provide a transition between non-residential and residential uses could help lower noise impacts of non-residential uses on residential uses. The application of new zone districts could potentially generate higher levels of mobile source noise than existing conditions, but, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur within the Downtown Plan Area. Projecting the location and type of future growth would be speculative at this time; therefore, permanent ambient noise increase impacts and any associated potential health impacts cannot be identified and would be less than significant.

The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development policies, such as those in the Noise Element of the City's General Plan and Noise Ordinance, as described in Regulatory Setting, intended to avoid potential impacts related to ambient noise. The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and

[2] MNDs were prepared for the 1334-1356 S Flower Street Residential Project; 945 W. 8th Street Project; Olympic and Hill Project; Central City West Specific Plan Amendment; Draft EIRs were prepared for 713 E. 5th Street Project; 2110 Bay Street Mixed-Use Project; 5th and Hill Project; Olympic Tower Project; Southern California Flower Market Project; 1001 Olympic (Olympia) Project; Fig & 8th Project; College Station Project; 520 Mateo Project; Sustainable Community Environmental Assessments were prepared for Weingart Projects.

associated zone changes would analyze potential community- and site-specific noise impacts related to operation. A ***less than significant*** impact would occur.

Temporary Noise Impacts

Generally, temporary or periodic increases in ambient noise levels are associated with construction activities. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers. The New Zoning Code would provide zone districts with a range of densities and intensities that could be applied elsewhere in the City through future community plan updates or amendments. However, due to the modulatory of the New Zoning Code, it is not known where or to what extent future development and associated construction may occur as application of the New Zoning Code would be driven by the policy intent and vision of future community plan updates and amendments. Projecting the location and type of future growth would be speculative at this time; therefore, temporary or periodic ambient noise impacts cannot be identified and would be less than significant.

The content of the New Zoning Code would not repeal, amend, or conflict with existing regulations, such as Section 112.05 and 41.40 of the LAMC related to construction noise, as described in Regulatory Setting, intended to avoid potential impacts related to temporary or periodic increases in ambient noise. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific noise impacts related to construction. A ***less than significant*** impact would occur.

Mitigation Measures

Downtown Plan

4.11-1 Project-Specific Noise Study

A Noise Study, prepared by a qualified noise expert to meet the requirements herein, shall be required for all discretionary projects in the Downtown Plan Area located within 500 feet of noise-sensitive land uses and that have one or more of the following characteristics:

- Two or more subterranean levels or 20,000 cubic yards or more of excavated material;
- Construction duration (excluding architectural coatings) of 18 months or more;
- Use of large, heavy-duty equipment rated 300 horsepower or greater; or
- The potential for impact pile driving.

Noise-sensitive land uses are residences, transient lodgings, schools, libraries, churches (or other places of assembly), hospitals, nursing homes, auditoriums, concert halls, amphitheaters, playgrounds, and parks. The Noise Study shall characterize sources of construction noise, quantify noise levels at noise-sensitive uses, and identify measures to reduce noise exposure. The Noise Study shall identify reasonably available noise reduction devices or techniques to reduce noise levels to acceptable levels and/or durations including through reliance on any relevant federal, state or local standards or guidelines or accepted industry practices, and in compliance with LAMC standards. Noise reduction devices or techniques shall include but not be limited to: mufflers, shields, sound barriers, and time and place restrictions on equipment and activities. Each measure in the Noise Study shall identify anticipated noise reductions at noise-sensitive land uses.

Project applicants shall be required to comply with all measures identified and recommended by the Noise Study and shall maintain proof that notice of, as well as compliance with, the identified measures have been included in contractor agreements.

New Zoning Code

No mitigation measures are required because the impact of the New Zoning Code on noise levels is less than significant.

Significance After Mitigation

Downtown Plan

Mitigation Measure 4.11-1 requires completion of a Noise Study for all discretionary projects in the Downtown Plan Area located within 500 feet of a noise-sensitive land use that includes one of four characteristics associated with substantial construction activity levels. Mitigation Measure 4.11-1 requires the implementation of mufflers, shields, sound barriers and/or any other available noise reduction device or techniques. However, because compliance with all City standards cannot be assured for all construction projects, construction noise at various sensitive land uses could result in significant impacts. Therefore, the Downtown Plan would result in a ***significant and unavoidable*** impact related to temporary and periodic noise after mitigation.

In consideration of the related health effects of reasonably anticipated development from the Proposed Project, to determine the number of incidences of exceedance of noise thresholds we can be guided by historical development. As discussed above, based on the City's published CEQA documents for 2018, two projects were determined to result in significant and unavoidable construction noise impacts (5th and Hill Project and the 713 E. 5th Street Project). Based on this data from a year of high development activity, it is reasonable to anticipate that one or two projects per year would require a level of construction duration or equipment activity that could result in significant construction noise impacts to nearby sensitive receptors. As detailed under *Health Effects of Environmental Noise*, human health effects range from annoyance to hearing loss and physiological effects, but response to noise is subjective and can vary greatly from person to person. Factors that influence individual response include the intensity, frequency, and pattern of noise, the amount of background noise present before the intruding noise, and the nature of work or human activity that is exposed to the noise source. It is not feasible to determine a specific number of persons that could experience health effects from significant construction noise impacts since such effects would depend on the intensity and duration of noise, the distance between noise sources and receivers, and whether noise barriers are present between sources and receivers, but it is likely that individuals in the Downtown Plan Area will experience varying levels of disturbance related to construction noise with or without implementation of the Downtown Plan.

New Zoning Code

Not applicable.

Threshold 4.11-2	Generation of excessive groundborne vibration or groundborne noise levels

Impact 4.11-2 **Downtown Plan:** Reasonably anticipated development in the Downtown Plan Area generally is not anticipated to involve activities that would result in substantial vibration levels (e.g., blasting operations). However, future construction activity, specifically pile driving, could potentially generate vibration exceeding the 90 VdB threshold for buildings extremely susceptible to building damage (e.g., historic structures). Although mitigation is available to reduce the

potential effects of construction-related vibration, it cannot be assured that construction-related vibration would not result in building damage and reduce all significant impacts to less than significant levels. Thus, the Downtown Plan would result in a ***less than significant impact*** for operational vibration and a ***significant and unavoidable impact*** related to construction vibration.

New Zoning Code: The content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid the generation of excessive groundborne vibration or noise levels. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area. Any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Impacts related to the exposure of persons to or generation of excessive groundborne vibration or noise levels would be ***less than significant***.

Downtown Plan Impact

Construction Vibration

Construction activity can result in varying degrees of ground vibration depending on the equipment and methods employed. Operation of construction equipment causes vibrations that spread through the ground and diminish in strength with distance. Buildings founded on the soil in the vicinity of the construction site respond to these vibrations with varying results ranging from no perceptible effects at the lowest levels, low rumbling sounds and perceptible vibrations at moderate levels, and damage at the highest levels.

Table 4.11-10 shows construction equipment vibration levels based on various reference distances. Construction vibration is a localized event and is typically only perceptible to a receptor that is in close proximity to the vibration source. High-rise buildings and development on sites with certain geologic conditions may require pile driving. Construction equipment would typically generate vibration levels up to 87 Vdb at 25 feet, although pile driving could generate a vibration level of 112 Vdb at 25 feet. Heavy equipment could potentially operate within 25 feet of nearby buildings.

Caisson drilling, loaded trucks, jackhammers, and bulldozers would not exceed the 90 VdB threshold for extremely fragile buildings. However, the vibration levels associated with pile driving could exceed the thresholds for each of the identified sensitive building types: 98 VdB for engineering concrete and masonry buildings, 94 VdB for fragile buildings, and 90 VdB for extremely fragile buildings. The City's Office of Historic Resources has recorded Historic-Cultural Monuments (HCMs) in the Central City Community Plan Area (see Section 4.4, *Cultural Resources*, for a detailed list of HCMs). Therefore, the Downtown Plan would result in a ***potentially significant*** impact related to construction vibration.

TABLE 4.11-10 APPROXIMATE VDB GENERATED BY CONSTRUCTION EQUIPMENT

	Approximate VdB			
Equipment	**25 Feet**	**50 Feet**	**75 Feet**	**100 Feet**
Pile Driver (Impact)	112	106	102	100
Caisson Drilling	87	81	77	75
Large Bulldozer	87	81	77	75
Loaded Trucks	86	80	76	74
Jackhammer	79	73	69	67
Small Bulldozer	58	52	48	46

SOURCE: FTA, *Transit Noise and Vibration Impact Assessment*, May 2006.

Operational Vibration

It is not anticipated that new development within the Downtown Plan Area would involve activities that would result in substantial vibration levels (e.g., blasting operations). Operational groundborne vibration in the vicinity of new development associated with the Downtown Plan would be primarily generated by vehicular travel on the local roadways. According to the FTA *Transit Noise and Vibration Impact Assessment* guidance document, rubber tires and suspension systems dampen vibration levels from trucks to a level that is rarely perceptible (2006). Accounting for additional vehicle trips that would be accommodated by the Downtown Plan, traffic vibration levels would be similar to existing conditions and not perceptible by sensitive receptors. Therefore, impacts related to operational vibration under the Downtown Plan would be ***less than significant***.

New Zoning Code Impact

As described above, vibration is a localized event and is typically only perceptible to a receptor that is in close proximity to the vibration source. Vibration during construction of a project is typically caused by construction equipment and vibration levels are based on various reference distances. Vibration during operation of a project is typically associated with vehicular travel on local roadways and some heavy industrial operations. The New Zoning Code would not result in generation of excessive groundborne vibration or noise levels. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Additionally, due to the modulatory of the New Zoning Code, it is not known where or to what extent future development may occur within the Downtown Plan Area. Projecting the location and type of future growth would be speculative at this time; therefore, vibration impacts cannot be identified and would be less than significant.

Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development policies which are intended to avoid potential vibration impacts. A ***less than significant*** impact would occur.

Mitigation Measures

Downtown Plan

The following mitigation measures for the Downtown Plan addresses potentially significant impacts related to construction vibration in the vicinity of buildings extremely susceptible to building damage (e.g., historic structures).

4.11-2(a) Vibration Control Plan

For construction activity for discretionary projects involving heavy construction equipment (e.g., large bulldozer or excavator) within 25 feet of an extremely fragile building (non-engineered masonry) or historical resource (designated or in SurveyLA or other City recognized survey), the applicant shall prepare a Vibration Control Plan. The Vibration Control Plan requirement will also apply to use of pile drivers within 135 feet of an extremely fragile building or historical resource. The Vibration Control Plan shall be prepared by a qualified structural engineer and shall include methods to minimize vibration, including but not limited to:

- Use of drilled piles or the use of a sonic vibratory pile driver rather than impact pile driving
- Use of rubber-tired equipment rather than metal-tracked equipment
- Avoiding the use of vibrating equipment when allowed by best engineering practices

The Vibration Control Plan shall include a pre-construction survey letter establishing baseline conditions at potentially affected extremely fragile buildings/historical resources. The survey letter shall provide a shoring design to protect the extremely fragile building/historical resource from potential damage. At the conclusion of vibration causing activities, the qualified structural engineer shall issue a follow-up letter describing damage, if any, to impacted buildings. The letter shall include recommendations for any repair, as may be necessary, in conformance with the Secretary of the Interior Standards. Repairs shall be undertaken and completed in conformance with all applicable codes including the California Historical Building Code (Part 8 of Title 24).

A Statement of Compliance signed by the Applicant and Owner is required to be submitted to LADBS at plan check and prior to the issuance of any permit. The Vibration Control Plan, prepared as outlined above shall be documented by a qualified structural engineer, and shall be provided to the City upon request.

4.11-2(b) Best Management Practices for Vibration

For projects that are not required to comply with mitigation measure 4.11-2(a), the City shall notify developers of the following best management practices to reduce damage to vibration-sensitive uses:

- Impact pile drivers shall be avoided to eliminate excessive vibration levels. Drilled piles or the use of a sonic vibratory pile driver are alternatives that shall be utilized where geological conditions permit their use.
- Construction activities shall involve rubber-tired equipment rather than metal-tracked equipment.
- The construction contractor shall manage construction phasing (scheduling demolition, earthmoving, and ground-impacting operations so as not to occur in the same time period), use low-impact construction technologies, and shall avoid the use of vibrating equipment when allowed by best engineering practices.

New Zoning Code

No mitigation measures are required because the impact of the New Zoning Code on groundborne vibration or groundborne noise levels is less than significant.

Significance After Mitigation

Downtown Plan

Construction Vibration

Development projects in the City of Los Angeles typically do not result in vibration damage even though vibration generating equipment is utilized for all urban infill construction. Although most construction activities located in the Downtown Plan Area are not anticipated to have significant vibration impacts, it is possible that a small number of development projects in the Downtown Plan Area could have significant vibration impacts during construction. This would most commonly occur when a development project would be located next to a historical resource constructed of fragile building materials, which is more sensitive to vibration damage, than structures that were built based on more recent building codes. Mitigation Measure 4.11-2(a) would reduce vibration impacts whenever a development project is located near a historical resource constructed of fragile materials. Although, it is difficult to quantify the vibration reduction associated with Mitigation Measure 4.11-2(a) without knowing the specifics of a development project, including the distance from the equipment to the historical resource. Implementing caisson drilling instead of impact pile driving would reduce vibration levels from 112 Vdb at 25 feet to approximately 87 Vdb at 25 feet. The unmitigated analysis also concludes that vibration levels could exceed 98 VdB significance threshold for engineered concrete and masonry buildings without plaster (e.g., typical urban

development), causing building damage or substantial human annoyance. Vibration is an unavoidable byproduct of construction activity. In an urban environment, vibration from construction equipment is related to the weight and movements of equipment. In the absence of specific development projects with detailed construction requirements and known adjacent uses, there is no way to determine specific potential for impact and feasible, appropriate mitigation to control equipment weight and movements from construction activity associated with each infill project.

Requiring Mitigation Measures 4.11-2(a) and/or 4.11-2(b) for all development projects would be infeasible because the City has determined that the use of staff resources to apply these mitigation measures to all ministerial projects is not justified. It would require City staff to evaluate each and every ministerial project to determine if that project, because of its unique characteristics, should be subject to this mitigation measure. Additionally, it would require rezoning every property to get authority to review ministerial projects. From an implementation and administrative point of view requiring these procedures or actions would be extremely difficult and require an inordinate amount of staff time and resources to capture the small number of projects that could have significant impacts.

It is anticipated that Mitigation Measure 4.11-2(a) would substantially reduce/control construction vibration for historical resources or those of fragile construction. In addition, Mitigation Measure 4.11-2(b) would limit vibration levels at uses other than historic properties. However, in the absence of construction details associated with specific projects and without knowing the proximity of construction activities to specific receptors, it is anticipated that construction vibration levels at certain particularly fragile adjacent buildings could exceed the thresholds of significance. Therefore, the Downtown Plan's construction-related vibration impact would remain ***significant and unavoidable***.

Operational Vibration

Impacts related to operational vibration were determined to be ***less than significant without mitigation***.

New Zoning Code

Not applicable.

Threshold 4.11-3	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels

Impact 4.11-3

Downtown Plan: The Downtown Plan Area is not located in the vicinity of a public airport or private airstrip; therefore, ***no impact*** related to airport or airstrip noise would result from the Downtown Plan.

New Zoning Code: Airports and private airstrips are located in the City; however, the New Zoning Code would not expose people to excessive noise levels associated with airports. Additionally, the content of the New Zoning Code would not repeal, amend, or conflict with the existing regulations intended to avoid potential impacts related to airport noise. Impacts would be ***less than significant***.

Downtown Plan Impact

The Downtown Plan Area is not located in the vicinity of a public airport or private airstrip. Los Angeles International Airport (LAX), Bob Hope (Burbank) Airport, Santa Monica Airport, and El Monte Airport are all about 10 miles from the Downtown Plan Area and no portion of the Downtown Plan Area would be

exposed to noise exceeding 60 dBA CNEL from any of these airports. Therefore, ***no impact*** related to airport or airstrip noise would result from Plan implementation.

New Zoning Code Impact

As discussed in Existing Conditions, LAX, Van Nuys Airport, and Whiteman Airport are located in the City, and there are 51 private use airstrips within the City, all of which are heliports. However, due to the modulatory of the New Zoning Code, it is not known where or to what extent future development may occur as application of the New Zoning Code would be driven by the policy intent and vision of future community plan updates and amendments. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific noise impacts for projects located within two miles of a public airport or private airstrip.

Further, the content of the New Zoning Code would not repeal, amend, or conflict with the existing Los Angeles County Airport Comprehensive Land Use Plan as described in Regulatory Setting, intended to avoid potential impacts related to airport noise. Existing airport overlay zones and their requirements would still apply and be regulated by the Los Angeles County Airport Land Use Commission. A ***less than significant impact*** would occur.

Mitigation Measures

No impact related to airport noise would occur under the Downtown Plan and the impact would be less than significant for the New Zoning Code. Therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

CUMULATIVE IMPACTS

Permanent Increase in Ambient Noise Levels

Stationary Noise

Stationary noise impacts are localized to a project site and sensitive receptors within the immediate vicinity. Therefore, for stationary noise sources, the cumulative setting is development in the Downtown Plan Area and areas immediately adjacent to the Downtown Plan Area. Future development in the City would include mechanical equipment, loading, trash pick-up, and other noise-generating activities. However, such activities would be typical of the urban environment within the City and any on-site activities would be required to comply with applicable provisions of the LAMC. Therefore, there would be no cumulative impact related to stationary noise sources. In addition, the New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would result in an increase in stationary noise sources. Therefore, the incremental effect of the Downtown Plan and New Zoning Code with respect to stationary noise sources would not be cumulatively considerable and cumulative impacts would be ***less than significant.***

Mobile Noise

The cumulative setting for mobile noise impacts is the City and adjacent communities because, as detailed in Section 4.15, *Transportation and Traffic*, the Downtown Plan was modeled with future forecasts from SCAG for the City of Los Angeles and adjacent communities when determining VMT. The traffic analysis presented herein considers the combined effect of project-generated traffic, existing traffic volumes and pass-through future traffic from areas both within and outside the Downtown Plan Area. Table 4.11-7 presents the cumulative increase in future mobile source noise levels. The transportation analysis approach used in this analysis applied established traffic forecasting tools that have been empirically proven and previously accepted under CEQA. However, these forecasting tools may prove to be conservative if some of the recent trends in travel persist. It is not clear what direction the trends will take at this point. VMT per capita has been generally dropping since around 2004, increased for many decades prior, and has now begun to climb again since January 2014. Trends in Los Angeles are also pulling in multiple directions. If the trends toward higher levels of walking, bicycling, and transit use exceed what is forecast in this analysis, this could result in fewer driving related impacts than the Downtown Plan conservatively accounts for in this analysis.

As shown in **Table 4.11-7**, future mobile noise levels including reasonably anticipated development from the Downtown Plan would increase by more than 3 dBA CNEL at all but four locations, in comparison to existing conditions. However, it would not increase noise levels to be within the "normally unacceptable" category for adjacent land uses. In addition, the New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would increase sources of mobile noise. Therefore, the incremental effect of the Downtown Plan and New Zoning Code on mobile source noise levels would not be cumulatively considerable and cumulative impacts would be ***less than significant.***

Substantial Temporary Increase in Ambient Noise Levels

Construction noise impacts are localized to a project site and sensitive receptors within the immediate vicinity. Therefore, for sources of construction noise, the cumulative setting is development in the Downtown Plan Area and areas immediately adjacent to the Downtown Plan Area. Construction of future development projects in the city would produce temporary noise impacts. Cumulative development in the city is not likely to result in the exposure of on-site or off-site sensitive receptors to excessive construction noise due to the localized nature of noise impacts and the fact that all construction would not occur at the same time and at the same location. Therefore, only sensitive receptors located in close proximity to each construction site would be potentially affected by each activity.

Construction activities associated with reasonably anticipated development projects from the Downtown Plan may overlap for some time with construction activities for other development projects, which are adjacent to, or within the Downtown Plan Area. Typically, if a development site is 500 feet or more away from another site then noise levels would have attenuated to a point that they would not combine to produce a cumulative noise impact. Therefore, construction noise levels would typically become cumulative if two development sites were to have construction occurring within 500 feet of each other.

Per the LAMC, construction activities would be prohibited between the hours of 9:00 PM and 7:00 AM Monday through Friday, before 8:00 AM or after 6:00 PM on Saturdays and national holidays, and on Sundays. However, as discussed above, larger or more unusual projects could result in significant short-term increases in noise levels. These projects could combine together, or combine with smaller projects, to substantially increase noise levels at specific land uses. Therefore, the significant and unavoidable construction noise impacts of the Development Plan could add to construction noise impacts associated with cumulative development, especially on the periphery of the Downtown Plan Area where receptors

could be exposed to noise sources from within and outside the Downtown Plan Area. The incremental effect of the Downtown Plan would be cumulatively considerable and this cumulative temporary impact would be ***significant and unavoidable***.

The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would involve an increase in construction noise impacts. For these reasons, the incremental effect of the New Zoning Code related to construction noise would not be cumulatively considerable effect. Cumulative impacts would be ***less than significant.***

Vibration

Construction Vibration

Construction vibration impacts are localized to a project site and sensitive receptors within the immediate vicinity. Therefore, for sources of construction vibration, the cumulative setting is development in the Downtown Plan Area and areas immediately adjacent to the Downtown Plan Area. Construction of future development projects in the city would produce temporary vibration impacts. Cumulative development in the city is not likely to result in the exposure of on-site or off-site sensitive receptors to excessive ground-borne noise and vibration due to the localized nature of vibration impacts and the fact that all construction would not occur at the same time and at the same location. Therefore, only sensitive receptors located in close proximity to each construction site would be potentially affected by each individual activity.

Construction activities associated with reasonably anticipated development projects from the Downtown Plan may overlap for some time with construction activities for other development projects, which are adjacent to, or within the Downtown Plan Area. However, for the combined vibration impact from simultaneous construction projects to reach cumulatively significant levels, intense construction from these projects would have to occur simultaneously in close proximity to a sensitive receptor. Downtown Plan construction-related vibration would not result in additive vibration in combination with cumulative development in most areas of the city. However, individual development projects near the periphery of the Downtown Plan Area could potentially be constructed concurrently with other development adjacent to, but outside the Downtown Plan Area, such that intense construction from two or more projects would simultaneously occur in close proximity to existing sensitive receptors. Therefore, the significant and unavoidable construction vibration impacts of the Development Plan could add to vibration impacts associated with cumulative development on the periphery of the Downtown Plan Area. Therefore, the incremental effect of the Downtown Plan would be cumulatively considerable and temporary cumulative vibration impacts related to construction activity would be ***significant and unavoidable***.

The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would involve an increase in construction vibration impacts. For these reasons, the incremental effect of the New Zoning Code would not be cumulatively considerable and cumulative impacts would be ***less than significant.***

Operational Vibration

Operational ground-borne vibration impacts are localized to a project site and sensitive receptors within the immediate vicinity. Therefore, for sources of operational ground-borne vibration, the cumulative setting is development in the Downtown Plan Area and areas immediately adjacent to the Downtown Plan Area. Ground-borne vibration could conceivably be generated by the operation of future development projects within the City. It is not anticipated that new development within the Downtown Plan Area would include substantial sources of operational ground-borne vibration. It is reasonable to assume that other projects

outside the Downtown Plan Area would have similar characteristics. In addition, the New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would increase sources of operational ground-borne vibration. Therefore, cumulative impacts related to operational ground-borne noise and vibration at any sensitive receptor would not be significant. The incremental effect of the Downtown Plan and New Zoning Code would not be cumulatively considerable and cumulative impacts would be ***less than significant.***

Public Airports/Private Airstrips

Aircraft-related noise impacts occur only in the vicinity of airports or airstrips. Although Citywide growth could increase the number of people who are exposed to aircraft-related noise impacts, such impacts would be localized in nature. In addition, new development would not increase aircraft-related noise impacts. Because no portion of the Downtown Plan Area is located in the vicinity of a public airport or private airstrip, the Downtown Plan would have no contribution to any cumulative impact related to these hazards. The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would increase the potential for aircraft-related noise impacts. For these reasons, the incremental effect of the Downtown Plan and New Zoning Code related to airport and air strip noise would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

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4.12 POPULATION, HOUSING, AND EMPLOYMENT

This section analyzes population, housing and employment impacts associated with the Downtown Plan and the New Zoning Code. Topics addressed include local and regional assessments, expected population, housing, and employment growth, and the potential displacement resulting from implementation of the Downtown Plan. The analysis presented in this section utilizes information from a variety of public agencies, including the City of Los Angeles Department of City Planning (DCP), the U.S. Census Bureau (U.S. Census), and the Southern California Association of Governments (SCAG).

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

CEQA requires an EIR to compare existing physical conditions (baseline) to the physical conditions after implementation of a project. Neither component of the Proposed Project would result in direct impacts. However, indirect effects could result from the reasonably anticipated development that is anticipated to occur with the Downtown Plan. Assessing the impacts of the Downtown Plan requires determining reasonably anticipated development and identifying the current conditions. Both of these determinations rely in part on estimates of the current population, housing, and employment, and the projected growth in population, housing, and employment.

Population

Table 4.12-1 shows citywide and Downtown Plan Area population data for 2010 and 2017 (baseline conditions). The City's population increased from approximately 3,790,000 residents in 2010 to 3,950,000 residents in 2017, resulting in a net population growth of approximately 160,000 residents or four percent. The Downtown Plan Area had approximately 60,000 residents in 2010, and the Downtown Plan Area population increased to 76,000 residents in 2017, resulting in a net population growth of approximately 16,000 residents or 26 percent. The Downtown Plan Area population comprises approximately two percent of the City's population, and recent population growth in the Downtown Plan Area has greatly exceeded population growth trends citywide.

TABLE 4.12-1 POPULATION IN LOS ANGELES AND THE DOWNTOWN PLAN AREA

Planning Area	Historical (2010)	2017 (Baseline)	% of Citywide Baseline	Net Growth (Baseline-Historical)	% Change (Baseline-Historical)
Citywide	3,790,000	3,950,000	100	160,000	4
Downtown Plan Area	60,000	76,000	2	16,000	26

Numbers are rounded to the nearest thousand.
SOURCES: Historical Data – U.S. Census Bureau 2010; 2017 Baseline – SCAG 2016-2040 RTP/SCS.

The Downtown Plan Area is also home to a sizeable homeless population, as well as an incarcerated population, neither of which is included in the population data described above. Based on counts conducted by the Los Angeles Homeless Services Authority (LAHSA), Downtown Los Angeles, including Skid Row, had a homeless population of approximately 6,000 in 2017 (LAHSA 2017).

The Downtown Plan Area contains two jails, the Men's Central Jail and Twin Towers Correctional Facility (a.k.a. Twin Towers Jail or Los Angeles County Jail). In 2015, the Men's Central Jail had an average daily inmate population of 4,195, while the Twin Towers Jail had an average daily inmate population of 3,662, for a combined total average daily inmate population of approximately 8,000 (Los Angeles Sheriff's Department [LASD] 2016).

Housing

The City of Los Angeles as a whole, and the Downtown Plan Area include a mix of commercial, retail, residential development, civic, public facility, entertainment, and industrial uses and encompasses a number of distinct neighborhoods, which are described in detail in Section 4.10, *Land Use and Planning*. Major Downtown neighborhoods include the Financial District and Commercial Core, Bunker Hill and Cultural Corridor, the Historic Core and Entertainment Center, South Park, Arts District, Civic Center, El Pueblo and Union Station, Skid Row, Chinatown, Little Tokyo, and Flower, Market, and Fashion Districts.

The Downtown Plan Area encompasses the City's urban core, which is intended for the highest density and intensity of development in the City, as envisioned by the Downtown Core designation for the area established in the General Plan Framework Element. The majority of housing in the Downtown Plan Area consists of multi-family units located in a mixed-use context. However, there are some single-family homes, particularly in the northwest portion of the Downtown Plan Area.

Table 4.12-2 shows citywide and Downtown Plan Area housing data estimates for 2010 and 2017. Housing units can be accounted for in different ways by providers of demographic data. SCAG accounts for housing units by providing an estimate of the number of households, or occupied housing units, meaning that vacant units are excluded. Other demographic data sources, such as the 2010 Census provide households and as well as the total housing unit number, including both occupied units and vacant units. For consistency between different data sources, all housing data provided in **Table 4.12-2** show total households. As shown therein, the number of households citywide increased from approximately 1,318,000 in 2010 to 1,397,000in 2017, resulting in a net increase of approximately 79,000 households or approximately six percent. In comparison, the Downtown Plan Area had approximately 26,000 households in 2010, which increased to 34,000 in 2017. This represents a net increase of approximately 8,000 households, or 30percent. This indicates that housing growth in the Downtown Plan Area has been higher than citywide housing growth in the past decade.

TABLE 4.12-2 HISTORICAL HOUSING INVENTORY IN LOS ANGELES AND THE DOWNTOWN PLAN AREA

Planning Area	Historical (2010)	2017 (Baseline)	% of Citywide Baseline	Net Change (Baseline-Historical)	% Change (Baseline-Historical)
Citywide	1,318,000	1,397,000	100	79,000	6
Downtown Plan Area	26,000	34,000*	2.4	8,000	30

Notes: Numbers are rounded to the nearest thousand, and percentages are calculated from the rounded values.
* For conservative purposes, this forecast assumes there are no vacant units and all forecasted units are occupied.
SOURCES: Citywide and Downtown Historical Data – U.S. Census Bureau 2010; 2017 Baseline – SCAG 2016-2040 RTP/SCS;

The housing market can be influenced by population growth, income, housing unit cost, and housing locations. Age distribution is also a key market characteristic because housing demand can be influenced by the housing preference of certain age groups due to limited income. In many cases the majority of the young adult population (20 to 34 years old) tends to occupy apartments and smaller single-family units. The population in the 35 to 65 years old age bracket occupies a range of housing types, including larger

single-family homes, condominiums, and apartments, based on income and household sizes. The population in the 65+ year old age bracket occupies the above types, as well as assisted living homes and nursing homes.

Employment

Table 4.12-3 summarizes historical and baseline (2017) employment data for Los Angeles citywide and the Downtown Plan Area. As shown therein, citywide employment increased from approximately 1,605,000 in 2010 to 1,824,000 in 2017, resulting in a net growth of approximately 219,000 jobs, or about 14 percent. In comparison, the Downtown Plan Area had approximately 298,000 jobs in 2010, which decreased to 219,000 in 2017. This represents a net decrease of approximately 79,000 jobs, or 27 percent. Currently, the Downtown Plan Area provides for approximately 14 percent of jobs citywide.

TABLE 4.12-3 EMPLOYMENT IN LOS ANGELES AND THE DOWNTOWN PLAN AREA

Planning Area	Historical (2010)	2017 (Baseline)	% of Citywide Baseline	Net Change (Baseline-Historical)	% Change (Baseline-Historical)
Citywide	1,605,000	1,824,000	100	219,000	14
Downtown Plan Area	298,000	219,000	12	-79,000	-27

Notes: Numbers are rounded to the nearest thousand, and percentages are calculated from the rounded values.
SOURCES: Citywide and Downtown Plan Area Historical Data –U.S. Census Bureau, On the Map Application for 2010, https://onthemap.ces.census.gov/, accessed August, 2018. The 2010 Census form did not survey people about employment; therefore, a count of jobs is not available from the 2010 Census.
2017 Baseline– SCAG 2016-2040 RTP/SCS.
/a/ The higher number of employment in 2010 in comparison to the 2017 Baseline is likely due to difference in data sources between the two years, and the associated difference in methodology. Based on OntheMap data, the employment for Downtown Plan Area in 2010 and 2017 is 298,000 and 323,000, respectively.

REGULATORY FRAMEWORK

FEDERAL

Comprehensive Housing Affordability Study (Chas)

CHAS was enacted by the Cranston-Gonzalez National Affordable Housing Act of 1990 and was run by the U.S. Department of Housing and Urban Development (HUD). The primary purpose of the CHAS data is to demonstrate the number of households in need of housing assistance. This is estimated by the number of households that have certain housing problems and have income low enough to qualify for HUD's programs (primarily 30, 50, and 80 percent of median income). CHAS also considers the prevalence of housing problems among different types of households, such as the elderly, disabled, minorities, and different household types. The CHAS data provide counts of the numbers of households that fit these HUD-specified characteristics in HUD-specified geographic areas.

In addition to estimating low-income housing needs, the CHAS data contribute to a more comprehensive market analysis by documenting issues such as lead paint risks, affordability mismatch, and the interaction of affordability with variables such as age of homes, number of bedrooms, and type of building.

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Relocation Act)

The Uniform Relocation Act (Public Law 91-646) provides important protections and assistance for people affected by federally funded projects. This law was enacted by Congress to ensure that people whose real property is acquired, or who move as a result of projects receiving federal funds, will be treated fairly and equitably and will receive assistance in moving from the property they occupy.

STATE

California Housing Element Law

State Housing Law (Government Code Section 65580) requires local government plans to address the existing and projected housing needs of all economic segments of the community through their housing elements. The housing element is one of seven state-mandated elements that every general plan must contain, and is required to be updated every eight years and determined legally adequate by the state. The purpose of the housing element is to identify the community's housing needs, state the community's goals and objectives with regard to housing production, rehabilitation, and conservation to meet those needs, and define the policies and programs that the community will implement to achieve the stated goals and objectives.

Senate Bill 375 (SB 375)

The Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008) focuses on aligning transportation, housing, and other land uses to achieve regional greenhouse gas (GHG) emission reduction targets established under the California Global Warming Solutions Act, also known as Assembly Bill (AB) 32. SB 375 requires Metropolitan Planning Organizations (MPO) to develop a Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan (RTP), with the purpose of identifying policies and strategies to reduce per capita passenger vehicle-generated GHG emissions. As set forth in SB 375, the SCS must: (1) identify the general location of land uses, residential densities, and building intensities within the region; (2) identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period; (3) identify areas within the region sufficient to house an eight-year projection of the regional housing need; (4) identify a transportation network to service the regional transportation needs; (5) gather and consider the best practically available scientific information regarding resource areas and farmland in the region; (6) consider the state housing goals; (7) establish the land use development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, will reduce GHG emissions from automobiles and light-duty trucks to achieve GHG emission reduction targets set by the California Air Resources Board (CARB), if there is a feasible way to do so; and (8) comply with air quality requirements established under the Clean Air Act.

Existing law requires local governments to adopt a housing element as part of their general plan and update the housing element as frequently as needed and no less than every five years. Under SB 375, this time period has been lengthened to eight years and timed so that the housing element period begins no less than 18 months after adoption of the RTP, to encourage closer coordination between housing and transportation planning. SB 375 also changes the implementation schedule required in each housing element. Previous law required the housing element to contain a program that set forth a five-year schedule to implement the goals and objectives of the housing element. The new law instead requires this schedule of actions to occur during the eight-year housing element planning period, and requires that each action have a timetable for implementation. SB 375 also requires that the schedules for the regional transportation plan (RTP) and

RHNA processes be synchronized and requires the RHNA to allocate housing units within the region in a manner consistent with the development pattern adopted by the SCS.

Fair Employment and Housing Act (FEHA)

The FEHA of 1959 (Government Code Section 12900 *et seq.*) prohibits housing discrimination on the basis of race, color, religion, sexual orientation, marital status, national origin, ancestry, familial status, disability, or source of income.

The Unruh Civil Rights Act

The Unruh Civil Rights Act of 1959 (Civ. Code Section 51) prohibits discrimination in "all business establishments of every kind whatsoever." The provision has been interpreted to include businesses and persons engaged in the sale or rental of housing accommodations.

California Relocation Assistance Act

The California Relocation Assistance Act (Government Code Section 7260 *et seq.*) establishes uniform policies to provide for the fair and equitable treatment of people displaced from their homes or businesses as a direct result of state and/or local government projects or programs. This Act requires that comparable replacement housing be made available to displaced persons within a reasonable period of time prior to the displacement. Displaced persons or businesses are assured payment for their acquired property at fair market value. Relocation assistance in the form of advisory assistance and financial benefits are provided at the local level. This includes aid in finding a new home location, payments to help cover moving costs, and additional payments for certain other costs.

Homeowners and Private Property Protection Act (Proposition 99)

In 2008, California voters approved Proposition 99, the Homeowners and Private Property Protection Act, which amended the California Constitution so that local governments are prohibited from using eminent domain authority to acquire an owner-occupied residence for the purposes of conveying it to a private recipient, with limited exceptions. Proposition 99 applies only to owner-occupied residences. Cities may still use eminent domain authority to convey multi-family and non-residential property to other private parties.

Density Bonuses and Other Incentives (i.e., State Density Bonus Law; Government Code Section 65915)

The State Density Bonus law (signed into law in 1979) requires jurisdictions to provide applicants with a density bonus and incentives or concessions for the production of housing development in which affordable housing is also provided. Eligible projects include housing developments with 10 percent housing for lower income households, five percent of the housing for very low income households, a senior citizen housing development or mobile park restricted to older persons, and 10 percent of the total dwelling units in condominium projects for families or persons with moderate income.

Assembly Bill (AB) 2222

On September 27, 2014, the governor signed AB 2222, which amended sections of the State Density Bonus Law (Government Code Section 65915). AB 2222 requires that density bonus projects resulting in a loss of existing affordable and otherwise locally-regulated (i.e., rent-stabilized) housing units replace those units one-for-one. It also extends the affordability period from 30 to 55 years and expands the use of equity sharing in for-sale units. Several other clarifications of the existing law are also included, but did change current City policy.

REGIONAL

Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS)

SCAG adopted its 2016-2040 RTP/SCS in April 2016. The RTP/SCS provides an integrated transportation and land use vision for Los Angeles, Orange, San Bernardino, Imperial, Riverside, and Ventura Counties (SCAG 2016). The 2016-2040 RTP/SCS presents a long-term transportation and land use vision for the SCAG region through 2040. The plan identifies challenges to regional growth, goals and objectives to guide the region's growth, strategies to achieve the stated goals and objectives, funding strategies for transportation projects, and performance measures to gauge progress and ensure that regional transportation projects and policy implementation are consistent with other planning goals for the region. The RTP also includes a list of transportation projects already funded and/or planned for construction in the SCAG region. The RTP/SCS is intended to aid local jurisdictions in developing local plans and addressing local issues of regional significance and includes population, housing, and employment forecasts for use in local planning efforts. If growth is anticipated, each city must accommodate a share of the region's projected growth.

The 2016-2040 RTP/SCS includes a set of regional land use strategies that are intended to increase transportation mode choice, guide future development patterns, further improve air quality, and reduce GHG emissions. These proposed land use strategies support a higher portion of new households and employment in areas well served by transit, and reduce growth in high value habitat areas along with neighborhoods that are adjacent to highways. Like the 2012-2035 RTP/SCS, the proposed land use strategies included in the 2016-2040 RTP/SCS continue to focus new growth in high-quality transit areas (HQTA) and existing suburban town centers and promote walkable mixed-use communities.[1]

SCAG Regional Housing Needs Assessment (RHNA)

The RHNA is a key tool for SCAG and its member governments to plan for growth. The fifth cycle Final RHNA Allocation Plan was adopted by the SCAG Regional Council on October 4, 2012 and quantifies the need for housing within each jurisdiction between 2013 and 2021. Communities then plan, consider, and decide how they will address this need through the process of completing the housing elements of their general plans. The RHNA does not necessarily encourage or promote growth, but rather allows communities to accommodate growth in a manner that enhances quality of life, improves access to jobs, transportation, and housing, and does not adversely impact the environment. The RHNA is produced periodically by SCAG, as mandated by state law, to coincide with the region's schedule for preparing housing elements.

The RHNA addresses existing and future housing needs. The existing need for housing is determined using data from the most recent U.S. Census, including the number of low-income households paying more than 30 percent of their income for housing and the number of people occupying overcrowded housing units (SCAG 2012). The future need for housing is determined using data on forecasted household growth, historical growth patterns, job creation, household formation rates, and other factors. The forecast housing need is then adjusted to account for an ideal level of vacancy needed to promote housing choice, maintain price competition, and encourage acceptable levels of housing upkeep and repair. The RHNA also accounts for units expected to be lost due to demolition, natural disaster, or conversion to non-housing uses. The sum of these factors – household growth, vacancy need, and replacement need – form the "construction need" assigned to each community. In addition, the RHNA considers how each jurisdiction might grow in ways that will decrease the concentration of low-income households in certain communities. The need for new housing is distributed among income groups so that each community moves closer to the regional average

[1] SCAG has prepared a draft 2020 RTP/SCS, but the update has not been adopted as of April 2020.

income distribution. The City of Los Angeles was assigned a RHNA of 82,002 units for the 2014 to 2021 planning period. **Table 4.12-4** summarizes the City's RHNA allocation by income category.

TABLE 4.12-4 LOS ANGELES REGIONAL HOUSING NEEDS ASSESSMENT ALLOCATION (2014-2021)

Income Category	Percent of Total Allocation	Number of Units
Extremely low income households (≤ 30% AMI)	12.5	10,213
Very low income households (31-50% AMI[1])	12.5	10,213
Low income households (51-80% AMI)	15.2	12,435
Moderate income households (81-120% AMI)	16.8	13,728
Above moderate income households (>120% AMI)	43.2	35,412
Total[2]	100.1	82,002

NOTES:
1. AMI = Area Median Income
2. Percentages add up to more than 100% due to rounding.
SOURCE: City of Los Angeles 2013

Measure H

Measure H is a county sales tax measure that was passed by Los Angeles County voters in March 2017. Through ¼-cent sales tax, Measure H is expected to generate $355 million a year for 10 years in funding dedicated to fighting homelessness. The five-year goal is to provide permanent housing for 45,000 families and individuals, while preventing homelessness for 30,000 others. In June 2017, the Board of Supervisors approved funding allocations for each of the Measure H-eligible Homeless Initiative strategies and detailed implementation plans were developed for new strategies and those that are significantly expanded and/or enhanced with Measure H funding.

LOCAL

The Housing Authority of the City of Los Angeles (HACLA) Year 2018 Agency Plan (Agency Plan)

The Agency Plan sets forth the Housing Authority's primary goals, as well as policies to support those goals. Goals include financing the redevelopment and rehabilitation of public housing assets, improve the public housing community environment through a public safety approach, and maintain comprehensive economic development and self-sufficiency opportunities for extremely-low, very-low, and low income residents and program participants (HACLA 20180. The Plan also reports on the status of existing public housing initiatives.

City of Los Angeles General Plan

The City of Los Angeles General Plan contains growth and development policies for accommodating projected long-term growth. Applicable goals and policies that apply to all development in the City of Los Angeles include a balanced distribution of land uses, adequate housing for all income levels, and economic stability. The General Plan Framework Element, Housing Element, and Land Use Element provide guidance specific to population, housing, and employment growth.

Framework Element

The Citywide General Plan Framework Element, adopted in December 1996 and amended in August 2001, is intended to guide the City's long-range growth and development. The Framework Element's "smart growth" strategy generally seeks to accommodate growth near transit and other existing infrastructure to assure a sustainable, economically viable future for Los Angeles. Although the Framework Element indicates a horizon year of 2010, the population anticipated for 2010 has still not been reached.

Housing Element

The Housing Element of the General Plan identifies the existing and projected housing needs of all economic segments of the City of Los Angeles. The goal of the Housing Element is to encourage the location of housing, jobs, and services in mutual proximity. Policies of the Housing Element are aimed at the provision of an adequate and affordable supply of housing.

Applicable goals, objectives, and policies from the General Plan Framework Element and Housing Element related to population, housing, and employment are listed in **Table 4.12-5**.

Land Use Element

The Central City and Central City North Community Plans are among the 35 community plans that make up the City's Land Use Element. The 35 community plans provide goals, objectives, and policies that are directly and indirectly related to population, housing, and employment and are the current guidelines for development in the Downtown Plan Area. The proposed Downtown Plan would update the goals and policies of the Central City and Central City North Community Plans to reflect land use patterns, address land use issues, and carry out the community's vision for the Downtown Plan Area.

City of Los Angeles Consolidated Plan (2013-2017)

The 2013-2017 Consolidated Plan (ConPlan) is the City's strategic plan for leveraging annual allocations of federal funds granted by HUD (e.g., Community Development Block Grant, Emergency Solutions Grant, HOME Investment Partnerships Program (HOME), and Housing Opportunities for Persons with AIDS). The City's 2013-2017 ConPlan represents the nation's first transit-oriented ConPlan and integrates transit, community, economic, and housing development investments. The ConPlan identifies the City's fiscal and policy challenges, establishes goals, and projected five-year goal outcomes to be achieved with federal funds. The Five-Year Plan in turn informs an Annual Plan prepared by the City each year that provide action plans for implementing projects and programs funded with federal grants (Los Angeles Housing + Community Investment Department 2018).

Los Angeles Municipal Code (LAMC)

Zoning regulations provide for the types and densities of commercial, institutional, industrial, and residential uses permitted in each of the City's zones. Zoning in the City establishes the maximum allowable development in a zone. Zoning also includes height limitations and other development standards which together regulate setbacks, building heights, floor area ratios (FAR), open space and parking for each parcel within the City, as applicable.

The LAMC is currently undergoing a comprehensive update to all Zoning Code sections as part of the re:code LA effort. re:code LA, which started in 2013 and will continue through 2020, will update the Zoning Code to make the Code more streamlined, visual, and easy to use. The existing Zoning Code regulations are not being repealed as part of this Project. The existing Zoning Code will continue to be located in Chapter 1 of the Los Angeles Municipal Code, while the New Zoning Code will be located in a new Chapter

TABLE 4.12-5 RELEVANT GENERAL PLAN POPULATION, HOUSING, AND EMPLOYMENT OBJECTIVES AND POLICIES

GENERAL PLAN FRAMEWORK – LAND USE	
Objective 3.1	Accommodate a diversity of uses that support the needs of the City's existing and future residents, businesses, and visitors.
Objective 3.3	Accommodate projected population and employment growth within the City and each community plan area and plan for the provision of adequate supporting transportation and utility infrastructure and public services.
Objective 3.4	Encourage new multi-family residential, retail commercial, and office development in the City's neighborhood districts, community, regional, and downtown centers as well as along primary transit corridor/boulevards, while at the same time conserving existing neighborhoods and related districts.
Policy 3.4.1	Conserve existing stable residential neighborhoods and lower-intensity commercial districts and encourage the majority of new commercial and mixed-use (integrated commercial and residential) development to be located (a) in a network of neighborhood districts, community, regional, and downtown centers, (b) in proximity to rail and bus transit stations and corridors, and (c) along the City's major boulevards, referred to as districts, centers, and mixed-use boulevards, in accordance with the Framework Long-Range Land Use Diagram.
Objective 3.5	Ensure that the character and scale of stable single-family residential neighborhoods is maintained, allowing for infill development provided that it is compatible with and maintains the scale and character of existing development.
GENERAL PLAN FRAMEWORK – HOUSING	
Objective 4.1	Plan the capacity for and develop incentives to encourage production of an adequate supply of housing units of various types within each City sub region to meet the projected housing needs by income level of the future population to the year 2010.
Objective 4.2	Encourage the location of new multi-family housing development to occur in proximity to transit stations, along some transit corridors, and within some high activity areas with adequate transitions and buffers between higher-density developments and surrounding lower-density residential neighborhoods.
Objective 4.3	Conserve scale and character of residential neighborhoods.
Objective 4.4	Reduce regulatory and procedural barriers to increase housing production and capacity in appropriate locations.
GENERAL PLAN FRAMEWORK – ECONOMIC DEVELOPMENT	
Objective 7.2	Establish a balance of land uses that provides for commercial and industrial development which meets the needs of local residents, sustains economic growth, and assures maximum feasible environmental quality.
Objective 7.3	Maintain and enhance existing businesses in the City
Objective 7.5	Capture a significant share of regional growth in the "targeted" or emerging industries in the City of Los Angeles.
HOUSING ELEMENT	
Objective 1.1	Produce an adequate supply of rental and ownership housing in order to meet current and projected needs.
Objective 1.2	Preserve quality rental and ownership housing for households of all income levels and special linkage needs.
Objective 1.3	Forecast and plan for changing housing needs over time in relation to production and preservation needs.
Objective 1.4	Reduce regulatory and procedural barriers to the production and preservation of housing at all income levels and needs.
Objective 2.2	Promote sustainable neighborhoods that have mixed-income housing, jobs, amenities, services, and transit.
Objective 2.4	Promote livable neighborhoods with a mix of housing types, quality design, and a scale and character that respects unique residential neighborhoods in the City
Objective 2.5	Promote a more equitable distribution of affordable housing opportunities throughout the City.

SOURCES: City of Los Angeles, *The Citywide General Plan Framework, An Element of the City of Los Angeles General Plan*, re-adopted 2001; City of Los Angeles General Plan, *Housing Element 2013-2021, a*dopted 2013.

1A of the Los Angeles Municipal Code. Relevant components of re:code LA are described in detail in Section 3.0, *Project Description*.

Affordable Housing and Labor Standards Initiative (Proposition JJJ)

Proposition JJJ, approved on November 8, 2016, is a measure to impose affordable housing and local labor hiring requirements on new development projects, as well as set a minimum wage for hired construction workers. Key provisions of measure JJJ are as follows:

- All development projects that include 10 or more residential units and require changes to the General Plan or other zoning would be required to make a percentage of the units affordable to low-income and working residents or pay a fee to fund affordable housing and enforce laws that protect renters.
- Developers of any such residential projects would have to hire contractors who:
    - Are licensed according to city and state law;
    - Guarantee to offer at least 30 percent of work-hours to city residents, with 10 percent coming from those living within five miles of the project;
    - Pay standard wages for the area; and
    - Employ members of apprenticeship training programs and workers with real-world experience.
- Amendments to community plans requires an assessment to consider whether the amendment will "reduce the capacity for creation and preservation of affordable housing and access to local jobs."
- Developers would be required to make as much as 20 percent of the units in a project affordable for low-income and working renters. That number can be as high as 40 percent for homes that are for sale.
- Moreover, projects planned around public transit within a half mile of significant public transit stops would be encouraged through an incentive program that would apply only to projects that include affordable housing and require contractors to comply with the restrictions laid out in the second bullet above.
- No tax dollars to be used.

Transit Oriented Communities (TOC) Affordable Housing Incentive Program

Pursuant to the voter-approved Measure JJJ, LAMC Section 12.22 A.31 was added to create the Transit Oriented Communities (TOC) Affordable Housing Incentive Program (TOC Program). The program provides incentives for developers to build affordable housing located within a one-half mile radius of major transit stops; see Section 4.10, *Land Use*, for more information. TOC Program Guidelines were released by the City Planning department on September 22, 2017 and last revised on February 26, 2018.

Affordable Housing Linkage Fee (AHLF) Ordinance

The City Council adopted the AHLF Ordinance on December 13, 2017 and became effective on February 17, 2018, with a phased-in fee structure. The AHLF Ordinance places a fee on certain new market-rate residential and commercial developments to generate local funding for affordable housing. The fee amount is based on the fee schedule in effect at the time the building permit for a project is issued, and the market area within which it is located. Fees will be adjusted annually for inflation beginning July 1, 2019 using the Consumer Price Index (CPIU). The market areas may be updated by City Council every five years beginning July 1, 2023.

Affordable Housing Trust Fund

The City created and administers the Affordable Housing Trust Fund (Fund), which is codified in the LAMC. The Fund establishes a special fund for the purposes of receiving and disbursing monies to address the affordable housing needs of the City. The Fund requires 25 percent of the received initial and continuing net revenue of the 2001 business tax and payroll expense tax amnesty program and the revenue program of the Revenue and Taxation Code Section 1955.1 (Assembly Bill 63) be allocated to the Fund.

Density Bonus Ordinance

The purpose of the City's Density Bonus Ordinance, codified as LAMC Section 12.22 A.25, is to establish procedures for implementing State Density Bonus requirements, as set forth in California Government Code Sections 65915-65918, and to increase the production of affordable housing, consistent with City policies. Subject to the provisions of LAMC Section 12.22 A.25, housing development projects that include an affordable housing component or a senior citizen housing development projects may be granted a density bonus, allowing for a density increase over the otherwise maximum allowable residential density under the applicable zoning ordinance and/or specific plan. The density bonus is determined based on the percentage and type of restricted affordable housing units provided and shall not exceed 35 percent. The amount of parking required for these projects may also be reduced. In addition, a housing development project that qualifies for a density bonus may be granted incentives set forth in the ordinance that allow for modification to a City development standard or requirement.

Greater Downtown Housing Incentive (Ordinance No. 179076)

The Greater Downtown Housing Incentive Ordinance (GDHI), codified as LAMC Section 12.22 A.29 establishes areas within the Central City and Southeast Community Plan Areas in which development projects are eligible for incentives, such as increased allowable floor area and waiver of yard requirements, if they provide a certain percentage of low-, moderate-, or workforce-income housing units. As described in Chapter 3, *Project Description*, the Downtown Plan introduces the new Community benefits Program for the Plan Area and the GDHI will be amended to remove the portions that are currently in the Downtown Plan Area.

Homelessness Reduction and Prevention, Housing, and Facilities Bond (Proposition HHH)

Proposition HHH, approved on November 8, 2016, is a $1.2 billion general obligation bond to finance the construction of supportive and affordable housing for homeless people in the City. The purpose of the bond is to provide safe, clean affordable housing for the homeless and for those in danger of becoming homeless, such as battered women and their children, veterans, seniors, foster youth, and the disabled; and provide facilities to increase access to mental health care, drug and alcohol treatment, and other services.

Residential Hotel Unit Conversion and Demolition Ordinance

The Residential Hotel Unit Conversion and Demolition Ordinance (RHO) prohibits conversion or demolition of dwelling units in a residential hotel without approval from the Housing + Community Investment Department (HCIDLA). The ordinance adds Article 7.1 to Chapter IV of the LAMC and amends Sections 91.106.4.1, 151.06, and 151.09 (City of Los Angeles 2008). The ordinance seeks to preserve dwelling units provided by residential hotels, which often serve as affordable housing for the very low income, elderly, and disabled (HCIDLA 2018).

Rent Stabilization Ordinance (RSO)

The City's RSO was established in response to the shortage of affordable housing in Los Angeles and went into effect May 1, 1979. The RSO's purpose is to regulate rents so as to safeguard tenants from excessive rent increases, while at the same time providing landlords with just and reasonable returns from their rental units. The RSO addresses allowable rent increases, the registration of rental units, legal reasons for eviction, and the causes for eviction requiring relocation assistance payment to the tenant. Properties subject to the RSO are those that are within the City limits, contain two or more units, and have a Certificate of Occupancy prior to October 1, 1978, as well as replacement units under LAMC Section 151.28. A complaint can be filed by any tenant who believes that an owner, manager, or agent has committed a violation of the RSO. The Housing and Community Investment Department oversees and enforces the RSO. The RSO comprises Chapter XV of the LAMC.

In 2017, two ordinances amending the RSO went into effect. The "Ellis Amendments" (Ordinance No. 184873) amended the RSO requirements for demolition or permanent withdrawal of RSO units. The amendments provide clarification on the applicability of RSO to both vacant and occupied units, the unit withdrawal process, and relocation service requirements. In addition, the amendments require that property owners file annual status reports on withdrawn properties and allow landlords to qualify for an exemption on newly constructed units where RSO units are demolished by providing a certain amount of affordable housing. The second amendment (Ordinance No. 184822) addresses relocation assistance for unpermitted rental units and requires that eviction notices must list one of the permitted RSO eviction reasons (Los Angeles Housing + Community Investment Department 2017).

Development Guidelines and Controls for City Center and Central Industrial Redevelopment Project Areas

The City Center and Central Industrial Redevelopment Project Areas currently have development guidelines and controls for residential hotel preservation. The Development Guidelines protect and preserve existing affordable housing by mitigating the hardship caused by displacement of low income households. These Development Guidelines as implemented by the City of Los Angeles Department of City Planning, and Housing and Community Investment Department, guarantee a one for one replacement of residential hotel units when a residential hotel is proposed for conversion or demolition within the City Center and Central Industrial Project Areas.

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance were developed in accordance with CEQA Guidelines, specifically, Appendix G. The Proposed Project would have a significant impact with respect to population and housing if it would:

- Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure) (Threshold 4.12.1)
- Displace substantial amounts of existing people or housing, necessitating the construction of replacement housing elsewhere (Threshold 4.12.2)

METHODOLOGY

Growth Inducement

For Threshold 4.12.2, the following criteria related to growth inducement are considered relevant to the Proposed Project:

- The degree to which the project would cause growth (i.e., new housing or employment generators) or accelerate development in an undeveloped area that exceeds projected/planned levels for the year of project occupancy/build out, and that would result in an adverse physical change in the environment;
- Whether the project would introduce unplanned infrastructure that was not previously evaluated in the adopted Community Plan or General Plan;
- The extent to which growth would occur without implementation of the project

The State of California requires regions and cities to plan for changes in population, housing, and employment. If regional growth is projected, each city must accommodate a share of anticipated growth. SCAG is responsible for producing socio-economic estimates and projections at multiple geographic levels. The socio-economic estimates and projections are used for state mandated long-range planning efforts, such as the RTP/SCS. Every four years, SCAG prepares socioeconomic projections that are used by various City departments and agencies for their long-range planning efforts. These projections are derived from a combination of sources and consider factors such as birth rates, migration rates, historical trends, household size, market and economic projections, existing and planned land uses, and consistency with relevant adopted local, regional and state land use policies and growth strategies.

The citywide population is anticipated to increase by 17 percent from the 2016 estimate to approximately 4.6 million persons by the year 2040, according to the SCAG 2016-2040 RTP/SCS. The growth projections for the City of Los Angeles are based on several factors, including historical development trends, land values, as well as smart growth strategies to direct development to areas in proximity to rail and major bus stations, community centers, regional centers, and Downtown Los Angeles.

The Los Angeles Department of City Planning (LADCP) allocates the City's projected population and employment to the City's 35 community plans consistent with the City's General Plan Framework Element and other City policies, which call for directing growth to regional, commercial and transit centers. The City then accommodates the projected levels of population, housing, and employment through its Community Plan updates. With implementation of the Downtown Plan, the land use designations,

intensities, and densities of the Downtown Plan Area would be updated to accommodate population growth, housing, and employment demand projected by SCAG through the year 2040, as well as to meet the other project objectives, including locating growth in transit centers and along transit corridors. The development growth assumptions for the Downtown Plan are based on the acreage of land designated for each type of land use (by General Plan Land Use designations); allowable densities and intensities in each designation; anticipated levels of development in the life of the Downtown Plan; and development constraints, such as topography, land values, and historic preservation regulations (as described in Methodology, Appendix B)

As discussed in Appendix B, the reasonably anticipated development and associated growth in population, housing and employment anticipated to occur with the Downtown Plan is based on assumptions about the level of development that can be reasonably expected to occur during the life of the Downtown Plan (through the horizon year 2040), given the Downtown Plan's land use designations, zoning/height districts, and policies and using best practices and knowledge. Past building data demonstrates that not all sites will be built to the maximum densities permitted by the Downtown Plan for a variety of reasons including economic conditions, market trends, financial lending practices, construction and land acquisition costs, physical site constraints, and other General Plan policies or regulations. For this reason, 100 percent development to maximum allowable densities and intensities is a theoretical scenario that is not analyzed, but rather a more realistic reasonably anticipated development is used to guide and analyze the potential environmental impacts of those changes.

For all impact areas, the analysis in this section considers reasonably expected population, housing, and employment growth that would occur with implementation of the Proposed Project.

Displacement

For Threshold 4.12.2, the determination of significance related to population and housing displacement takes into consideration the following factors that are considered relevant to the Proposed Project:

- The total number of residential units to be demolished, converted to market rate, or removed through other means as a result of the Proposed Project, in terms of net loss of market-rate and affordable units;
- The current and anticipated housing demand and supply of market rate and affordable housing units in the area;
- The land use and demographic characteristics of the area and the appropriateness of housing in the area; and
- Whether the Proposed Project is consistent with adopted City and regional housing policies such as the Framework and Housing Elements, HUD Consolidated Plan and CHAS policies, and the adopted Redevelopment Plans, Rent Stabilization Ordinance, and the RTP/SCS.

Loss of affordable housing and displacement of low-income renters is a social and economic impact, which is not a CEQA impact unless it results in an indirect physical impact.[2] Based on this, an impact from loss of affordable housing and displacement in this EIR will be an impact if it results in a physical impact to the environment, such as from construction of new housing elsewhere. It may also be from transportation or other impacts related to people driving a farther distance. The CEQA Guidelines require a lead agency to consider the reasonably foreseeable indirect environmental consequences of a project's economic or social impacts. To require an analysis of the indirect physical impacts, the social and economic impacts must be

[2] *Porterville Citizens for Responsible Hillside Dev. v City of Porterville* (2007) 157 CA4th 885, 903 (claimed impact of new homes on existing home values is economic impact).

supported by substantial evidence. An EIR would be required to analyze reasonably foreseeable, not speculative impacts, resulting from social and economic impacts.[3]

SCAG RTP/SCS data on population, housing, and employment projections are used as a benchmark or a reference point to guide the planning process locally. The analysis below compares reasonably expected population, housing, and employment to the 2017 baseline and SCAG's 2040 projections. If there is potential for a net decrease in residential units or net loss of market-rate or affordable units as a result of the Downtown Plan or the New Zoning Code, necessitating the construction of replacement housing elsewhere, then, their impact related to displacement would be considered significant.

PROJECT IMPACTS

Threshold 4.12-1	Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)

Impact 4.12-1

Downtown Plan: The Downtown Plan would increase the development capacity of the Downtown Plan Area in a manner consistent with regional growth projections and the City's vision for Downtown Los Angeles. Therefore, it would not induce substantial population growth, either directly or indirectly. This impact would be ***less than significant*** Downtown.

New Zoning Code: The modularity of the New Zoning Code could facilitate expanded development capacity in the Downtown Plan Area, but the New Zoning Code does not include any standards that would encourage population growth which exceeds regional growth projections. Furthermore, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area**.** Any indirect impacts on population growth from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Therefore, the impact would be ***less than significant*** Citywide.

Downtown Plan Impact

The Downtown Plan would increase the development capacity of the Downtown Plan Area by updating the land use designations and corresponding zones to allow for an increase in the density and intensity of development relative to existing conditions. **Table 4.12-6** summarizes population, housing, and jobs estimates for the Downtown Plan Area under existing (2017) and 2040 conditions with and without the Downtown Plan. The Downtown Plan 2040 estimates are based on the reasonably anticipated development for the area, rather than the maximum allowable build-out, which would not be realistic and is not supported by past building trends.

Based on the increased development capacity of the proposed Downtown Plan, the Downtown Plan Area would accommodate approximately an additional 176,000 persons (an increase of 232 percent relative to baseline conditions), from 76,000 to 252,000 persons; 99,000 housing units (an increase of approximately 291 percent), from 34,000 to 133,000 units; and approximately an additional 86,000 jobs (an increase of 39 percent), from 219,000 to 305,000 jobs. Under continued implementation of the existing Central City and Central City North Community Plan Areas, the Downtown Plan Area would still experience substantial growth in population (47 percent), housing (74 percent), and jobs (27 percent), but growth would be less

[3] CEB, Practice under the California Environmental Quality Act, Section 6.36; Public Resources Code Section 21065; Friends of Davis v. City of Davis (2000) 83 Cal.App.4th 1004, 1020 (rejecting an argument that an initial study was required to analyze speculative physical impacts resulting from competition with retail tenant).

than the reasonably anticipated development under the proposed Downtown Plan. **Figure 4.12-1** compares anticipated population, housing, and jobs growth in 2040 with and without implementation of the Downtown Plan.

TABLE 4.12-6 EXISTING (2017) AND 2040 DEVELOPMENT PROJECTIONS

	Population	Housing	Jobs
Existing Downtown Plan Area (2017) /a/	76,000	34,000	219,000
2040 with Downtown Plan /b/	252,000	133,000	305,000
Change	176,000	99,000	86,000
Percent Change	232	269	39
2040 without Downtown Plan /b/	112,000	59,000	278,000
Change	36,000	25,000	59,000
Percent Change	47	74	27

Notes: Numbers are rounded to the nearest thousand and percentages are calculated from the rounded values.
SOURCE: /a/ SCAG Projections - SCAG 2016-2040 RTP/SCS
/b/ 2040 with and without Downtown Plan Projections - LADCP 2018a

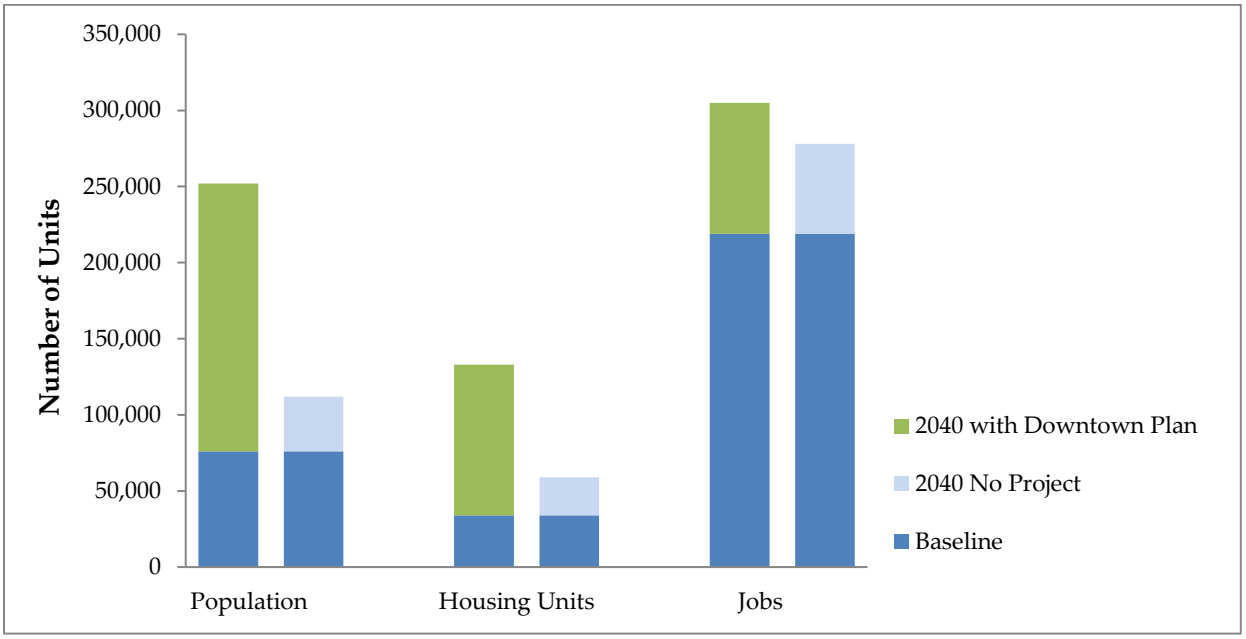
The updates to the existing Downtown Plan Area General Plan designations and corresponding zones being developed to implement the Downtown Plan are intended to provide for a development capacity consistent with long-range SCAG growth projections. The Downtown Plan Area's 2040 development capacity needs to be sufficient to meet projected population, housing, and employment for the area. Although, potential impacts of the Downtown Plan are analyzed based on the Downtown Plan's 2040 reasonably anticipated development against SCAG's 2040 citywide projections, a comparison of population, housing and employment capacity with and without the 2040 Downtown Plan is presented in **Table 4.12-7** for informational purposes only. As demonstrated in **Table 4.12-7**, the Downtown Plan would accommodate population, housing, and job growth that SCAG projects for the Downtown Plan Area. In contrast, without the Downtown Plan, projected population and housing growth would not be accommodated.

TABLE 4.12-7 COMPARISON OF SCAG AND LADCP DOWNTOWN PLAN AREA DEVELOPMENT PROJECTIONS

	Population	Housing	Jobs
SCAG 2040 Downtown Plan Area projections	189,000	96,000	257,000
2040 with Downtown Plan	**252,000**	**133,000**	**305,000**
Would the Downtown Plan Area accommodate projected growth with the Downtown Plan?	Yes	Yes	Yes
2040 without Downtown Plan	**112,000**	**59,000**	**278,000**
Would the Downtown Plan Area accommodate projected growth without the Downtown Plan?	No	No	Yes

Notes: Numbers are rounded to the nearest thousand, and percentages are calculated from the rounded values.
SOURCES: SCAG Projections - SCAG 2016-2040 RTP/SCS; 2040 with and without Downtown Plan Projections - LADCP 2018a

Figure 4.12-1 Downtown Plan Area Population, Housing, and Job Projection with and without the Downtown Plan



While the Downtown Plan is expected to result in population, housing, and jobs exceeding SCAG forecasts for the Downtown Plan Area, it would not result in growth exceeding SCAG citywide projections for 2040. **Table 4.12-8** compares the projected Downtown Plan development capacity to citywide SCAG projections and evaluates the area's contribution to citywide growth. As demonstrated in the table, implementation of the Downtown Plan would not result in an increase in population, housing, and jobs exceeding projected increases for the City.

TABLE 4.12-8 DOWNTOWN PLAN CONTRIBUTION TO PROJECTED CITYWIDE GROWTH AND DEVELOPMENT

	Population	Housing	Jobs
2017 Citywide Baseline	3,950,000	1,397,000	1,824,000
2040 Citywide SCAG Projections	4,609,000	1,690,000	2,169,000
Change	659,000	293,000	345,000
Citywide Percent Change	17	21	19
Existing Downtown Plan Area (2017)	76,000	34,000	219,000
2040 with Downtown Plan	252,000	133,000	305,000
Downtown Plan Change	176,000	99,000	86,000
Percent of Projected Citywide Growth Resulting from Downtown Plan	**27**	**33**	**25**

Notes: Numbers are rounded to the nearest thousand and percentages are calculated from the rounded values.
SOURCES: Citywide baseline and 2040 Citywide SCAG Projections– SCAG 2016 -2040 RTP/SCS; Existing Downtown Plan Area – SCAG 2016-2040 RTP/SCS; Downtown Plan data - LADCP 2018a

As indicated in **Table 4.12-8**, the Downtown Plan Area would accommodate a substantial proportion of the City's growth with implementation of the Downtown Plan, comprising 27 percent of population growth, 33 percent of housing growth, and 25 percent of employment growth. The Downtown Plan Area's substantial growth is consistent with historical trends shown in **Tables 4.12-1**, **-2**, and **-3**, which indicate that the Downtown Plan's population and housing growth have exceeded citywide trends in the past decade. The City has discretion in how it allocates growth across the City to meet other objectives and has historically allocated more growth to the Downtown Plan Area than SCAG, consistent with the City's General Plan Framework vision for the Downtown Core as the primary center of urban activity. This allocation is also consistent with SCAG's 2016-2040 RTP/SCS's goal of reducing Vehicle Miles Travelled (VMT) by accommodating a majority of new housing and jobs in areas within half a mile of major transit stops or high-quality transit corridors, as well as SCAG's objective of generally directing future growth to High Quality Transit Areas (HQTAs).

The Downtown Plan does not directly entail construction of individual development or infrastructure projects, although it includes policies and policy changes to support their development. As discussed in Section 4.10, *Land Use and Planning*, the Downtown Plan includes policies to support the development of a number of major infrastructure projects, potentially including a High-Speed Rail Station at Union Station.[4] Impacts to population due to major infrastructure projects will be evaluated by the projects' lead agencies and mitigated, as feasible, through the environmental review process for the individual projects.

The Downtown Plan would expand the development capacity of the Downtown Plan Area in a manner consistent with SCAG projections and the vision for the area established through the Downtown Core designation in the City's General Plan Framework Element. Therefore, the Downtown Plan would not induce substantial population growth, either directly or indirectly, and impacts would be ***less than significant.***

New Zoning Code Impact

As discussed above in the Downtown Plan impact discussion, by 2040, the City's population is expected to grow from 3,950,000 to 4,609,000 (659,000 residents or 17 percent), the number of households is expected to increase from 1,397,000 to 1,690,000 (293,000 households or 21 percent), and the number of jobs is expected to grow from 1,824,000 to 2,169,000 (345,000 jobs or 19 percent). The New Zoning Code has the potential to induce substantial growth if its application would result in growth exceeding SCAG citywide projections for 2040.

The New Zoning Code would allow for a variety of new zone districts that could be applied elsewhere in the City through future community plan updates or amendments. The New Zoning Code includes Density Districts ranging from those allowing a maximum of one dwelling unit per lot to those where density is limited only indirectly by Floor Area maximums. The New Zoning Code also offers incentives for affordable housing and removes the existing requirement that parking spaces in single-family zones be provided in a private garage. The removal of this requirement may encourage the conversion of existing garages into accessory dwelling units or the creation of new accessory dwelling units where the New Zoning Code is applied in existing single-family areas. The New Zoning Code would also allow for the adaptive reuse of existing parking structures or parking areas constructed (at least 15 years) prior in certain commercial and residential areas of the City. These provisions have the potential to increase residential density up to the maximum density allowed by the zone and also add non-residential square footage. However, if an existing parking structure or parking area were converted to another use, it would still be required to meet the density limits set by the zone.

[4] Based on recent changes in direction at the State level, the High Speed Rail Station appears unlikely to be built in the foreseeable future.

If applied outside of the Downtown Plan Area, these different zone districts, development standards, and incentives could result in additional growth, especially if the Density Districts allowing high levels of density are applied. However, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update or amendment and associated zone changes would analyze potential impacts related to substantial population growth, during which community-specific reasonably anticipated development would be estimated and their capacity to accommodate population, housing, and employment would be evaluated. Like the Downtown Plan, it is expected that the development capacity of communities undergoing future community plan updates and amendments would be developed in accordance with SCAG projections and the proposed vision for the community as established in the City's adopted General Plan Framework Element. Further, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts related to population growth from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. As such, the impact would be ***less than significant.***

Mitigation Measures

Impacts related to population, housing and employment growth as a result of the Downtown Plan and the New Zoning Code are less than significant; therefore, mitigation is not required.

Threshold 4.12-2	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere

Impact 4.12-2

Downtown Plan: The Downtown Plan would accommodate new development and redevelopment projects in the Downtown Plan Area that would likely result in some displacement of existing housing units and residents. However, the Downtown Plan would establish policies and zoning regulations that are expected to substantially increase the capacity for housing stock in the Downtown Plan Area and also includes policies to support the provision of affordable housing. In addition, local policies and regulations would require and/or incentivize many future development projects in the Downtown Plan Area to provide market rate and affordable units. This impact would be ***less than significant.***

New Zoning Code: The New Zoning Code does not include any standards that would directly displace current residents, but to the extent that the modular structure of the New Zoning Code encourages development, the New Zoning Code could cause displacement indirectly. However, this displacement would be offset by the construction of additional units which increase the total housing stock. Therefore, any indirect impacts related to displacement from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Therefore, the impact would be ***less than significant*** citywide.

Downtown Plan Impact

The Downtown Plan would allow for new development and redevelopment projects in the Downtown Plan Area. Moreover, no property owner would be required to redevelop his/her property. The Downtown Plan does not require any existing housing to be demolished or reduced in order to be consistent with the Downtown Plan's land use designations and zoning. In effect, existing development on the ground could be maintained or grandfathered in. Primarily future development would be subject to the Downtown Plan once it is effective. With that said, reasonably anticipated development from the Proposed Plan is anticipated to result in redevelopment that would likely result in the displacement of some existing housing

units and residents, including homeless residents, during construction. However, the number of displaced units and residents and locations of any replacement housing, if needed, would be speculative.

The city includes a number of policies that seek to preserve affordability of existing housing stock and minimize displacement. The City's Rent Stabilization Ordinance (RSO) would cap increases in rental rates for the dwelling units built on or before October 1, 1978 as well as replacement units under LAMC Section 151.28, so that residents of these units in the Downtown Plan Area would not be displaced if increased development and improvements to the Downtown Plan Area raise property values. The Residential Hotel Unit Conversion and Demolition Ordinance (RHO) offers protections for preservation of existing residential hotels. The RHO stipulates compliance with certain tenant rights and prohibits demolition of residential hotels or its conversion to other uses without approval from the Housing + Community Investment Department (HCIDLA).[5]

Further, although no residential units are specifically proposed to be displaced, displacement of some residences is a reasonably foreseeable result of development that could occur under the Downtown Plan. Redevelopment activity could also potentially displace some housing and people in the Downtown Plan Area. There may be a lag time between displacement and the development of replacement housing in some instances. However, it would be speculative to attempt to identify which units and people, how many units and people might be displaced, and what the lag time, if any, might be. In addition, as discussed under Impact 4.12-1 and further below, implementation of the Downtown Plan is projected to substantially increase the overall housing stock in the Downtown Plan Area. Finally, the City has adopted a number of policies, including new policies in the Downtown Plan itself, that are specifically aimed at providing affordable housing in association with new housing development and reducing homelessness. As such, the Downtown Plan would not necessitate the construction of replacement housing elsewhere.

As identified in Section 4.10, *Land Use and Planning*, of this EIR, a substantial portion of the Downtown Plan Area is currently designated as commercial (approximately 690 acres) and industrial (1,516 acres) in comparison to the area designated as residential (approximately 212 acres). The Downtown Plan Area has not been historically developed with substantial number of residential uses, with the exception of residential uses generally concentrated in the South Park portion of the Downtown Plan Area that have been developed in the last 15 to 20 years, and are not likely to be redeveloped during the life of the Downtown Plan. Moreover, the Downtown Plan provides additional opportunities for housing by expanding areas where housing is allowed, then what currently exists. The Downtown Plan is projected to accommodate a substantial net increase in the number of available housing units in the Downtown Plan Area. As shown in **Table 4.12-5**, the Downtown Plan is expected to accommodate an increase in the number of available housing units in the Downtown Plan Area from approximately 34,000 units to 133,000 units, an increase of 99,000 units. Based on the Downtown Plan's potential to increase housing units in the Downtown Plan Area by approximately 291 percent, it is anticipated that any replacement housing need created by displacement of existing housing would be more than offset through implementation of the Downtown Plan. Furthermore, the Downtown Plan includes specific policies to incentivize the production of affordable housing. The Plan introduces new opportunities for affordable housing in all areas of the plan that allow residential uses under the Downtown Plan Community Benefits Program. The Program will offer additional development rights to residential projects in exchange for providing affordable housing. Additionally, certain portions of the Plan Area have additional provisions for affordable housing. The area bounded by 5th Street to the north, Central Avenue to the east, 7th Street to the south and San Pedro to the west, which is currently designated as light industrial, and allows light industrial, commercial and non-residential uses will be re-designated to also allow for restricted affordable units for deeply-low, extremely low, very-low, low and moderate income households, while not allowing for market-rate housing, in order to promote the provision of affordable housing in this portion of the Plan Area. As discussed in the Setting, the City has

[5] Assembly Bill 1482, a new statewide rent control ordinance extends rent control to units built in the last 15 years and caps rent increases at 5% plus cost of living.

adopted regulations and policies that require or incentivize the provision of affordable housing in new development projects that apply citywide. As discussed in Section 4.12.3, *Regulatory Framework*, these policies include the Density Bonus Ordinance (LAMC Section 12.22 A.25) and affordable housing mandates included in Proposition JJJ. The Density Bonus Ordinance would incentivize the provision of affordable and/or senior housing units in new development projects by offering projects that provide these units additional floor area ratios. Proposition JJJ includes a measure requiring new development projects requesting a zone change or general plan amendment in the City to designate a certain percentage of condos and apartments in new residential buildings for low-income tenants. Per the AHLF Ordinance, certain new market-rate residential and commercial developments are required to pay a fee that goes towards funding affordable housing.

The Downtown Plan also includes the following policies to support the provision of housing to meet a wide range of economic and social needs, as well as preserve and retain existing housing and residents:

- **LU 2.1** Foster an equitable and inclusive Downtown, with housing options that can accommodate the fullest range of economic and social needs.
- **LU 2.2** Provide incentives and simplify zoning controls where possible to expedite the production of housing.
- **LU 2.3** Expand the areas where housing is permitted to meet the projected housing needs.
- **LU 2.4** Encourage a mix of rental and ownership housing and facilitate the development of affordable housing and permanent supportive housing.
- **LU 3.1** Recognize additional housing unit options to accommodate a variety of household sizes, including larger households, such as those with children, multigenerational living, and special needs populations.
- **LU 3.2** Facilitate the preservation of existing residential units, and avoid displacement of current Downtown residents.
- **LU 3.3** Foster healthy communities composed of mixed-income housing in proximity to transit, jobs, amenities, services, cultural resources, and recreational facilities.
- **LU 29.7** Encourage the creation of a range of housing options, including social service housing, permanent supportive housing, a full spectrum of affordable housing, and workforce housing.
- **LU 33.6** Support affordable housing options for artists.
- **LU 40.4** Support affordable housing for seniors and encourage the creation of adaptable residential buildings to accommodate aging populations.
- **LU 51.3** Maintain a high standard for the provision of affordable and workforce housing on publicly owned land in Civic areas, such that these areas serve as models for the rest of the City.

The Downtown Plan is specifically aimed at accommodating current and anticipated housing demand as well as changing demographics in the Downtown Plan Area. Although the number of existing units (including affordable units) that might be displaced by future development cannot be predicted with any degree of certainty, the Downtown Plan would substantially increase the overall availability of housing in the Downtown Plan Area and includes policies to support the provision of housing to meet a range of economic and social needs. To that end, it would implement relevant City and regional housing policies as well as those of the RTP/SCS. Future development projects in the Downtown Plan Area would also be incentivized or required to provide affordable units. Moreover, displacement of housing units likely to occur due to the time lag between demolished units and construction of new units would be temporary and would be offset by the overall net increase in housing under the Downtown Plan. Therefore, the Downtown Plan

is not anticipated to result in the net loss or displacement of housing, necessitating the construction of replacement housing elsewhere. The impact would be ***less than significant***.

New Zoning Code Impact

The New Zoning Code would allow for a variety of new zone districts that could be applied in the Downtown Plan Area and elsewhere in the City through future community plan updates or amendments. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. It is expected that the development capacity of communities undergoing future community plan updates and amendments would be developed in accordance with SCAG projections. Additionally, the City's General Plan Framework Element Land Use policy encourages the retention of the City's stable residential neighborhoods and encourages growth to locate in neighborhood districts, commercial and mixed-use centers, along boulevards, industrial districts, and in proximity to transportation corridors and transit stations, which would minimize displacement of housing or population. As such, the impact would be ***less than significant.***

Mitigation Measures

Impacts related to the displacement of housing or persons as a result of the Downtown Plan and the New Zoning Code are less than significant; therefore; therefore, mitigation is not required.

CUMULATIVE IMPACTS

Cumulative population and housing impacts consider Citywide growth and development. As indicated in **Table 4.12-6**, Los Angeles is expected to grow substantially in population, housing, and employment through 2040. The City's population is expected to grow from 3,950,000 to 4,609,000 (659,000 residents or 17 percent), the number of households is expected to increase from 1,397,000 to 1,690,000 (293,000 households or 21 percent), and the number of jobs is expected to grow from 1,824,000 to 2,169,000 (345,000 jobs or 19 percent).

Inducement of Substantial Population Growth

State laws require local governments to regularly assess and plan for future growth. For example, SCAG is required to update its RTP/SCS and accompanying growth projections every four years and the City is required to update its Housing Element, and correspondingly conduct a RHNA, every other RTP/SCS cycle, or every eight years. As discussed under Impact 4.12-1, the Downtown Plan specifically is intended to accommodate a high proportion of Citywide population, housing, and employment growth projected by SCAG through 2040 in the Downtown Plan Area because of its proximity to existing and future transit opportunities. Accommodating much of the City's growth in the Downtown Plan Area would meet both City and SCAG planning objectives related to increasing transit use, reducing regional vehicle miles traveled, and creating more livable communities, but would not cause any exceedance of the overall Citywide growth projection for Los Angeles. The New Zoning Code would not currently be implemented outside of the Downtown Plan Area; therefore, any indirect impacts related to population growth from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Nevertheless, as with the Downtown Plan, it is expected that with the City's overall intent is to accommodate sufficient housing to meet SCAG projections, even if some community plan areas accommodate more housing than anticipated by SCAG and others accommodate less. Based on these facts, neither the Downtown Plan nor the New Zoning Code would contribute to cumulatively considerable impacts related to population growth. Cumulative impacts would be ***less than significant.***

Displacement of People and Housing

As noted above, the City's intent is to accommodate forecast housing demand. Through 2040, the City anticipates adding 293,000 housing units. This 21 percent increase as compared to the current citywide housing stock would exceed the 17 percent citywide population growth over the same time period. As such, although some individual housing units may be displaced as redevelopment of properties occurs throughout the City, the overall effect of implementation of the City's 35 community plans would be to increase the City's housing stock. Thus, although temporary displacement of some individuals could occur, such displacement would not necessitate the construction of new housing beyond what is already planned for and forecast to occur.

As discussed under Impact 4.12-2, implementation of the Downtown Plan would accommodate the construction of additional housing, including affordable housing, in an urban center where impacts to many environmental resources can be minimized and would help to offset displacement impacts arising from cumulative development. The Downtown Plan is expected to result in a net increase of housing over existing conditions and would allow a variety of new housing types. As noted above, the Downtown Plan could result in some temporary displacement of housing units and people due to the time lag between removal and replacement of housing, but this displacement would be offset by the anticipated increases in housing. Therefore, such temporary impacts would not add to other impacts resulting from redevelopment of sites outside the Downtown Plan Area and permanent displacement of housing and people is not anticipated. Reasonably anticipated development under the Downtown Plan would temporarily displace some people and housing, but the overall effect of the Downtown Plan would be a substantial increase in the Downtown Plan Area housing stock. In addition, the Downtown Plan includes policies for the preservation of Rent Stabilized and covenanted affordable units. Overall, the Downtown Plan would have a beneficial contribution to any cumulative impacts related to displacement.

The New Zoning Code would not directly displace any people or housing. Further, the New Zoning Code would not be implemented outside of the Downtown Plan Area at this time; therefore, any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative.

Based on the information above, the contribution of the Downtown Plan and the New Zoning Code to cumulative impacts related to displacement of people and housing would not be cumulatively considerable. Cumulative impacts would be ***less than significant.***

REFERENCES

CEB. CEQA Guidelines, Sections 15064(e), Practice under the California Environmental Quality Act, Section 6.36.

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4.13 PUBLIC SERVICES

This section provides an overview of existing public services and evaluates potential environmental impacts resulting from the provision of public service facilities to accommodate Plan development. Public services addressed include fire and emergency services, police protection services, public schools, and libraries; parks are addressed in Section 4.14, *Recreation*.

Fire Protection and Emergency Services

ENVIRONMENTAL SETTING

CITYWIDE SETTING

The Los Angeles Fire Department provides fire prevention, protection, and emergency medical services throughout Los Angeles. LAFD is a full-spectrum life safety agency that provides essential emergency and non-emergency services throughout the 472-square mile jurisdiction within the City. LAFD consists of 3,435 uniformed fire personnel that provide fire prevention, firefighting, emergency medical care, technical rescue, hazardous materials mitigation, disaster response, public education, and community service. LAFD also consists of 381 professional support staff that provides technical and administrative support to the LAFD. A total of 1,018 uniformed firefighters, in addition to 270 firefighter/paramedics are on active duty citywide serving at 106 neighborhood fire stations (LAFD 2018). In January 2015, the LAFD service areas were re-structured into four geographic bureaus that align with the Los Angeles Police Department (LAPD) geographic boundaries: Central, Valley, West, and South Bureaus. With this updated approach, the LAFD, LAPD, and the City's Emergency Management Department have developed a more unified effort to respond to emergencies. Each designated Bureau Commander is responsible for all LAFD activities in the respective bureaus. In addition, the LAFD has implemented a new emergency medical dispatch card system, known as the Tiered Dispatch System, to reduce call-processing times; and the LAFD Automatic Vehicle Location System, to ensure the nearest emergency resource is dispatched during calls (LAFD 2015a).

The LAFD provides fire prevention, protection, and emergency medical services throughout Los Angeles. The LAFD is organized into groups of fire stations clustered into battalions within larger geographic groups known as bureaus (LAFD 2017a). Each bureau is commanded by a Deputy Chief who oversees and coordinates daily field operations within each bureau's respective service area.

DOWNTOWN PLAN AREA SETTING

The Downtown Plan Area is in the service area of the Central Bureau and contains four fire stations, Stations 3, 4, 9 and 10, which are part of Battalion 1 of the Los Angeles Fire Department. Battalion 1 also includes Fire Stations 2, 14, 17 and 25 which are not located in the Downtown Plan Area. An additional five fire stations are located within a mile of the Downtown Plan Area boundary, and at least two other fire stations are located within two miles of the Downtown Plan Area and would be able to assist in responding to fire and medical emergencies in the Downtown Plan Area.

Service Performance Measures

Table 4.13-1 summarizes the performance statistics for stations that serve the Downtown Plan Area. Most fire stations in and near the Downtown Plan Area have an average turn-out time standard for fire incidents and EMS incidents, (which begins at dispatch notification and includes turn-out and travel times) of less than five minutes and 20 seconds for fire incidents, with the exception of stations 20, 17, and 44.

TABLE 4.13-1 LAFD FIRE STATIONS – CENTRAL BUREAU

Fire Station[1]	Address	Overall Operational Response Time (min : sec)[1]			Staffing	Service and Equipment
		Non-EMS	*EMS*	*Structural Fire*		
Stations in the Downtown Plan Area						
3	108 North Fremont Avenue	5:51	6:30	4:35	18	Task force, search and rescue team, heavy rescue team, command team
4	450 East Temple Street	6:03	6:12	3:46	19	Dispatch center, engine house, two paramedic ambulances
9	430 East 7th Street	5:25	5:44	4:15		
10	1335 South Olive Street	5:45	6:12	4:27	14	Task force, rescue air cushion, paramedic ambulance
Stations Less than Two Miles from the Downtown Plan Area						
1	2230 Pasadena Ave Los Angeles, CA 90031 (0.5 mi away)	6:50	6:50	4:56	14	Task force, paramedic ambulance
2	1962 East Cesar Chavez Avenue (0.9 mi away)	5:52	6:00	4:40	12	Task force
11	1819 7th St Los Angeles, CA 90057 (0.9 mi away)	5:31	5:54	4:03	14	Task force, two paramedic ambulances
17	1601 South Santa Fe Avenue (0.5 mi away)	6:16	6:25	4:59		
14	3401 South Central Avenue (1.0 mi away)	5:59	6:12	4:18	8	Task force, two paramedic ambulances
20	2144 West Sunset Boulevard (1.2 mi away)	5:41	6:23	4:26	8	Task force, paramedic ambulance
44	1410 Cypress Avenue (1.8 mi away)	6:29	6:38	4:52		

[1]Average overall response time for January –July 2018.
NOTE: Non-EMS = fire and other services; EMS = Emergency Medical Services; task force = fire truck and two engines
SOURCE: 1. LAFD 2017b 2. LAFD 2018a

LAFD's services continue to be based on the community's needs, as determined by on-going evaluations that consider the number of calls and other factors. These evaluations are used to determine the need for reallocation of existing equipment or personnel and/or the acquisition of new equipment, personnel, or new stations. As development occurs, the LAFD reviews EIRs and subdivisions applications for needed facilities. Where appropriate, construction of new facilities is required as a condition of development for individual projects (Los Angeles 2001).

Fire Flow and Response Distance

The adequacy of fire protection for a given area is based on required fire flow, response distance from existing fire stations, and the LAFD's judgment of needs in the area. Personnel and equipment needs for individual fire stations are determined based on the LAFD's review of the number of incidents within a station's service area. As the number of incidents increases, the LAFD assigns new staff and equipment as necessary to maintain acceptable service ratios and response times (Los Angeles 2012).The Fire Code specifies required fire flow (measured in gallons per minute from the local water system) and response distance for fire protection services, as discussed in the Regulatory Framework.

The fire flow necessary to contain a fire depends on the existing land use or combination of land uses and the density of the area being served. Consequently, the amount of water necessary for fire protection depends on various factors, including the type of development, occupancy, and the level or intensity of a fire hazard. Maximum response distances also vary with land use and density of development. Response distance relates directly to the linear travel distance (i.e., miles between a station and a site) and the LAFD's ability to successfully navigate through an area's circulation system. The Fire Code specifies maximum response distances allowed between specific locations and engine/truck companies based upon land use and fire flow requirements.

When response distances exceed these requirements, plans for new commercial and residential structures must be reviewed and various fire suppression equipment (e.g., automatic fire sprinkler systems, fire signaling systems, fire extinguishers, smoke removal systems, and any other fire protection devices) as deemed necessary by the Fire Chief are required to be incorporated in the plans prior to the approval of an occupancy permit. In addition to fire flow requirements, the LAFD requires different types of fire hydrants within a specified distance to deliver the required fire flow, as discussed in the Regulatory Framework.

REGULATORY FRAMEWORK

Federal, state and local laws, regulations, plans, and guidelines that are potentially applicable to the Proposed Project are summarized below.

FEDERAL

Federal Emergency Management Act (FEMA)

FEMA was established in 1979 via executive order and is an independent agency of the federal government. In March 2003, FEMA became part of the U.S. Department of Homeland Security with the mission to lead the effort in preparing the nation for all hazards and effectively manage federal response and recovery efforts following any national incident. FEMA also initiates proactive mitigation activities, trains first responders, and manages the National Flood Insurance Program and the U.S. Fire Administration.

Disaster Mitigation Act of 2000

Disaster Mitigation Act (42 United States Code [U.S.C.] Section 5121) provides the legal basis for FEMA mitigation planning requirements for state, local, and Indian Tribal governments as a condition of mitigation grant assistance. It amends the Robert T. Stafford Disaster Relief Act of 1988 (42 U.S.C. Section 5121-5207) by repealing the previous mitigation planning provisions and replacing them with a new set of requirements that emphasize the need and creates incentives for state, tribal, and local agencies to closely coordinate mitigation planning and implementation efforts. This Act reinforces the importance of pre-disaster infrastructure mitigation planning to reduce disaster losses nationwide and the streamlining of the

administration of federal disaster relief and programs to promote mitigation activities. Some of the major provisions of this Act include:

- Funding pre-disaster mitigation activities
- Developing experimental multi-hazard maps to better understand risk
- Establishing state and local government infrastructure mitigation planning requirements
- Defining how states can assume more responsibility in managing the Hazard Mitigation Grant Program (HMGP)
- Adjusting ways in which management costs for projects are funded

The mitigation planning provisions outlined in Section 322 of this Act establish performance-based standards for mitigation plans and require states to have a public assistance program (Advance Infrastructure Mitigation [AIM]) to develop county government plans. The consequence for counties that fail to develop an infrastructure mitigation plan is the chance of a reduced federal share of damage assistance from 75 percent to 25 percent if the damaged facility has been damaged on more than one occasion in the preceding 10-year period by the same type of event.

Federal Fire Safety Act (FFSA)

The FFSA of 1992 is different from other laws affecting fire safety as the law applies to federal operations, and there is no requirement for local action unless a private building owner leases space to the federal government. The FFSA requires federal agencies to provide sprinkler protection in any building, whether owned or leased by the federal government that houses at least 25 federal employees during their employment.

STATE

California Constitution Article XIII Section 35

Section 35 of Article III of the California Constitution at subdivision (a)(2) provides: "The protection of the public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services." Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directed the proceeds of a 0.50 percent sales tax to be used exclusively for local public safety services. California Government Code Sections 30051-30056 provide rules to implement Proposition 172. Public safety services include fire protection. Section 30056 provides that cities are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992-93 fiscal year. Therefore, an agency is required to use Proposition 172 to supplement its local funds used on fire protection, as well as other public safety services. In City of Hayward v. Trustee of California State University (2015) 242 Cal. App. 4th 833, the court found that, Section 35 of Article XIII of the California Constitution requires local agencies to provide fire services and that it is reasonable to conclude that a lead agency will comply with that provision and ensure that public services are provided. (See City of Hayward v. Trustee of California State University (2015) 242 Cal. App. 4th 833, 847, stating "the city has a constitutional obligation to provide adequate fire protection services".)

California Fire Code

Title 24, Part 9 of the California Code of Regulations (CCR), also referred to as the California Fire Code, is part of the California Building Code and establishes standards regarding fire protection and notification systems for residential and commercial buildings. It includes fire safety requirements and regulations,

including implementation of fire protection devices, such as fire extinguishers and smoke alarms, installation of sprinklers in all high-rise buildings, establishment of fire resistance standards for fire doors, buildings materials, and types of construction, clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazards areas, and fire suppression training. The California Fire Code is applicable to all occupancies in California, but can be superseded by local regulations if they are more stringent. Regulations in the California Fire Code are incorporated by reference with amendments in the Los Angeles Building Code, Fire Safety Regulations.

Title 8 California Code of Regulations (CCR) Sections 1270 and 6773

In accordance with CCR, Title 8 Section 1270, "Fire Prevention," and Section 6773, "Fire Protection and Fire Equipment," the California Occupational Safety and Health Administration (Cal-OSHA) establishes minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

California Health and Safety Code Section 13100-13135

California Health Safety Code Section 13100-13135 codifies regulations known as the "Regulations of the State Fire Marshal" and constitutes the Basic Building Design and Construction Standards of the State Fire Marshall. The regulations establish minimum standards for the preservation and protection of life and property against fire, explosion, and panic through requirements for fire protection and notification systems, fire protection devices, and fire suppression training.

California Governor's Office of Emergency Services (Cal OES)

In 2009, the State of California passed legislation creating the Cal OES and authorized it to prepare a Standard Emergency Management System (SEMS) program (Title 19 CCR Section 2401 et seq.), which sets forth measures by which a jurisdiction should handle emergency disasters. In California, SEMS provides the mechanism by which local government requests assistance. Non-compliance with SEMS could result in the state withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster. Cal OES coordinates the state's preparation for, prevention of, and response to major disasters, such as fires, floods, earthquakes and terrorist attacks. During an emergency, Cal OES serves as the lead state agency for emergency management in the state. It also serves as the lead agency for mobilizing the state's resources and obtaining federal resources. Cal OES coordinates the state response to major emergencies in support of local government. The primary responsibility for emergency management resides with local government. Local jurisdictions first use their own resources and, as they are exhausted, obtain more from neighboring cities and special districts, the county in which they are located, and other counties throughout the state through the statewide mutual aid system (see discussion of Mutual Aid Agreements, below). California Emergency Management Agency (Cal-EMA) maintains oversight of the state's mutual aid system.

Mutual Aid Agreements

Cal OES developed the Emergency Managed Mutual Aid (EMMA) System in response to the 1994 Northridge Earthquake. The EMMA System coordinates emergency response and recovery efforts along the coastal, inland, and southern regions of California. The purpose of EMMA is to provide emergency management personnel and technical specialist to afflicted jurisdictions in support of disaster operations during emergency events. Objectives of the EMMA Plan is to provide a system to coordinate and mobilize assigned personnel, formal requests, assignment, training and demobilization of assigned personnel; establish structure to maintain the EMMA Plan and its procedures; provide the coordination of training for

EMMA resources, including SEMS training, coursework, exercises, and disaster response procedures; and to promote professionalism in emergency management and response. The EMMA Plan was updated in November 2012 and supersedes the 1997 EMMA Plan and November 2001 EMMA Guidance.

LOCAL

Los Angeles City General Plan

The City's General Plan contains two elements with policies pertaining to fire protection and emergency response. Chapter 9 (Infrastructure and Public Services) of the Framework Element contains general objectives and specific policies to ensure provision of fire protection and emergency response services into the future through adequate planning, funding, data collection, creation of standards, and cooperation with other agencies. The Safety Element of the General Plan identifies existing police, fire, and emergency services and the service needs of the City of Los Angeles in the event of a natural disaster and provides broad goals, objectives, and policies related to the City's response to hazards and natural disasters. The Emergency Operations Organization (EOO) is responsible for implementing the Safety Element. Goals and policies applicable to fire protection and emergency services are summarized in **Table 4.13-2**.

TABLE 4.13-2 RELEVANT GENERAL PLAN FIRE PROTECTION GOALS, OBJECTIVES, AND POLICIES

Framework Element – Infrastructure and Public Services	
Goal 9J	Every neighborhood has the necessary level of fire protection service, emergency medical service (EMS) and infrastructure.
Objective 9.16	Monitor and forecast demand for existing and projected fire facilities and service.
Policy 9.16.1	Collect appropriate fire and population development statistics for the purpose of evaluating fire service needs based on existing and future conditions.
Objective 9.17	Assure that all areas of the City have the highest level of fire protection and EMS, at the lowest possible cost, to meet existing and future demand.
Policy 9.17.2	Identify areas of the City with deficient fire facilities and/or service and prioritize the order in which these areas should be upgraded based on established fire protection standards.
Policy 9.17.4	Consider the Fire Department's concerns and, where feasible adhere to them, regarding the quality of the area's fire protection and emergency medical services when developing General Plan amendments and zone changes, or considering discretionary land use permits.
Objective 9.19	Maintain the Los Angeles Fire Department's ability to assure public safety in emergency situations.
Policy 9.19.1	Maintain mutual aid or mutual assistance agreements with local fire departments to ensure an adequate response in the event of a major earthquake, wildfire, urban fire, fire in areas with substandard fire protection, or other fire emergencies.
Policy 9.19.3	Maintain the continued involvement of the Fire Department in the preparation of contingency plans for emergencies and disasters.
Safety Element	
Goal 2	A city that responds with the maximum feasible speed and efficiency to disaster events so as to minimize injury, loss of life, property damage and disruption of the social and economic life of the City and its immediate environs.
Objective 2.1	Develop and implement comprehensive emergency response plans and programs that are integrated with each other and with the City's comprehensive hazard mitigation and recovery plans and programs.
Policy 2.1.5	Response: Develop, implement, and continue to improve the City's ability to respond to emergency events. [All EOO emergency response programs and all hazard mitigation and disaster recovery programs related to protecting and reestablishing communications and other infrastructure, service and governmental operations systems implement this policy.]
Policy 2.1.6	Standards/fire. Continue to maintain, enforce and upgrade requirements, procedures and standards to facilitate more effective fire suppression. [All peak load water and other standards, code requirements (including minimum road widths, access, and clearances around structures) and other requirements or procedures related to fire suppression implement this policy.]

TABLE 4.13-2 RELEVANT GENERAL PLAN FIRE PROTECTION GOALS, OBJECTIVES, AND POLICIES	
	The Fire Department and/or appropriate City agencies shall revise regulations or procedures to include the establishment of minimum standards for location and expansion of fire facilities, based upon fire flow requirements, intensity and type of land use, life hazard, occupancy and degree of hazard so as to provide adequate fire and emergency medical event response. At a minimum, site selection criteria should include the following standards which were contained in the 1979 General Plan Fire Protection and Prevention Plan: Fire stations should be located along improved major or secondary highways. If, in a given service area, the only available site is on a local street, the site must be on a street which leads directly to an improved major or secondary highway. Fire station properties should be situated so as to provide drive-thru capability for heavy fire apparatus. If a fire station site is on the side of a street or highway where the flow of traffic is toward a signalized intersection, the site should be at least 200 feet from that intersection in order to avoid blockage during ingress and egress. The total number of companies which would be available for dispatch to first alarms would vary with the required fire flow and distance as follows: (a) less than 2,000 gpm would require not less than 2 engine companies and 1 truck company; (b) 2,000 but less than 4,500 gpm, not less than 2 or 3 engine companies and 1 or 2 truck companies; and (c) 4,500 or more gpm, not less than 3 engine companies and 2 truck companies. These provisions of the 1979 Plan were modified by the Fire Department for purposes of clarification.
Goal 3	A city where private and public systems, services, activities, physical condition and environment are reestablished as quickly as feasible to a level equal to or better than that which existed prior to the disaster.
Objective 3.1	Develop and implement comprehensive disaster recovery plans which are integrated with each other and with the City's comprehensive hazard mitigation and emergency response plans and programs.
Policy 3.1.1	Coordination: Coordinate with each other, with other jurisdictions and with appropriate private and public entities prior to a disaster and to the greatest extent feasible within the resources available, to plan and establish disaster recovery programs and procedures which will enable cooperative ventures, reduce potential conflicts, minimize duplication and maximize the available funds and resources to the greatest mutual benefit following a disaster. [All EOO recovery programs involving cooperative efforts between entities implement this policy.]
SOURCE: City of Los Angeles 2001	

Los Angeles Fire Department (LAFD) Strategic Plan 2015-2017

The LAFD Strategic Plan 2015-2017 focuses on goals and strategic actions to guide the LAFD in the following areas: improving service delivery, implementing advanced technologies, employing sound budgeting practices and enhancing leadership. The plan also addresses the development of an even more professional workforce, promoting a positive work environment, and working to strengthen community relationships to improve preparedness and enhance resiliency during emergency events.

Los Angeles Municipal Code (LAMC) and Charter

The Los Angeles Fire Code is a combination of the California Fire Code and Los Angeles amendments and is contained within Chapter V, Article 7, Fire Protection and Prevention of the LAMC. As required by the Fire Code, the LAFD Bureau of Fire Prevention and Public Safety is required to administer and enforce basic building regulations as set forth by the State fire marshal. The Los Angeles Fire Code provides regulations for the safeguarding of life and property from fire, explosion, panic, or other hazardous conditions which may arise in the use or occupancy of buildings, structures, or premises.

LAMC Section 57.503 requires any facility, structure, group of structures, or premises to provide and maintain LAFD access and requires that any structure located more than 150 feet from an approved street provide an approved fire lane.

LAMC Section 57.507.3 contains the fire flow requirements characterized by the type of development (see **Tables 4.13-3** and **4.13-4**). As discussed therein and per Table 57.507.3.1 of the LAMC, fire flow requirements require 2,000 gallons per minute (gpm) from three adjacent fire hydrants for low-density residential developments; 4,000gpm from four adjacent fire hydrants for high density residential and neighborhood commercial developments; 6,000 to 9,000 gpm from four to six fire hydrants for industrial and commercial developments; and to 12,000 gpm available to any block for high-density industrial and commercial developments. As provided in LAMC Section 57.507.3.2 and described in Table 57.507.3.2, each fire hydrant serving industrial and commercial land developments serve 80,000 square feet of land area, be spaced 300 feet from the next fire hydrant on roads and fire lands, and be a 2.5-inch-by-4-inch double fire hydrant, or 4-inch-by-4-inch double fire hydrant.

TABLE 4.13-3 REQUIRED FIRE FLOW AND MAXIMUM RESPONSE DISTANCES

Land Use	Required Fire Flow	Maximum Response Distance to LAFD Fire Station[1]	
		Engine Company[2]	Truck Company[2]
Residential			
Low Density Residential	2,000 gpm from three adjacent hydrants flowing simultaneously	1.5 miles	1.5 miles
High Density Residential and Commercial Neighborhood	4,000 gpm from four adjacent hydrants flowing simultaneously	1.5 miles	1.5 miles
Commercial			
Industrial and Commercial	6,000 to 9,000 gpm from four hydrants flowing simultaneously	1 mile	1.5 miles
High Density Industrial and Commercial or Industrial (Principal Business Districts or Centers)	12,000 gpm available to any block (where local conditions indicate that consideration must be given to simultaneous fires, an additional 2,000 to 8,000 gpm will be required)	0.75 mile	1 mile

1. The maximum response distance to LAFD fire stations pertains to areas outside the boundaries covered by the Hillside Ordinance (Ordinance Number 168,159). When a portion of any subdivision, as that term is defined in Section 17.02 of the Los Angeles Municipal Code, falls outside of the one and one-half mile distance requirement, automatic fire sprinklers will not be required in that portion whenever a review by the Chief has determined that no unacceptable increase in hazard to the public will result.
2. The maximum response distances for both LAFD fire suppression companies (engine and truck) must be satisfied.
gpm = gallons per minute

SOURCE: City of Los Angeles Municipal Code, *Chapter V – Public Safety and Protection, Article 7 – Fire Protection and Prevention (Fire Code),* Section 57.507.3, Table 57.507.3.1.

TABLE 4.13-4 LAND USE AND REQUIRED FIRE FLOW

Type of Land Development	Net Land Area Served Per Hydrant[1]	Distance Between Hydrants on Roads and Fire Lanes	Type of Hydrant
Low-Density Residential	150,000 sq. ft.	600 ft.	2 1/2" x 4" Double Fire Hydrant
High-Density Residential & Neighborhood Commercial	100,000 sq. ft.	300 - 450 ft.	2 1/2" x 4" Double Fire Hydrant
Industrial & Commercial	80,000 sq. ft.	300 ft.	2 ½" x 4" Double Fire Hydrant or 4" x 4" Double Fire Hydrant
High-Density Industrial & Commercial	40,000 sq. ft.	300 ft.	4" x 4" Double Fire Hydrant

1. These standards will be systematically reduced where greater fire flow is required due to restricted access, depth of lots, length of blocks, or additional hazards.

SOURCE: City of Los Angeles Municipal Code, *Chapter V – Public Safety and Protection, Article 7 – Fire Protection and Prevention (Fire Code),* Section 57.507.3.2, Table 57.507.3.2.

LAMC Section 57.507.3.3 requires land uses to include the installation of an automatic fire-sprinkler system should the type of land use exceed the maximum response distances per Table 57.507.3.3 of LAMC Section 57.507.3.3.

City of Los Angeles Proposition F, Q, and J – Facilities Bond

Proposition F, also known as the Fire Facilities Bond, was approved in November 2000 and authorized the issuance of $532.6 million to finance the construction and rehabilitation of fire stations and animal shelters in the City of Los Angeles. Further, $378.6 million was allocated for the construction of 18 new or replacement neighborhood fire/paramedic stations, one regional fire station and training facility, and an emergency air operations/helicopter maintenance facility, for a total of 20 Proposition F projects. Through Proposition F, regional Fire Station 82 (5769 Hollywood Boulevard) was reconstructed and opened in 2012.

Proposition Q, known as the Citywide Public Safety Bond Measure was approved in March 2002 and allocated $600 million to renovate, improve, expand, and construct police, fire, 911, and paramedic facilities. Proposition Q also includes renovations to existing LAFD facilities, totaling 80 LAFD facility renovation projects.

In 2006, Measure J amended Proposition F, providing flexibility in the design of new facilities and setting standards for such facilities. Specifically, Measure J allows the following: the development of new regional fire/paramedic stations to be designed and built on one or more properties that are less than two acres; standard fire/paramedic stations to be designed and built on one acre; components to be built on two or more sites within proximity; or facilities to be designed to fit on a single site of less than two acres (Los Angeles 2017).

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the *CEQA Guidelines*, the Proposed Project would have a potentially significant impact if it would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection.

Consistent with *City of Hayward v. Trustees of California State University* (2015; 242 Cal.App.4th 833), significant impacts under CEQA consist of adverse changes to physical conditions resulting from a project. Potential impacts on public safety services are not an environmental impact that CEQA requires a project applicant to mitigate:

"[T]he obligation to provide adequate fire and emergency medical services is the responsibility of the city." (Cal. Const., art. XIII, § 35, subd. (a)(2) ["The protection of the public safety is the first responsibility of local government, and local officials have an obligation to give priority to the provision of adequate public safety services."].) Therefore, while response times and standards for services are discussed herein, they are provided for informational purposes only and to provide an indication of the potential need for new facilities, rather than as thresholds for significance.

The determination of significance shall be made considering whether a project would require the addition of a new fire station or the expansion, consolidation or relocation of an existing facility to maintain service, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection.

METHODOLOGY

The following analysis focuses on determining whether the Proposed Project would result in adverse physical impacts to the environment due to the expansion of existing fire protection facilities or construction of new facilities. Whether additional facilities would be required is determined primarily by considering the adequacy of existing fire protection services, impacts of the Proposed Project on demand for fire protection service, and input from the LAFD. Whether provision of new or expanded facilities would result in substantial adverse environmental effects is evaluated by considering the physical context in which facilities would be built, constraints on the size and number of new and/or expanded facilities, and an analysis of potential environmental impacts that would result from their construction.

As discussed under "Thresholds of Significance," an impact related to public services would occur if the Proposed Project promotes growth patterns resulting in the need for and/or the provision of new or physically altered fire or emergency response facilities, the construction of which would cause significant environmental impacts in order to maintain service ratios, response times, or other performance objectives. The need for or deficiency in adequate fire and emergency response services in and of itself is not a CEQA impact, but a social or economic impact. (*City of Hayward v. B'd of Trustees* (2015) 242 Cal.App. 4th 833, 843. To the extent that the Proposed Project causes the need for additional fire and emergency response services that result in the construction of new facilities or additions to existing facilities and the impact from that construction results in a potential impact to the environment, that is a CEQA impact that needs to be assessed in this EIR. Any discussion in this EIR of social or economic impacts that relates solely to the level of fire and life safety services provided to the community, including any existing or future needs and deficiencies, is not determinant on its own of CEQA impacts, absent those social or economic impacts resulting in physical impacts. The ultimate determination of whether there is a significant impact related to fire and emergency response services is based on whether a significant physical impact would result from the construction of new or expanded fire and emergency response facilities.

PROJECT IMPACTS

Threshold 4.13-1	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?

Impact 4.13-1

Downtown Plan: The Downtown Plan would allow for increased development potential that could increase demand for fire protection service in the Downtown Plan Area. This may result in the need for new or expanded fire protection facilities. The size and location of new facilities is not known at this time, but based on the urbanized character of the Downtown Plan Area, it is anticipated that new or expanded facilities could be built without creating significant environmental impacts; therefore, impacts would be ***less than significant***.

New Zoning Code: The New Zoning Code does not include any standards that would result in impacts related to the provision of fire protection facilities**.** The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The impact would be ***less than significant***.

Downtown Plan Impact

The Downtown Plan provides a framework for development of the City's Downtown through 2040 and includes changes to existing policy to enable higher-density development. Future growth under the Downtown Plan is anticipated to add about 99,000 new housing units (291 percent increase), 176,000 new residents (232 percent increase), and 86,000 new employees (39 percent increase) in the Downtown Plan Area by 2040. The Downtown Plan also includes policies to improve pedestrian, bike, and public transit networks in the Downtown Plan Area and encourage use of alternative transportation modes and active transport. Impacts to fire protection services resulting from construction and operation of new development are discussed below.

Construction

While the Downtown Plan would allow for increased residential, commercial, and light industrial development, it would not constitute a commitment to any specific construction. Nevertheless, construction activities associated with development of the Plan Area would potentially temporarily increase existing demand on fire protection and EMS. Construction activities could potentially expose combustible materials (e.g., wood, plastics, sawdust, coverings, and coatings) to fire risks from machinery and equipment sparks, exposed electrical lines, and chemical reactions in combustible materials and coatings. However, in compliance with Occupational Safety and Health Administration (OSHA) requirements, construction managers and personnel would be trained in emergency response and fire safety operations. In addition, fire suppression equipment (e.g., fire extinguishers) would be maintained on each specific construction site during construction.

Road and lane closures due to construction activities related to individual development projects could temporarily affect travel times of fire and emergency services vehicles. Traffic delays caused by potential closures could impede the ability of emergency vehicles to efficiently move along roadways to their destination. In addition, road closures may result in detours that adversely affect response times. However, individual developers are required to implement construction staging and traffic management plans

consistent with LAFD requirements, if warranted, to ensure emergency access is maintained. Moreover, construction activities facilitated by the Downtown Plan would not foreseeably result in the need for expansion of existing fire stations or construction of new fire stations due to their temporary nature. Therefore, construction activity would have a ***less than significant*** environmental impacts related to fire protection.

Operation

Based on information provided in LAFD's Strategic Plan 2015-2017, the ability to provide adequate fire protection services is dependent on numerous factors including staffing levels, mutual aid agreements, deployment strategies, and technological advances in equipment. LAFD's primary determinant for assessing future service needs is based on their cumulative review and analysis of past incidents. Options available to LAFD include expanding fire prevention services, increasing staffing levels, and adding new fire stations(s) to underserved areas. The projected number of residents, employees and overall anticipated development levels is routinely reviewed by LAFD to assist in determining the future need for emergency services. LAFD determines the need for new fire stations based on the needs assessment that takes into account the complex set of factors discussed above, as well as geographic distribution of physical structures; access to trucks, ambulances, and other equipment; the location of new structures and anticipated response times (LAFD 2015).

Meeting service standards could also be affected by the impact of increased land use intensity and residential density in the Downtown Plan Area on roadway congestion in and around the Plan Area used by fire protection vehicles to access emergency sites. However, there is not a direct relationship between predicted travel delay and emergency response times because California State law requires that drivers yield the right-of-way to emergency vehicles and remain stopped until the emergency vehicles have passed. Generally, multi-lane arterial roadways allow emergency vehicles to travel at higher speeds and permit other traffic to maneuver out of the path of the emergency vehicle. The LAFD, in collaboration with Los Angeles Department of Transportation (LADOT), has also developed a Fire Preemption System (FPS) that automatically turns traffic lights to green for emergency vehicles traveling on designated streets in the City.

Existing regulations and policies would partially offset future increases in demand for fire protection service. For example, Downtown Plan Area developers would be required to comply with current fire code standards, which require new construction to incorporate more dynamic and advanced fire and life safety technologies and fire prevention measures than was previously required. In addition, policy measures in the Downtown Plan would encourage use of public transit and alternative modes of transportation, which would generally reduce traffic congestion in the Downtown Plan Area. Furthermore, LAFD has a constitutional mandate to protect public safety and must respond to changing circumstances and, therefore, would act to maintain response times. As development occurs over the life time of the Downtown Plan, it is expected that fire protection service levels will be evaluated and maintained by LAFD. In conformance with California Constitution Article XIII, Section 35, (a)(2), existing policies, procedures and practices related to fire protection and emergency services, LAFD would maintain acceptable emergency response times through the provision of additional personnel and equipment as needed, as well as potentially constructing new or expanding existing fire and emergency response facilities.

The ability of EMS and fire protection services to respond to calls in a timely manner depends primarily on the distance of the station to the incident and the speed at which the emergency vehicles are able navigate intervening roadways. While growth reasonably anticipated under the Downtown Plan would result in higher overall traffic volumes in the Downtown Plan Area, this would not impede emergency response, since California State law requires that drivers yield the right-of-way to emergency vehicles and remain stopped until the emergency vehicles have passed. Therefore, EMS and fire protection services response times generally would not change substantially as the population of the Downtown Plan increases.

As discussed in Section 4.12, *Population, Housing, and Employment*, implementation of the Downtown Plan would result in an increase in overall housing, population, and employment in the Downtown Plan Area. An increase in population, would foreseeably increase demand for fire or emergency protection facilities. Based on this rising demand and existing facilities that are already over capacity, the LAFD estimates that several facilities would require expansion and at least one new station would need to be built in or near the Downtown Plan Area to maintain timely response (Perez 2017). LAFD is considering the expansion of Fire Station No. 9, located at 430 7th Street, in the Downtown Plan Area. Fire Station No. 9 would be demolished and reconstructed as a larger facility. This expansion of this facility would accommodate existing staff and existing resources (Perez 2019). The existing station has not been identified as a historical resource and the site of this facility is surrounded by parking areas and commercial/industrial uses that would not be unusually sensitive to construction or operational noise, lighting, or other impacts associated with facility expansion.

Construction of new fire stations and expansion of existing fire stations to serve the Downtown Plan Area would occur in an urban center and would be limited in number (possibly one or two new facilities) and size. New facilities would also be required to comply with applicable federal, State, and local regulations and policies discussed in this EIR, such as NPDES permit requirements, the City's Tree Ordinance and Noise Ordinance, and the California Building Code, including CALGreen requirements.

Potential environmental impacts of construction and operation of any new facility, as an allowed land use, have been evaluated throughout this EIR. Construction and operational impacts to air, noise, traffic, as well as other impacts of new developments are discussed throughout this EIR, and they would not be any different for a fire/paramedic station/facility. It is not foreseeable that impacts from rebuilding Fire Station No. 9 or upgrades to any of the other existing stations or the construction of any other stations in the Downtown Plan Area would have greater or different impacts than those identified in this EIR for construction or operations. Similar to other types of development, the construction of new or expanded fire protection facilities could contribute to the significant historic resource and construction noise impacts identified in sections 4.4, *Cultural Resources*, and 4.11, *Noise*, of this EIR. According to the Los Angeles Bureau of Engineering (BOE), there are four basic configurations for fire stations but the typical standard fire/paramedic station would consist of a 15,250-square foot building on a parcel that is approximately one acre. Although the Fire Department is preparing a Standards of Cover that could result in recommendations for new fire station typologies, including those better suited to dense urban infill. Based on the urban location and the relatively small size of typical facilities, the construction of a new fire facility or expansion of an existing facility would likely qualify for an infill exemption or result in less–than-significant impacts with standard regulatory compliance measures and project specific design features or project specific mitigation measures identified through a project EIR or mitigated negative declaration. It is noted, that the EIR for Van Nuys No. 39, certified in 2017, found no unavoidable significant impacts for the construction of a new fire station. To the extent that any significant impacts could result from the unique characteristics of a specific site, those impacts would be speculative at this time. Furthermore, the construction of a new fire facility or expansion of an existing facility would require a project-specific environmental analysis under CEQA to address any site-specific environmental concerns. Therefore, impacts related to fire protection and emergency services would be ***less than significant.***

New Zoning Code Impact

As discussed in Existing Conditions, the LAFD is organized into four geographic bureaus with 14 battalions, each responsible for a group of five to eight fire stations within a geographic area typically 20 to 30 square miles in size. The LAFD is comprised of 106 fire stations and serves a population of over 3.9 million people. Future development has the potential to affect fire protection services by adding additional people and structures within the City that require protection and by increasing roadway congestion that can reduce response times, which could in turn require the construction of new or altered existing facilities.

However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update or development project and associated zoning classifications would analyze potential community- and site-specific impacts to existing fire protection. Therefore, impacts related to fire protection and emergency services would be ***less than significant.***

Mitigation Measures

Downtown Plan

No significant impacts related to fire protection facilities have been identified; therefore, mitigation is not required.

However, the construction of new fire protection facilities or expansion of existing facilities to serve the Downtown Plan Area would be required to incorporate applicable mitigation measures included in this EIR. These potentially include measures related to biological resources, cultural resources, hazards/hazardous materials, and noise.

New Zoning Code

This impact would be less than significant; therefore, mitigation is not required.

CUMULATIVE IMPACTS

The geographic area to analyze cumulatively considerable impacts to fire protection services includes the entire City of Los Angeles as well as areas at the City's periphery that could potentially be affected by construction of a new facility at or near the City's corporate boundary. Citywide development through 2040 would add an estimated 293,000 new households, 659,000 new residents, and 345,000 new employees (SCAG 2016).

Cumulative development throughout Los Angeles would increase overall demand for fire protection service and may create the need for more fire fighters and potentially new facilities. Fire Station 39, located at 14115 Sylvan Street, Van Nuys, will move to its new location at 14615 Oxnard Street, Van Nuys, on or about July 1, 2019; however, no other new facilities are planned at this time, city-wide (LAFD 2019). Impacts associated with the addition of multiple fire protection facilities throughout the City are speculative since the size, location, and nature of needed new facilities is not known that this time. Nevertheless, the impacts of new facilities would be localized in nature and the addition of multiple new facilities in specific locations may have localized impacts, but would not result in significant additive or cumulative impacts (i.e., the addition of multiple fire protection facilities in various parts of the City would not result in additive effects at any given location).

Past development has occurred in accordance with the growth allowed under the City of Los Angeles General Plan, and all development in the City is required to maintain consistency with City of Los Angeles fire protection regulations. Future development in the Downtown Plan Area, as well as future development occurring within the entire LAFD service area, would be required to comply with all applicable LAFD fire code requirements associated with adequate fire access, fire flows, and number of hydrants as a condition of project approval. Additionally, any development project that would be located at distances that exceed response distance requirements would be required to undergo plan review by the Fire Chief, who would

determine the fire suppression measures that the development project would be required to implement. New development would be required to provide upgrades to the water distribution systems serving the LAFD service area in accordance with LAFD and/or Los Angeles Department of Water and Power (LADWP) requirements. As with the code requirements for fire access, fire flows, number of hydrants, and fire suppression measures, these upgrades would be addressed for new development in conjunction with individual project approvals. These requirements would reduce the demand for additional fire services. However, in the event the Downtown Plan would result in the need for new or expanded fire and emergency response facilities, the construction and operation of new facilities would not be expected to result in new or substantially different impacts from those impacts discussed in the other sections of this EIR, such as *traffic, air, noise*. Without information as to design, location of new or expanded LAFD facilities and their proximity to sensitive receptors, such impacts would be speculative at this time. Similarly, the construction and operation of new fire protection facilities in the Downtown Plan Area may have localized impacts, but individual facilities would not contribute to any additive cumulative or regional impacts. Therefore, the Downtown Plan's incremental effect related to fire service would not be cumulatively considerable.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning so it would only apply to the Downtown Plan at this time. Therefore, projecting the location and type of any new fire protection facilities would be speculative. Future community plan updates and associated zoning classifications would, however, be required to adhere to existing state and local requirements related to the provision of fire protection facilities.

Based on the above information, the incremental effect of the Downtown Plan and New Zoning Code would not be cumulatively considerable and cumulative impacts would be ***less than significant.***

Police Protection

ENVIRONMENTAL SETTING

CITYWIDE SETTING

The Los Angeles Police Department (LAPD) provides police protection services to the entire City of Los Angeles. Similar to the LAFD, the Los Angeles Police Department (LAPD) is comprised of four geographic bureaus (Valley, West, Central, and South) with 21 subdivisions. In 2017, the LAPD had 10,038 sworn police officers and 2,819 civilian personnel (LAPD 2017e).

The LAPD handles an estimated 2,981,238 telephone calls for service per year and approximately 1,270,278 are non-emergency related. According to the 2016 Crime Statistics summary, there were 28,084 violent crimes, 97,346 property crimes, and 119,955 arrests in 2016 (LAPD 2016).

DOWNTOWN PLAN AREA SETTING

The Downtown Plan Area lies within the operational boundaries of the Central Bureau and straddles the boundaries of three divisions: most of the Downtown Plan Area lies in the service area of Division 1 (Central Area); the southeastern portion lies in the service area of Division 13 (Newton Area); and a small area in the northwest corner of the Downtown Plan Area lies in the service area of Division 11 (Northeast Area). Each division has its own police station that serves as the division's headquarters. Currently, the Central Station is at full capacity; office space for officers is limited and there is insufficient parking space for police vehicles (Ogaz 2017).

Table 4.13-5 summarizes the stations serving the Downtown Plan Area and includes the current service population and service area for each division. **Table 4.13-6** summarizes current crime statistics for Divisions 1, 11, and 13. Typical crimes include homicide, rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft, and arson.

TABLE 4.13-5 LAPD STATIONS SERVING THE DOWNTOWN PLAN AREA

Division/Station	Address	Service Population	Service Area (sq. mi.)
Central Area	251 E. 6th Street	40,000	4.5
Northeast Area	3353 San Fernando Road	250,000	29
Newton Area	3400 South Central Ave.	150,000	9

SOURCE: LAPD 2017a, b, c

TABLE 4.13-6 2016 CRIME STATISTICS

Division/Station	Violent Crimes[1]	Property Crimes[2]
Central Area	1,702	4,377
Northeast Area	952	5,093
Newton Area	2,100	4,244

1. Violent crimes include homicide, rape, robbery, and aggravated assault.
2. Property crimes include burglary, motor vehicle theft, burglary/theft from motor vehicle, personal/other theft

SOURCE: LAPD 2016a

Response time represents the period of time elapsed from the initiation of an assistance call to the appearance of a police unit at the scene. The LAPD has a response time goal of seven minutes (Ogaz 2017). Currently, the average citywide response time is 6.1 minutes (SoCal Patch 2017). Unlike fire protection services, police units are most often in a mobile state; therefore, the distance between a police station and a project site is of little relevance. Instead, the number of deployed police officers and their proximity to crimes is more directly related to the response time.

The Central Area Station, which serves most of the Downtown Plan Area, employs 402 officers, about 313 of which are patrol and probation officers that take response calls (Ogaz 2017). This station currently serves a population of approximately 40,000 (LAPD 2017a); thus, there are about 78 police officers per 10,000 persons. This is above the 2015 national average number of officers per 10,000 persons (16.6) for jurisdictions with a population of over 500,000 and higher, and higher than the citywide 2015 average of 24.9 officers per 10,000 people (Governing 2015). The LAPD also uses technology to enhance strategic deployment of field officers in their service area (LAPD 2016b), which can help lower average response time. PredPol software predicts the times and places where crimes are most likely to occur based on historic data on the time, location, and type of crimes committed.

REGULATORY FRAMEWORK

STATE

California Penal Code

All law enforcement agencies in California are organized and operated in accordance with the applicable provisions of the California Penal Code. This code sets forth the authority, rules of conduct, and training for peace officers. Under state law, all sworn municipal and county officers are state peace officers.

California Constitution, Article XIII, Section 35

Section 35 of Article III of the California Constitution at subdivision (a)(2) provides: "The protection of the public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services." Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directed the proceeds of a 0.50 percent sales tax to be used exclusively for local public safety services, including police. California Government Code Sections 30051-30056 provide rules to implement Proposition 172. Section 30056 provides that a city is not allowed to spend less of its own financial resources on its combined public safety services in any given year compared to its 1992-93 fiscal year. Therefore, an agency is required to use Proposition 172 to supplement its local funds used on police protection, as well as other public safety services. In City of Hayward v. Trustee of California State University (2015) 242 Cal. App. 4th 833, the court found that, Section 35 of Article XIII of the California Constitution requires local agencies to provide fire services and that it is reasonable to conclude that a lead agency will comply with that provision and ensure that public services are provided. (See City of Hayward v. Trustee of California State University (2015) 242 Cal. App. 4th 833, 847 stating "the city has a constitutional obligation to provide adequate fire protection services".) It is reasonable to analogize that a similar analysis would apply to police services as Section 35 of Article XIII includes a responsibility for cities to give priority to public safety services, which includes police services.

LOCAL

City of Los Angeles General Plan, Framework and Safety Elements

Chapter 9, Infrastructure and Public Services of the Framework Element, includes goals, objectives, and policies applicable to police protection services. These are summarized in **Table 4.13-7**. In addition, the Safety Element of the Los Angeles General Plan addresses natural hazard issues related to Los Angeles Police Department (LAPD) resources (e.g., traffic safety during or following a disaster) and recognizes that most jurisdictions rely on emergency personnel (police, fire, gas, and water) to respond to emergencies.

TABLE 4.13-7 RELEVANT GENERAL PLAN POLICE PROTECTION GOALS, OBJECTIVES, AND POLICIES

Framework Element – Chapter 9, Infrastructure and Public Services	
Goal 9I	Every neighborhood in the City has the necessary police services, facilities, equipment, and manpower required to provide for the public safety needs of that neighborhood.
Objective 9.13	Monitor and forecast demand for existing and projected police service and facilities.
Policy 9.13.1	Monitor and report police statistics, as appropriate, and population projections for the purpose of evaluating police service based on existing and future needs.
Objective 9.14	Protect the public and provide adequate police services, facilities, equipment and personnel to meet existing and future needs.
Policy 9.14.1	Work with the Police Department to maintain standards for the appropriate number of sworn police officers to serve the needs of residents, businesses, and industries.
Policy 9.14.5	Identify neighborhoods in Los Angeles where facilities are needed to provide adequate police protection.
Policy 9.14.7	Participate fully in the planning of activities that assist in defensible space design and utilize the most current law enforcement technology affecting physical development.
Objective 9.15	Provide for adequate public safety in emergency situations.
Policy 9.15.1	Maintain mutual assistance agreements with local law enforcement agencies, State law enforcement agencies, and the National Guard to provide for public safety in the event of emergency situations.

SOURCE: City of Los Angeles 2001

City of Los Angeles Charter and Administrative and Municipal Codes

The law enforcement regulations, as well as the powers and duties of the LAPD, are outlined in the City of Los Angeles' Charter, Administrative Code, and the LAMC. Article V, Section 570 of the City of Los Angeles Charter gives power and duty to the LAPD to enforce the penal provisions of the Charter, City ordinances, and State and federal law. The Charter gives responsibility to LAPD officers to act as peace officers and to protect lives and property in case of disaster or public calamity. Chapter 11, Section 22.240 of the Los Angeles Administrative Code requires the LAPD to adhere to the State of California standards described in Section 13522 of the California Penal Code. Section 13522 charges the LAPD with the responsibility of enforcing all LAMC Chapter 5 regulations related to fire arms, illegal hazardous waste disposal, and nuisances (e.g., excessive noise), and with providing support to the Department of Building and Safety Code Enforcement inspectors and the LAFD in the enforcement of the City's Fire, Building, and Health Codes. The LAPD is also given the power and the duty to protect residents and property and to review and enforce specific security-related mitigation measures in regards to new development.

Los Angeles Police Department (LAPD) Computer Statistics Unit (COMPSTAT) Program

The LAPD COMPSTAT was created in 1994 and implements the General Plan Framework goal of assembling statistical population and crime data to determine necessary crime prevention actions. This system implements a multi-layer approach to police protection services through statistical and geographical information system (GIS) analysis of growing trends in crime through its specialized crime control model.

COMPSTAT has effectively and significantly reduced the occurrence of crime in Los Angeles communities through accurate and timely intelligence regarding emerging crime trends or patterns (LAPD 2018).

LAPD Guidelines and Plan Review

Projects subject to City review are required to develop an Emergency Procedures Plan to address emergency concerns and practices. The plan is subject to review by LAPD. In addition, projects are encouraged to comply with the LAPD's *Design Out Crime Guidelines*, which incorporates techniques of Crime Prevention Through Environmental Design (CPTED) and seeks to deter crime through the design of buildings and public spaces (LAPD 2017d). Specifically, projects are recommended to:

Provide on-site security personnel whose duties shall include but not be limited to the following:

- Monitoring entrances and exits;
- Managing and monitoring fire/life/safety systems;
- Controlling and monitoring activities in parking facilities;

Install security industry standard security lighting at recommended locations including parking structures, pathway options, and curbside queuing areas;

Install closed-circuit television at select locations including (but not limited to) entry and exit points, loading docks, public plazas and parking areas;

Provide adequate lighting of parking structures, elevators, and lobbies to reduce areas of concealment;

Provide lighting of building entries, pedestrian walkways, and public open spaces to provide pedestrian orientation and to clearly identify a secure route between parking areas and points of entry into buildings;

Design public spaces to be easily patrolled and accessed by safety personnel;

Design entrances to, and exits from buildings, open spaces around buildings, and pedestrian walkways to be open and in view of surrounding sites; and

Limit visually obstructed and infrequently accessed "dead zones."

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the *CEQA Guidelines*, the Proposed Project would have a potentially significant impact if it would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services.

While response times and standards for services are provided in the impact discussions below, they are provided for informational purposes only and to provide an indication of the potential need for new facilities, rather than as thresholds for significance.

METHODOLOGY

The following analysis focuses on determining whether the Proposed Project would result in adverse physical impacts to the environment due to the expansion of existing police facilities or construction of new facilities. Whether additional facilities would be required is determined primarily by considering the

adequacy of existing police services, impacts of the Proposed Project on demand for police protection facilities, and input provided by the LAPD. The need for or deficiency in adequate police services in and of itself is not a CEQA impact, but a social or economic impact. (*City of Hayward v. B'd of Trustees* (2015) 242 Cal. App. 4th 833, 843). Any discussion in this EIR that relates solely to the level of police protection services provided to the residents or users of the Downtown Plan Area and its surrounding community, including any existing or future needs and deficiencies, is for informational purposes only. The ultimate determination of whether there is a significant impact related to police protection services is based on whether a significant impact will result from the construction of new or expanded police facilities. Whether provision of new or expanded facilities would result in substantial adverse environmental effects is evaluated by considering the physical context in which facilities would be built, constraints on the size and number of new and/or expanded facilities, and an analysis of potential environmental impacts that would result from their construction.

PROJECT IMPACTS

Threshold 4.13-2	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection?

Impact 4.13-2

Downtown Plan: The Downtown Plan would accommodate residential, commercial, and light industrial development in the Downtown Plan Area, which would increase demand for police services and officers in order to maintain acceptable response times. However, due to existing limited capacity at police stations serving the Downtown Plan Area, growth under the Downtown Plan is anticipated to result in the need for new or expanded police facilities. However, based on the urbanized character of the Downtown Plan Area, it is anticipated that new or expanded facilities could be built without creating significant environmental impacts; therefore, impacts would be ***less than significant***.

New Zoning Code: The New Zoning Code does not include any standards that would result in impacts related to the provision of police protection facilities. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The impact would be ***less than significant***.

Downtown Plan Impact

Construction

Construction related to future development within the Downtown Plan Area would have the potential to temporarily increase the demand on police services. Construction sites can pose a nuisance with respect to vandalism and theft. Road and lane closures due to construction activities related to individual development projects could affect response times of police vehicles. Traffic delays caused by potential closures could impede the ability of police vehicles to efficiently move along roadways to their destination. Additionally, temporary road closures may also result in detours that impact response time. Any development project that will cause temporary road closures is required to submit a plan to LADOT for approval to ensure any impacts are minimized and, if necessary, proper signage and flagmen provided to avoid impacts. Additionally, large projects are required to develop a construction staging and traffic management plan, as necessary, to ensure that emergency access is maintained and the construction sites are secure. Construction

of reasonably anticipated development under the Downtown Plan would not result in the need for new or physically altered governmental facilities to maintain police service levels and objectives.

Operation

The Downtown Plan would accommodate new residential, commercial, and light industrial development in the Downtown Plan Area, resulting in an estimated 176,000 additional residents (232 percent increase) and 86,000 additional employees (39 percent increase). A larger population could increase demand for LAPD services by increasing the opportunities for crime, though an increase in development intensity and residential density would not necessarily result in a directly proportional increase in crime. An area's crime rate is influenced by many factors, such as police presence, implementation of crime prevention measures, department funding, and socioeconomic factors. To ensure that necessary police services, facilities, and equipment are provided for the public safety needs of all neighborhoods, demand for existing and projected police services and facilities is monitored and forecasted by LAPD in order to maintain standards. Accordingly, as development occurs over the lifetime of the Downtown Plan, police protection service levels would continue to be evaluated and maintained by LAPD in accordance with existing policies, procedures and practices. Individual developments in the Downtown Plan Area would be required to incorporate design features to deter crime. The LAMC and Los Angeles Building Code (LABC) include recently adopted requirements regarding lighting and/ or security locks and devices for residential uses, as well as outdoor lighting requirements for a variety of uses (e.g., LABC Chapter 67, 1029, 8697)(Los Angeles Department of Building and Safety [LADBS] 2017). Additionally, LAPD would review development project applications to determine the types of design features that the development project would need to incorporate to deter crime, consistent with the techniques of CPTED.

Meeting service standard could be affected by increased roadway congestion. As discussed in Section 4.15, *Transportation and Traffic*, of this EIR, implementation of the Downtown Plan would result in land use intensification and an organized and coordinated development pattern that would increase accessibility of destinations while minimizing the related growth in vehicle trips and VMT per capita. While implementation of the Downtown Plan could impact segment-level LOS, there is not a direct relationship between predicted travel delay and emergency response times as California State law requires that drivers yield the right-of-way to emergency vehicles and remain stopped until the emergency vehicles have passed. Designated emergency and disaster routes within the Plan Area would be maintained. Generally, multi-lane arterial roadways allow emergency vehicles to travel at higher speeds and permit other traffic to maneuver out of the path of the emergency vehicle. On congested roadways, multi-lane arterial roadways with continuous center left-turn lanes facilitate emergency access when the thru lanes experience delays. Additionally, as previously mentioned under Existing Setting, various roadways within the Plan Area is equipped with FPS, a system that automatically turns traffic lights to green for emergency vehicles traveling on designated streets.

Additional demand for police service would need to be accommodated, at least in part, through the hiring of new patrol officers who would require office space and patrol cars. However, due to existing over-capacity issues and the age of existing facilities, the LAPD expects that replacement and expansion of existing facilities, or construction of new facilities, would be required to maintain adequate police service in the Downtown Plan Area through 2040 (Ogaz 2017). Although the exact types and locations of future new facilities are not known at this time, it is anticipated that new facilities would be community facilities similar to the Central Community Police Station located at 251 E. 6th Street. Such facilities could generally be accommodated in existing buildings or small new structures and could be developed without new significant environmental impacts beyond those described throughout this EIR. Police protection service levels would continue to be evaluated and maintained by LAPD in accordance with existing policies, procedures and practices as development occurs over the lifetime of the Downtown Plan.

Construction of new or expanded police stations would occur in an urban center and would be limited in number and size. New facilities would also be required to comply with applicable federal, State, and local regulations and policies discussed in this EIR, such as NPDES permit requirements, the City's Tree Ordinance and Noise Ordinance, and the California Building Code, including CALGreen requirements.

The environmental impacts of construction and operation of any new facility, as an allowed land use, have been evaluated throughout this EIR. Potential impacts to air, noise, traffic, as well as other impacts of new developments are discussed in the impact sections of this EIR and would not be different for the construction of a LAPD station/facility. It is not foreseeable that impacts from the construction or operation of new or expanded police facilities in the Downtown Plan Area would have greater or different impacts than those identified in this EIR for construction or operations. It is unlikely, but possible, that, similar to other types of development, the construction of new or expanded police protection facilities could contribute to the significant historic resource and construction noise impacts identified in sections 4.4, *Cultural Resources*, and 4.11, *Noise*, of this EIR. Should new facilities be needed, such facilities are anticipated to be infill developments surrounded by urban uses and would not require new or expanded infrastructure. Based on the urban character of the Downtown Plan Area, the construction of new police facilities or expansion of an existing facility would most likely result in a less-than-significant impact and or possibly qualify for an infill exemption. To the extent that any significant impacts could result from the unique characteristics of a specific project site, those impacts would be speculative at this time. Furthermore, although it is anticipated that needed new community facilities could be developed without significant environmental effects beyond those identified in this EIR, the construction a new LAPD facility or expansion of an existing facility would require project-specific environmental analysis under CEQA to address any site-specific environmental concerns. Therefore, impacts related to police protection services, would be ***less than significant***.

New Zoning Code Impact

As discussed in Existing Conditions, the LAPD has 10,038 sworn police officers and 2,819 civilian personnel that serve a population of over 3.9 million people. The provision of new police protection facilities and increased demand for police protection is influenced by many factors, such as police presence, implementation of crime prevention measures, department funding, and socioeconomic factors. Future development has the potential to affect police protection services by adding additional people and structures within the City that require protection and by increasing roadway congestion that can reduce response times, which could in turn require the construction of new or altered existing facilities. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative.

As discussed in Section 3.7.4, there are many combinations of Form, Frontage, Standards, Use, and Density Districts that could be applied to properties to make a zone. Due to the modular nature of the new zoning, it is not known where or to what extent future development may occur. Projecting the location and type of future growth as a result of the New Zoning Code outside of the Downtown Plan Area would be speculative at this time as this Project only includes an update to the Downtown Community Plan. In addition, as required by the LAMC and LABC, individual developments are presently required to incorporate design features to deter crime (LADBS 2017). For example, as discussed in the Downtown Community Plan Impact, the LAMC and LABC include recently adopted requirements regarding lighting and/or security locks and devices for residential uses, as well as outdoor lighting requirements for a variety of uses.

Future environmental review of a proposed community plan update and associated zone districts would analyze potential community- and site-specific impacts to existing police protection. Any proposed development would undergo project-level environmental review under CEQA, and would be required to

comply with state and local requirements related to police protection. Therefore, impacts related to police protection services would be ***less than significant.***

Mitigation Measures

Downtown Plan

No significant impacts related to police facilities have been identified; therefore, mitigation is not required.

However, the construction of new police facilities or expansion of existing facilities to serve the Downtown Plan Area would be required to incorporate applicable mitigation measures included in this EIR. These potentially include measures related to biological resources, cultural resources, hazards/hazardous materials, and noise.

New Zoning Code

This impact would be less than significant; therefore, mitigation is not required.

CUMULATIVE IMPACTS

The geographic area to analyze cumulatively considerable impacts to police protection services includes the entire City of Los Angeles as well as areas at the City's periphery that could potentially be affected by construction of a new facility at or near the City's corporate boundary. Citywide development through 2040 would add an estimated 659,000 new residents, 293,000 new households, and 345,000 new employees (SCAG 2016).

As described above, development projects within the City, including the Downtown Plan Area, would be subject to review upon project submittal of the development application and may be required to provide security features, such as security cameras, private security services, and/or on-site police drop-in facilities that reduce the demand for police service. Future development would also be required to incorporate design elements relative to security, and semi-public and private spaces such as CPTED. These features may include, but not be limited to, access control to buildings, secured parking facilities, walls/fences with key systems, well-illuminated public and semi-public space designed with a minimum of dead space to eliminate areas of concealment, and location of toilet facilities or building entrances in high-foot traffic areas. These measures would minimize the overall increase in demand for police protection services. Nevertheless, cumulative development throughout Los Angeles would increase overall demand for police service and may create the need for more officers and potentially new facilities. However, environmental impacts associated with the construction of new or expanded facilities would not be expected to result in significant environmental effects and the impacts associated with the addition of police protection facilities are speculative since the size, location, and nature of needed new facilities is not known at this time. Any potential impacts of new facilities would be localized in nature and the addition of new facilities in specific locations would not result in significant cumulative impacts (i.e., the addition of multiple police protection facilities in various parts of the City would not result in additive effects at any given location). As demand for LAPD services increases, LAPD will act to maintain adequate service levels. In the event the Downtown Plan would result in the need for new or expanded LAPD facilities, the construction and operation of new facilities would not be expected to result in new or substantially different impacts from those impacts discussed in other sections of this EIR, such as traffic, air, noise. Without information as to design, location of new or expanded LAFD facilities and their proximity to sensitive receptors, such impacts would be speculative at this time. Furthermore, the construction and operation of new police facilities in the Downtown Plan Area may have localized impacts, but individual facilities would not contribute to any

additive or cumulative regional impacts. Therefore, the incremental effect of the Downtown Plan related to police facilities would not be cumulatively considerable.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning so it would only apply to the Downtown Plan at this time. Therefore, projecting the location and type of any new police facilities would be speculative. Future community plan updates would, however, be required to adhere to existing state and local requirements related to the provision of police protection facilities.

Based on the above information, the incremental effect of the Downtown Plan and New Zoning Code related to police protection service would not be cumulatively considerable and cumulative impacts would be ***less than significant.***

Schools

ENVIRONMENTAL SETTING

CITYWIDE SETTING

The Los Angeles Unified School District (LAUSD) serves an area totaling 710 square miles, including most of the City of Los Angeles and the entirety or portions of 26 cities and unincorporated areas of Los Angeles County (LAUSD 2017a). LAUSD enrolled 595,118 students in pre-K through 12th grade for the 2017-2018 school year, an additional 30,405 students in other types of classes, and 76,220 students in adult education courses (LAUSD 2017a). The District includes 19 primary schools, 448 elementary schools, 81 middle schools, 94 high schools, 54 option schools, 49 Magnet schools, 25 multi-level schools, 13 special education schools, 2 home/hospital schools, 177 K-12 Magnet centers (i.e., Magnet schools within regular campuses), 224 charter schools, and 120 other schools and centers.

LAUSD provides a number of programs that allow residents within LAUSD boundaries to attend schools outside of their residential community (LAUSD 2017b). Magnet schools offer a themed core-curriculum (e.g., business, communication arts, gifted/highly gifted/high ability, liberal arts, and visual and performing arts) and provide bus services for their students to promote greater ethnic and racial integration; the Capacity Adjustment Program (CAP) provides busing when a school reaches capacity and students need to be transported to another school; Permits with Transportation (PWT) provides busing for non-Anglo students to attend in a more integrated environment and vice versa; and Public School Choice/No Child Left Behind (PSC/ NCLB) offers busing for students who attend a Program Improvement School and wish to attend a non-Program Improvement School. Nevertheless, the majority of LAUSD students attend schools within their residential community. Enrollment is categorized as either "actual" or "resident" enrollment. As noted in **Table 4.13-8**, actual enrollment is the number of students actually attending the school at the start of the reported school year, including magnet students and resident enrollment is the total number of students living in the school's attendance area and who are eligible to attend at the start of the school year, plus any on-site magnet schools.

DOWNTOWN PLAN AREA SETTING

LAUSD currently operates 20 elementary and middle schools whose attendance area includes the Downtown Plan Area; 12 of the schools are traditional elementary schools, five are traditional middle schools, two are primary centers (K or K-1), and one provides 2nd through 6th grade instruction. In addition, the Downtown Plan Area lies within five "school choice areas" that include an additional 18 schools. Of these schools, two are middle schools and 16 are high schools (LAUSD 2017c). Students residing within the attendance boundaries of any of the schools included in each "zone of choice" may attend any of the schools within that zone. **Figure 4.13-1** shows the location of these public schools. **Table 4.13-8** provides the names and locations of LAUSD schools serving the Downtown Plan Area, as well current and projected data for capacity, enrollment, seating overage, and overcrowding status; projections are for five years in the future (i.e., 2021-2022 school year). Enrollment and capacity numbers are based on data for the 2016-2017 school year and already take into account planned school building additions and portable classrooms on site (LAUSD 2017c).

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TABLE 4.13-8 PUBLIC SCHOOLS SERVING THE DOWNTOWN PLAN AREA – CAPACITY AND ENROLLMENT

School Name	School Type	Location	Current Data (2016 - 2017)					Projected Data (2021 – 2022)			
			Capacity[1]	Actual Enroll-ment[2]	Resident Enroll-ment[3]	Seating Overage[4] (shortage)	Over-crowded[5]?	Capacity[6]	Resident Enroll-ment	Seating Overage (shortage)	Over-crowding?
Schools Serving Downtown Plan Area											
10th St	Elementary	1000 Grattan St, Los Angeles, CA 90015	730	697	886	(156)	YES	657	820	(163)	YES
20th St	Elementary	1353 E 20th St, Los Angeles, CA 90011	639	600	648	(9)	YES	575	659	(84)	YES
9th St	Elementary	835 Stanford Ave, Los Angeles, CA 90021	360	342	287	73	No	324	381	(57)	YES
Ann St	Elementary	126 E Bloom St, Los Angeles, CA 90012	209	126	141	68	No	188	159	29	No
Castelar St	Elementary	840 Yale St, Los Angeles, CA 90012	718	362	615	103	No	646	711	(65)	YES
Gratts LA for YS	2nd-6th	309 Lucas Ave, Los Angeles, CA 90017	627	512	759	(132)	YES	564	924	(360)	YES
Logan St	Elementary	1711 Montana St, Los Angeles, 55CA 90026	488	304	540	(52)	YES	454	447	7	YES
Norwood St	Elementary	2020 Oak St, Los Angeles, CA 90007	621	532	568	53	No	559	479	80	No
Olympic PC	Kindergarten	950 Albany St, Los Angeles, CA 90015	176	152	222	(46)	YES	176	220	(44)	YES
Gratts Para Los Ninos	Kindergaten-1st	474 Hartford Ave, Los Angeles, CA 90017	341	326	258	83	No	341	258	83	No
Plasencia	Elementary	1321 Cortez St, Los Angeles, CA 90026	715	631	697	18	YES	644	627	17	YES
San Pedro St	Elementary	1635 S San Pedro St, Los Angeles, CA 90015	783	723	798	(15)	YES	705	737	(32)	YES
Solano Ave	Elementary	615 Solano Ave, Los Angeles, CA 90012	290	245	145	145	No	261	175	86	No
Utah St	Elementary	255 Gabriel Garcia Marquez St, Los Angeles, CA 90033	589	451	268	321	No	548	243	305	No
Vernon City	Elementary	2360 E Vernon Ave, Vernon, CA 90058	218	248	142	76	No	196	150	46	No
Adams	Middle	151 W 30th St, Los Angeles, CA 90007	1,231	842	1,274	(43)	YES	1145	1171	(26)	YES
Castro	Middle	1575 W 2nd St, Los Angeles, CA 90026	462	359	688	(226)	YES	430	652	(222)	YES
Hollenbeck	Middle	2510 E 6th St, Los Angeles, CA 90023	1,453	1,073	1,370	83	No	1350	1270	81	No
Liechty	Middle	650 S Union Ave, Los Angeles, CA 90017	1,104	989	1,600	(496)	YES	1027	1755	(728)	YES

TABLE 4.13-8 PUBLIC SCHOOLS SERVING THE DOWNTOWN PLAN AREA - CAPACITY AND ENROLLMENT

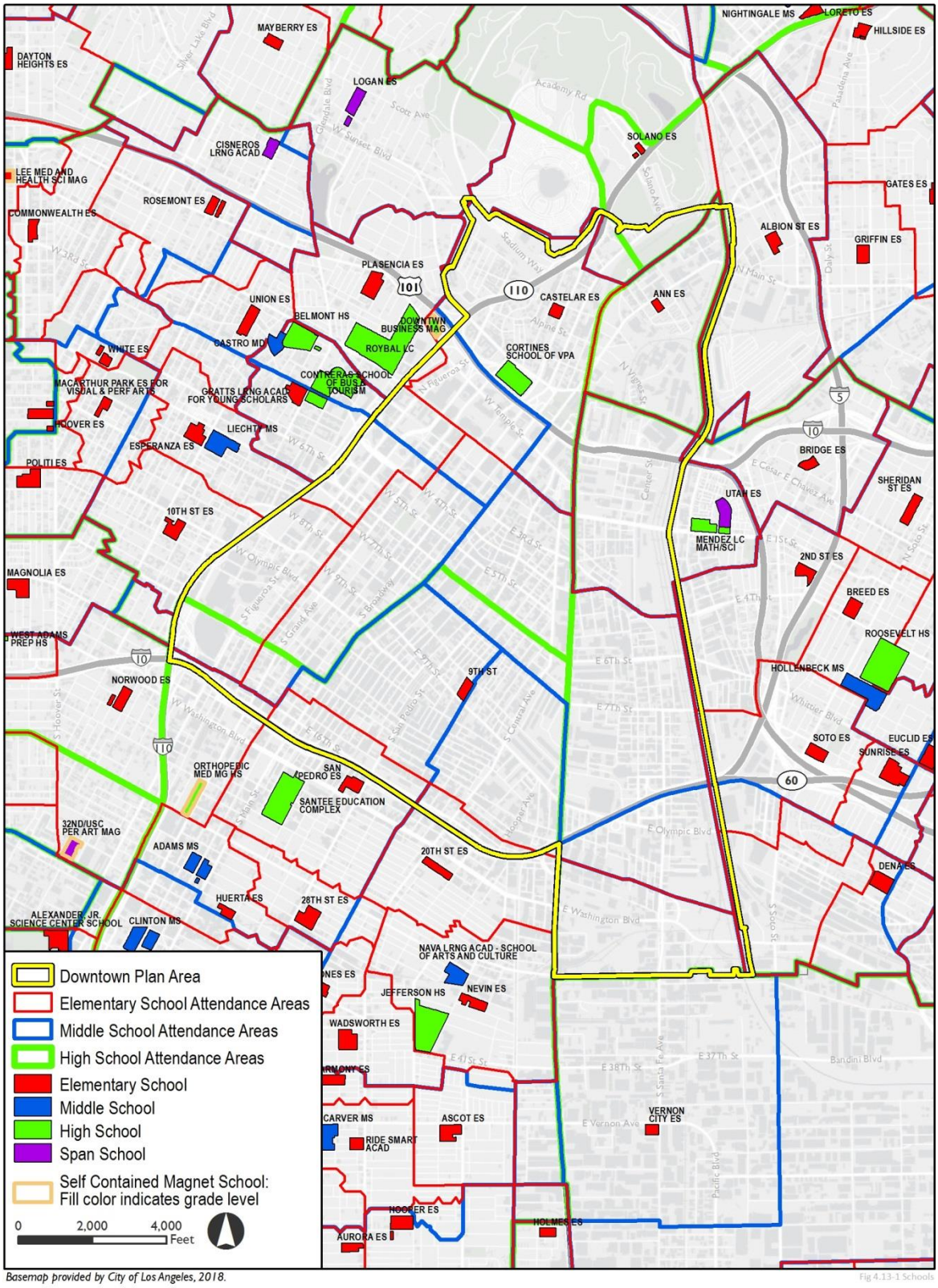
School Name	School Type	Location	Current Data (2016 - 2017)					Projected Data (2021 – 2022)			
			Capacity[1]	Actual Enroll-ment[2]	Resident Enroll-ment[3]	Seating Overage[4] (shortage)	Over-crowded[5]?	Capacity[6]	Resident Enroll-ment	Seating Overage (shortage)	Over-crowding?
Nightingale	Middle	3311 N Figueroa St, Los Angeles, CA 90065	905	740	1611	(706)	YES	842	1272	(430)	YES
Nava Learning Academies MS Zone of Choice											
Nava LA Sch Business & Technology	Middle	1420 E Adams Blvd, Los Angeles, CA 90011	524	465				487			
Nava LA Sch Art & Culture	Middle	1420 E Adams Blvd, Los Angeles, CA 90011	566	487				526			
School Choice Area Total			**1,090**	**952**	**1,444**	**(354)**	**YES**	**1013**	**1277**	**(264)**	**YES**
Belmont HS Zone of Choice											
Contreras Learning Complex ALC	High School	322 Lucas Ave, Los Angeles, CA 90017	453	431				426			
Cortines School of Visual & Performing Arts	High School	450 N Grand Ave, Los Angeles, CA 90012	1,796	1,470				1688			
Contreras Learning Complex Business & Trade	High School	322 Lucas Ave, Los Angeles, CA 90017	511	446				480			
Contreras Learning Complex Social Justice	High School	322 Lucas Ave, Los Angeles, CA 90017	521	477				490			
Belmont	High School	1575 W 2nd St, Los Angeles, CA 90026	1861	975				1749			
Roybal Learning Complex	High School	1200 Colton St, Los Angeles, CA 90026	1,507	1,188				1417			
Contreras Learning Complex Global Studies	High School	322 Lucas Ave, Los Angeles, CA 90017	392	344				368			
School Choice Area Total			**7,041**	**5,331**	**6932**	**109**	**No**	**6618**	**6880**	**(262)**	**YES**
Boyle Heights Zone of Choice											
Boyle Heights STEM	High School	503 S Mott St, Los Angeles, CA 90033	344	200				323			

TABLE 4.13-8 PUBLIC SCHOOLS SERVING THE DOWNTOWN PLAN AREA – CAPACITY AND ENROLLMENT

School Name	School Type	Location	Current Data (2016 - 2017)					Projected Data (2021 – 2022)			
			Capacity[1]	Actual Enroll-ment[2]	Resident Enroll-ment[3]	Seating Overage[4] (shortage)	Over-crowded[5]?	Capacity[6]	Resident Enroll-ment	Seating Overage (shortage)	Over-crowding?
Roosevelt	High School	456 S Mathews St, Los Angeles, CA 90033	1,817	1,485				1708			
Mendez	High School	1200 Plaza Del Sol E, Los Angeles, CA 90033	1,139	997				1071			
School Choice Area Total			**3,300**	**2,682**	**3,688**	**(388)**	**YES**	**3102**	**3498**	**(396)**	**YES**

Notes:
Data is provided for the 2016-2017 School Year.
1. Capacity represents the maximum number of students the school can serve while operating on its current calendar.
2. Actual enrollment is the number of students actually attending the school at the start of the reported school year, including magnet students.
3. Resident enrollment is the total number of students living in the school's attendance area and who are eligible to attend at the start of the school year, plus any on-site magnet schools.
4. Seating overage or (shortage) = Capacity - Resident Enrollment
5. A school is considered overcrowded if the school is currently on a multi-track calendar, there is a currently a seating shortage, or there is currently an available capacity of less than or equal to a "safety margin" of 20 seats.
6. School planning capacity is based on the number of eligible classrooms and classroom utilization after implementing LAUSD operation goals, which include operating on a two-semester calendar and assumed budget resources that allow for reductions in class size. Includes capacity allocated to charter co-locations and magnet programs.
SOURCE: Los Angeles Unified School District 2017c

Figure 4.13-1 Public Schools Serving the Downtown Plan Area



Basemap provided by City of Los Angeles, 2018.

Enrollment and capacity data for the public schools serving the Downtown Plan Area indicate that the area's schools are already over-burdened. Currently, ten schools and four zones of choice are overcrowded (i.e., have a seating shortage or a safety margin of less than 20 seats). In total, area schools currently have a deficit of 1,742 seats for middle school students, and a deficit of 279 seats for high school students; there are, however, 530 seats available for Elementary and Pre-K. Seating availability is calculated using residential enrollment numbers, which includes the total number of students eligible to attend a school, rather than actual enrollment numbers. Currently, all schools are able to accommodate actual enrollment.

Projected enrollment and capacity data are also provided in **Table 4.13-8** for a five-year horizon. School capacity is projected to decrease for all schools in five years. This does not indicate a reduction in available school facilities, but rather an anticipated decrease in classroom utilization due to implementation of LAUSD operational goals and availability of budgetary resources to support smaller class sizes. In addition, resident enrollment is expected to decrease based on recent enrollment trends (LAUSD 2017c). Under the future scenario, an additional two elementary schools and one zone of choice would experience overcrowding, resulting in a total of 12 schools and five zones of choice potentially facing seating shortages.

REGULATORY FRAMEWORK

STATE

California Government Code Section 65995 (California Government Code, Title 7, Chapter 4.9)

California Government Code Section 65995 authorizes school districts to collect impact fees from developers of new residential and commercial/industrial building space. Section 65995 was established under the School Facilities Act of 1986 and refined and amended by the Leroy F. Greene School Facilities Act of 1998 (Senate Bill 50 [SB 50]) to provide further guidance and restrictions on fee limits and fee types. The maximum fees authorized under SB 50 apply to zone changes, general plan amendments, zoning permits and subdivisions. The payment of school impact fees by developers are deemed to provide full and complete mitigation of school facilities impacts, notwithstanding any contrary provisions in CEQA or other State or local laws. The Los Angeles Unified School District (LAUSD) determines fees annually in accordance with California Government Code Section 65995.

California Education Code

School facilities and services are subject to the rules and regulations of the California Education Code and governance of the State Board of Education (SBE). The SBE is the 11-member governing and policymaking body of the California Department of Education (CDE) that sets Kindergarten through 12th Grade (K–12) education policy in the areas of standards, instructional materials, assessment, and accountability.

California Department of Education (CDE)

The CDE is the government agency responsible for public education throughout the state. With the State Superintendent of Public Instruction, the CDE is responsible for enforcing education law and regulations and for continuing to reform and improve public elementary school, secondary school, childcare programs, adult education, and preschool programs. The department oversees funding, and student testing and achievement levels for all state schools. A sector of the CDE, the SBE is the governing and policy making sector responsible for education policies regarding standards, instructional materials, assessment, and accountability. The CDE's mission is to provide leadership, assistance, oversight, and resources so that every Californian has access to an education that meets world-class standards. The core purpose of the CDE

is to lead and support the continuous improvement of student achievement, with a specific focus on closing achievement gaps.

Assembly Bill 149 and 2071 – Open Enrollment Policy

The open enrollment policy is a state-mandated policy that enables students located in the LAUSD to apply to any regular, grade-appropriate LAUSD school with designated "open enrollment" seats. Open enrollment seats are granted through an application process that is completed before the school year begins. Under the Open Enrollment Policy, students living in a particular school's attendance area are not displaced by a student requesting an open enrollment transfer to that school.

Class Size Reduction Kindergarten-University Public Education Facilities Bond Act of 1998

Proposition 1A, the Class Size Reduction Kindergarten-University Public Education Facilities Bond Act of 1998 (Ed. Code, Section 100400–100405) is a school construction funding measure that was approved by the voters on the November 3, 1998 ballot. This Act created the School Facility Program where eligible school districts may obtain state bond funds.

LOCAL

Los Angeles Citywide General Plan Framework (Framework Element)

Chapter 9, Infrastructure and Public Services of the Framework Element includes goals, objectives, and policies applicable to public schools; these are summarized in **Table 4.13-9**.

TABLE 4.13-9 RELEVANT GENERAL PLAN SCHOOL GOALS, OBJECTIVES, AND POLICIES

Framework Element – Chapter 9 Infrastructure and Public Services	
Goal 9N	Public schools that provide a quality education for all of the City's children, including those with special needs, and adequate school facilities to serve every neighborhood in the City so that students have an opportunity to attend school in their neighborhoods.
Objective 9.31	Work constructively with the Los Angeles Unified School District to monitor and forecast school service demand based upon actual and predicted growth.
Policy 9.31.1	Participate in the development of, and share demographic information about, population estimates.
Objective 9.32	Work constructively with Los Angeles Unified School District to promote the siting and construction of adequate school facilities phased with growth.
Policy 9.32.1	Work with the Los Angeles Unified School District to ensure that school facilities and programs are expanded commensurate with the City's population growth and development.
Policy 9.32.2	Explore creative alternatives for providing new school sites in the City, where appropriate.
Policy 9.32.3	Work with LAUSD to explore incentives and funding mechanisms to provide school facilities in areas where there is a deficiency in classroom seats.
Objective 9.33	Maximize the use of local schools for community use and local open space and parks for school use.
Policy 9.33.1	Encourage a program of decision-making at the local school level to provide access to school facilities by neighborhood organizations.
Policy 9.33.2	Develop a strategy to site community facilities (libraries, parks, schools, and auditoriums) together.

SOURCE: City of Los Angeles 2001

Los Angeles Unified School District (LAUSD).

Although the California public school system is under the policy direction of the Legislature, the CDE relies on local control for the management of school districts. In allocating resources among the schools of the district, school district governing boards and district administrators must not only follow the law but also set the educational priorities for their schools.

LAUSD 2016-2019 Strategic Plan.

The LAUSD 2016-2019 Strategic Plan outlines LAUSD's fundamental strategy, objectives and key initiatives. The plan is intended to cultivate common understanding and coherence, and to empower all stakeholders to take action toward creating a district of graduates. The Strategic Plan also provides the prioritized framework from which LAUSD will work (LAUSD 2016a).

LAUSD Choices Program.

LAUSD provides education choices including magnet and permits with transportation (PWT) programs to students residing within the LAUSD boundaries. Students interested in enrolling in LAUSD magnet and PWT programs are required to apply through LAUSD eChoices. Magnet schools under the Choice Program include business, communication arts, center for enriched studies, gifted/highly gifted/high ability, liberal arts, magnet schools assistance program, public service, science/technology/engineering/math, and visual and performing arts (LAUSD 2016b).

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the *CEQA Guidelines*, the Proposed Project would have a potentially significant impact if it would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for schools.

METHODOLOGY

The following analysis focuses on determining whether the Proposed Project would result in adverse physical impacts to the environment due to the expansion of existing school facilities or construction of new facilities. Whether additional facilities would be required is determined primarily by considering the adequacy of existing school facilities, impacts of the Proposed Project on demand for school facilities, and applicable regulations and policies that would influence future provision of school facilities and allow for mitigation of potential environmental impacts.

The legal practice guide, "CEB, Practice under the California Environmental Quality Act" provides the following discussion on impacts to schools:

- State and local agencies may not deny either legislative or adjudicative approvals on the basis of a refusal to pay fees in excess of those limits (Government Code Section 65995).
- The statutes also significantly limit the application of CEQA to school facilities impact issues. The fees set forth in Government Code Section 65996 constitute the exclusive means of both

"considering" and "mitigating" school facilities impacts of projects (Government Code Section 65996(a)).

In Goleta Union Sch. Dist. v Regents of Univ. of Cal. (1995) 37 CA 4th 1025, the court held that school overcrowding is a social impact and does not require analysis in an EIR and mitigation, unless the overcrowding is linked to physical environmental effects (such as new school construction). Similarly, in *Chawanakee Unified Sch. Dist. v County of Madera* (2011) 196 CA 4th 1016, the court held that because the methods in the statute are the exclusive means of "considering" impacts on schools, an EIR need not describe and analyze a development's impacts on schools (citing this text). However in this case, the court also ruled that the reach of the statute is limited to impacts "on" schools and does not extend to impacts on the non-school physical environment, even though they may be "related" to schools in some way. The implications of this ruling are uncertain, however, because the court did not consider the effect of Government Code Section 65996(b), which states that the statute provides full school facilities mitigation notwithstanding CEQA, or of Government Code Section 65996(c), which defines a school facility as "any school-related consideration relating to a school district's ability to accommodate enrollment."

Based on the above, for purposes of this EIR, an impact on schools would occur if the Proposed Project promotes growth patterns resulting in the need for and/or the provision of new or physically altered public school facilities (including charter schools), the construction of which would cause significant environmental impacts in order to maintain service, or other performance objectives. To the extent that the Proposed Project causes impacts to classroom sizes or school service impacts that results in the construction of new facilities or alterations to existing facilities, and the impact from that construction results in a potential impact to the environment, that is a CEQA impact that needs to be assessed in this EIR. Any discussion in this EIR that relates solely to the level of school services provided to the residents of the Downtown Plan Area, including any existing or future needs and deficiencies, is for informational purposes only. The ultimate determination of whether there is a significant impact related to schools is based on whether a significant impact will result from the construction of new or expanded school facilities.

The discussion of impacts to public schools addresses impacts for the Downtown Plan Area. Public school service needs are dependent on the size of the service population and the geographic area served. This analysis estimates the number of students that would be generated by reasonably anticipated development with the Proposed Project using LAUSD student generation rates and assesses whether existing and planned LAUSD school facilities expected to serve the Downtown Plan Area would have sufficient available capacity to accommodate the students (LAUSD 2008). If there would not be sufficient available capacity, the EIR will consider whether new school facilities will be needed, and whether the construction of the school facilities will result in a significant impact.

PROJECT IMPACTS

Threshold 4.13-3	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service or other performance objectives for public schools?

Impact 4.13-3 **Downtown Plan:** The Downtown Plan would not directly affect local schools, but the Downtown Plan would allow for development that would increase the student population of the Downtown Plan Area and would create the need for new or expanded school facilities. However, based on the urbanized character of the Downtown Plan Area, it is anticipated that new or expanded school facilities could be built without creating significant environmental impacts. Therefore, the

Downtown Plan impacts resulting from the provision of school facilities would be ***less than significant*.**

New Zoning Code: The New Zoning Code does not include any standards that would result in impacts related to the provision of school facilities. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area. Therefore, any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The impact would be ***less than significant.***

Downtown Plan Impact

The Downtown Plan would accommodate new residential development, resulting in about 97,000 new housing units (a 291 percent increase) and 176,000 additional residents (a 232 percent increase). Non-residential uses, including commercial, industrial and public facility uses, would result an approximately 173,000 sf of new development (a 115 percent increase). As summarized in **Table 4.13-10**, residential and non-residential development accommodated by the Downtown Plan would result in approximately 51,885 new students by 2040. Of this total, an estimated 26,537 would enroll in elementary school, 8,054 would enroll in middle school, 15,361 would enroll in high school, and 1,932 would enroll in special day classes.

TABLE 4.13-10 ANTICIPATED STUDENT GENERATION IN THE DOWNTOWN PLAN AREA

		Student Generation				
	Units	Elementary School (TK-5)	Middle School (6-8)	High School (9-12)	SDC	Total Students Generated
Residential [1]	99,608 du	22,601	6,086	12,909	1,932	43,528
Non-Residential [2]	172,649,288 sf	3,936	1,968	2,452		8,356
Total Students Generated by the Downtown Plan		**26,537**	**8,054**	**15,361**	**1,932**	**51,885**

Note: du = dwelling units; sf = square feet; TK = Transitional Kindergarten; SDC = Specialized Day Care

Totals may not add up due to rounding.

[1] Student generation rates for residential use is based on Level 1 – Developer Fee Justification Study for Los Angeles Unified School District (LAUSD 2017d). Residential Generation Rates: Elementary: 0.2269/du, Middle School: 0.0611/du, High School: 0.1296 /du, SDC: 0.0194/du

[2] Student generation rates for non-residential use is based on the average of office and retail/service student generation rates for a conservative estimate, taken from the LAUSD Commercial/Industrial Development School Fee Justification Study, September 2010 (LAUSD 2010). Non-residential Generation Rates: Elementary: 0.0228/1,000 sf, Middle School: 0.0114/1,000 sf, High School: 0.0142/1,000 sf. Non-residential uses include commercial, industrial, and public facilities.

As shown in **Table 4.13-8**, existing public pre-K and elementary schools serving the Downtown Plan Area currently have the capacity to accommodate an additional 530 students; however, middle and high schools have a deficit of available seats and LAUSD does not plan to build new school facilities to serve the Downtown Plan Area for at least the next five years (LAUSD 2017c). However, to help relieve schools that are operating at or above capacity, LAUSD also employs the LAUSD Choices Program that provides education choices including magnet and PWT programs to students residing within the LAUSD boundaries. Magnet schools under the Choice Program include business, communication arts, center for enriched studies, gifted/highly gifted/high ability, liberal arts, magnet schools assistance program, public service, science/technology/engineering/math, and visual and performing arts. In addition, independent Charter Schools that operate through LAUSD also help alleviate schools that are operating at or over capacity.

It is reasonably foreseeable that over the 20-year plan horizon the reasonably anticipated development from the Proposed Project would result in the need for and construction of new or expanded schools. If new or expanded schools are determined to be necessary during the life of the Proposed Project, such facilities would occur where allowed under the designated land use and/or in proximity to residential uses. The

environmental impacts of the construction and operation of new facilities, as an allowed land use, have been evaluated throughout this EIR. Specifically, the EIR analyzes anticipated effects of the Downtown Plan related to air quality, noise, traffic, utilities, and other environmental impact areas. It is not foreseeable that impacts from building new schools or new additions to schools in the Downtown Plan Area would have greater or different impacts than those identified in this EIR for construction or operations. Depending on the location of new schools, if they are determined to be needed, impacts related to particular locations could occur, however such impacts are too speculative to assess without information as to design, location and proximity to the population to be served. Should new facilities be needed, such facilities are anticipated to be infill developments surrounded by urban uses, and would not require new or expanded infrastructure. Based on the urban location and size, the construction of new schools or expansion of an existing facility could result in less than significant impacts and or possibly qualify for an infill exemption. To the extent that any significant impacts could result from the unique characteristics of a specific project site, or specific characteristics of a given school (e.g. night lighting, performance spaces), those impacts would be speculative at this time. Furthermore, in the event that LAUSD constructs a new school or physically alter an existing facility, a project-specific environmental analysis would be required under CEQA to address site-specific environmental concerns.

All development in California is subject to California Government Code Section 65995, which allows LAUSD to collect impact fees from developers of new residential and commercial/industrial space. These fees are collected on residential and commercial development and may be used to pay for all of the following: land (purchased or leased) for school facilities, design of school facilities, permit and plan checking fees, construction or reconstruction of school facilities, testing and inspection of school sites and school buildings, furniture for use in new school facilities, and interim school facilities (purchased or leased) to house students generated by new development while permanent facilities are constructed. Such development would assist in funding efforts necessary to alleviate school overcrowding and would ensure that new development under the Downtown Plan would bear its fair share of the cost of accommodating additional students. Based on all of the above, impacts would be ***less than significant***.

New Zoning Code Impact

As discussed in the Environmental Setting, the LAUSD serves an area totaling 710 square miles, including most of the City of Los Angeles. The District includes 19 primary schools, 448 elementary schools, 81 middle schools, 94 high schools, 54 option schools, 49 Magnet schools, 25 multi-level schools, 13 special education schools, 2 home/hospital schools, 177 K-12 Magnet centers, 224 charter schools, and 120 other schools and centers. Future development may create the need for new or physically altered school facilities when residential dwelling units are constructed and student population increases beyond existing capacity. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Therefore, the construction of new school facilities would not be required.

As discussed in Section 3.7.4, there are many combinations of Form, Frontage, Standards, Use, and Density Districts that could be applied to properties to make a zone. However, due to the modular nature of the new zoning, it is not known where or to what extent future development may occur. Projecting the location and type of future growth as a result of the New Zoning Code outside of the Downtown Plan Area would be speculative at this time as no development is being proposed.

Future environmental review of a proposed community plan update and associated zone districts would analyze potential community- and site-specific impacts to existing schools. Therefore, impacts related to schools would be ***less than significant.***

Mitigation Measures

Downtown Plan

No significant impacts related to schools have been identified; therefore, mitigation is not required.

However, the construction of new schools or expansion of existing facilities to serve the Downtown Plan Area would be required to incorporate applicable mitigation measures included in this EIR. These potentially include measures related to biological resources, cultural resources, hazards/hazardous materials, and noise.

New Zoning Code

This impact would be less than significant; therefore, mitigation is not required.

CUMULATIVE IMPACTS

The geographic area to analyze cumulatively considerable impacts to schools includes the entire school district which includes the entire City as well as adjacent areas that are served by LAUSD that could be affected by the construction of new school facilities. Citywide growth through 2040 is projected to add an estimated 659,000 new residents, 293,000 new households, and 345,000 new employees (SCAG 2016).

Cumulative development throughout Los Angeles would increase overall demand for public schools and potentially create a need for new facilities. As with the Downtown Plan, the construction and operation of new or expanded facilities throughout the LAUSD may have significant environmental effects; however, because the size, nature, and location of facilities that may be constructed in the future is not known at this time, analysis of the potential impacts of new schools would be speculative. The impacts of individual schools would generally be localized in nature and would not contribute substantially to any cumulative districtwide impacts. The Downtown Plan would contribute to increases in enrollment at LAUSD schools, but impacts related to the development of schools would be primarily restricted to the Downtown Plan Area and Downtown Plan Area developers would be subject to mandatory school impact fees. Depending on the design and location of new schools, if they are determined to be needed, construction and operational impacts (such as traffic, noise, and lighting) could occur. However, impacts related to specific locations would be speculative at this time and would be generally consistent with other allowed development analyzed in this EIR. Furthermore, the construction and operation of new or expanded school facilities in the Downtown Plan Area may have localized impacts, but individual facilities would not contribute to any additive cumulative or regional impacts. Therefore, the incremental effect of the Downtown Plan with respect to schools would not be cumulatively considerable.

As discussed above, the New Zoning Code applies to properties where a community plan is updated or amended to utilize the new zoning and, therefore, would only apply to the Downtown Plan Area at this time. It is not known where or to what extent future development throughout the City may occur, but future community plan updates to which the New Zoning Code would apply would be required to adhere to existing state and local requirements related to the provision of public schools.

Based on the above information, the incremental effect of the Proposed Project with respect to schools would not be cumulatively considerable and Cumulative impacts would be ***less than significant***.

Libraries

ENVIRONMENTAL SETTING

CITYWIDE SETTING

The Los Angeles Public Library (LAPL) provides library services to the City of Los Angeles. The Central Library, which is located within the Downtown Plan Area, serves as the library system's headquarters. In addition, the LAPL operates 72 community branches (LAPL 2015). The LAPL collection includes more than 6.5 million items, including digital and print items that are borrowed more than 15 million times a year. The library system also offers an array of other services to the LA community, such as homework help, story-time, professional development services, lecture series, music and arts events, and a summer reading series for kids. In total, LAPL offers more than 18,000 public programs a year (LAPL 2015).

LAPL members have access to materials housed at libraries throughout the LAPL system through the library loan program and can pick up materials at whichever library is most convenient. Every branch library offers free wi-fi and use of computer workstations that provide Internet access; the ability to search the LAPL online catalog; access to subscription databases, word processing and language learning tools, and historic document and photograph collections; and access to specially designed websites for children, teens, and Spanish speakers.

DOWNTOWN PLAN AREA SETTING

The Downtown Plan Area contains the Central Library, located on 630 W 5th Street, and two community branch libraries: the Little Tokyo Branch Library, located on 203 S Los Angeles Street, and the Chinatown Branch Library, located on 639 N Hill Street. One other community branch library is located less than a mile from the Downtown Plan Area boundary: the Pico Union Branch Library, located on 1030 S Alvarado Street. The Central Library is the third largest central library in the nation and contains more than 2.6 million books, 10,000 magazine subscriptions, as well as language learning and multi-media materials (LAPL 2017). It served over 2 million visitors in fiscal year 2011-2012 and circulated 1.2 million items. The 538,000-square foot building includes galleries for exhibitions, an auditorium for events, a cafeteria, store, and 255 public access computers.

The Little Tokyo Branch Library is housed in a 12,500 square-foot (sf) facility containing an extensive collection of Japanese materials. The Little Tokyo branch attracts people from throughout the Los Angeles area and the Southern California region, particularly on weekends (Sherod 2017). Like the Little Tokyo library, the Chinatown Branch Library attracts people from throughout Southern California due to its extensive collection of Chinese materials (e.g., magazines, newspapers, books, movies) and programs geared to first-generation Chinese Americans or recent immigrants, such as a bi-lingual Chinese citizenship class (Liang 2017). The library houses over 80,000 print items in a 14,500 sf building (Liang 2017).

REGULATORY FRAMEWORK

Los Angeles Public Library (LAPL) Branch Facilities Plan

In 1988, the LAPL Board of Commissioners adopted the *Branch Facilities Plan* to guide the construction, maintenance, and operation of libraries within the City. The Plan is composed of two elements: (1) the Criteria for New Libraries, and (2) the Proposed Project List. The first element sets standards for selection

of future library sites and the second lists proposed projects to renovate existing libraries or construct new facilities. According to the current Plan, service criteria are based on floor area required to serve varying amounts of residential population. Current LAPL branch building size standards are presented in **Table 4.13-11**.

TABLE 4.13-11 LAPL BRANCH FACILITIES SITE SELECTION CRITERIA

Population Served	Size of Facility (square feet)
Above 45,000	14,500
Below 45,000	12,500
Regional Branch	20,000

SOURCE: LAPL 2015

The Branch Facilities Plan also sets the following site selection criteria:

- When a community reaches a population of 90,000, an additional branch should be considered for the area
- One-story library buildings with interior layouts must be designed to accommodate the disabled, and to have electronic technology, substantial shelving and seating capacities, and have a community meeting room
- Good visibility and street access
- Easily accessible by car, by bus and on foot
- Take into consideration the relative locations of all schools served by the branch
- Take into consideration the relative locations of all neighboring branch libraries

All of the projects identified under the Branch Facilities Plan were completed by October 2008. The Board of Library Commissioners adopted a fully revised Plan on February 8, 2007 with a new Projects List and updated standards.

Proposition 1, a $53.4 million Branch Libraries Facilities Bond, was approved in 1989. Proposition 1 proposed obtaining new sites for building, renovating, and expanding libraries that were unable to serve the community sufficiently and/or were damaged by the Whittier earthquake. Additional funds were allocated by the Community Development Block Grant Award of federal funds from the California State Library Proposition 85, and from Friends of the Library Groups, totally $108 million. A total of 29 libraries were built under the 1989 Bond Program. Proposition DD, or the 1998 Library Facilities Bond, was approved in 1998 and authorized $178.3 million in bonds for funding the construction, renovation, improvement, or expansion of 32 new branch libraries. In 2011, Measure L increased the allocation of City funds to the library system. Measure L restored library hours of operation and services which were reduced during the recession, over a period of time without raising taxes. Measure L also funded the opening of the Central Library and eight regional branch libraries on Sundays.

Los Angeles Public Library Strategic Plan 2015-2020

The LAPL Strategic Plan 2015-2020 (the "Plan"), adopted in 2015, sets goals to increase the number of people who use library services and actively promote and market programs and services to increase overall engagement with the library. Libraries are increasingly providing for online resources, ebooks, and other technology, allowing patrons to use library services off-site and thereby reduce the need for physical facilities. With the passage of Measure L, the LAPL is offering enhanced programs, expanded collections, additional technology, an expanded digital presence, and increased opportunities for connection within and

between communities. Measure L, approved by City voters on March 8, 2011, amends the City Charter to incrementally increase the amount the City is required to dedicate annually from its General Fund to LAPL to an amount equal to 0.03 percent of the assessed value of all property in the City, and incrementally increase LAPL's responsibility for its direct and indirect costs until it pays for all of its costs. The Plan is comprised of the following six goals to achieve the increased use of local libraries:

Goal 1: Cultivate and inspire young readers

Goal 2: Nurture student success

Goal 3: Champion literacy and lifelong learning

Goal 4: Contribute to L.A.'s economic growth

Goal 5: Stimulate the imagination

Goal 6: Strengthen community connections and celebrate L.A.

City of Los Angeles General Plan Framework

Chapter 9 of the Framework Element includes objectives and policies applicable to library services. The objectives applicable to libraries are presented in **Table 4.13-12**.

TABLE 4.13-12 RELEVANT GENERAL PLAN LIBRARY GOALS, OBJECTIVES, AND POLICIES

Framework Element – Chapter 9 Infrastructure and Public Services	
Objective 9.20	Adopt a citywide library service standard by the year 2000.
Objective 9.21	Ensure library services for current and future residents and businesses.
SOURCE: Los Angeles 2001	

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

According to CEQA Guidelines, Appendix G, the Proposed Project would have a potentially significant impact if it would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities, such as libraries.

METHODOLOGY

The following analysis focuses on determining whether the Proposed Project would result in adverse physical impacts to the environment due to the expansion or construction of new library facilities. Whether additional facilities would be required is determined primarily by considering the adequacy of existing library services, impacts of the Proposed Project on demand for library services, and input provided by LAPL staff.

The need for or deficiency in library facilities to serve the residents or users of the Downtown Plan Area or the City is not in and of itself a CEQA impact, but a social or economic impact. (City of Hayward v. B'd of Trustees (2015) 242 Cal.App. 4th 833, 843). To the extent that the Proposed Project causes a need for the construction of new library facilities or additions to existing facilities, and the impact from that

construction results in a potential impact to the environment that is a CEQA impact that needs to be assessed in this EIR. Any discussion in this EIR that relates solely to the level of library services provided to the residents or users of the Plan Area and its surrounding community, including any existing or future needs and deficiencies, is for informational purposes only. The ultimate determination of whether there is a significant impact related to library services is based on whether a significant impact will result from the construction of new or altered library facilities as a result of the implementation of the Proposed Project.

This analysis estimates the number of residents that would be generated by implementation of the Proposed Project and assesses whether existing and planned public libraries expected to serve the Downtown Plan Area would have sufficient available capacity to accommodate additional users and whether new facilities would need to be constructed, the construction of which would cause significant environmental impacts.

PROJECT IMPACTS

Threshold 4.13-4	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for libraries?

Impact 4.13-4

Downtown Plan: The Downtown Plan would increase demand for library facilities. However, the Downtown Plan Area is well-served by library facilities and would not require the construction of new or expanded facilities. Impacts would be ***less than significant.***

New Zoning Code: The New Zoning Code does not include any standards that would result in impacts related to the provision of libraries. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The impact would be ***less than significant***.

Downtown Plan Impact

Downtown Plan development would add an estimated 176,000 residents and 86,000 employees to the Downtown Plan Area. Many of the Downtown Plan Area's future residents and employees would likely use the LAPL system, potentially increasing the number of library facility users. However, 75% of L.A. residents visit the library less than once a month, and 18% have not visited a public library more than once in the last five years (LAPL 2015). Thus, an increase in residents is unlikely to result in a substantial increase in annual visits to library facilities. Demand for library facilities may also be offset over time due to increased use of digital materials available through LAPL's online catalog; circulation of e-media is expected to increase from 2,200,000 in 2014 to 3,000,000 in 2020 (LAPL 2015).

The Downtown Plan Area is well-served by existing library facilities, primarily because it contains the Central Library, which attracts roughly two million visitors a year. This facility is housed in a building over 500,000 square feet in size and has seating for 1,400 people and nearly 89 miles of shelving. The two branch libraries in the Downtown Plan Area are also unique in that they largely serve specific cultural communities rather than specific geographical communities (Sherod 2017, Liang 2017); the Chinatown Branch offers an extensive collection of Chinese materials and programming geared for Chinese language speakers, while the Little Tokyo Branch offers an extensive collection of Japanese materials and programming geared to Japanese speakers. Both libraries attract visitors from throughout Southern California (Sherod 2017, Liang 2017).

The Downtown Plan Area would accommodate approximately 252,000 persons. Based on the site selection criteria of 90,000 persons per library branch, as identified in the Branch Facilities Plan, the three existing libraries serving the Downtown Plan Area would accommodate a population up to 270,000 persons. Because Downtown Plan development is not expected to cause an exceedance of capacity at existing facilities in the Downtown Plan Area and is not expected to generate a substantial demand for the unique collections and programs of the community branch libraries serving the Downtown Plan Area, it is unlikely that expansion or construction of new library facilities would be required.

If new library facilities are determined to be necessary at some point in the future, such facilities would occur where allowed under the designated land use. The environmental impacts of the construction and operation of new facilities, as an allowed land use, have been evaluated throughout this EIR. It is not foreseeable that impacts from building or upgrading libraries in the Downtown Plan Area would have greater or different impacts than those identified in this EIR for construction or operations. Potential impacts to air, noise, traffic, as well as other impacts of new developments are discussed in the impact sections of this EIR, and they would not be any different for a library facility. The Plan Area is urbanized and new facilities would not involve expansion of the urban sphere beyond current boundaries and, thus, there would be no need for new or expanded infrastructure. Therefore, the Downtown Plan would not result in adverse physical impacts associated with the provision of new or expanded library facilities. The impact conclusion would be ***less than significant.***

New Zoning Code Impact

As discussed in the Setting, the LAPL operates 72 community branches and includes more than 6.5 million items that serve a population of over 3.9 million people. Per the LAPL Branch Facilities Plan, an additional community branch should be considered for the area when a community reaches a population of 90,000. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Therefore, the construction of new library facilities would not be required.

As discussed in Section 3.7.4, there are many combinations of Form, Frontage, Standards, Use, and Density Districts that could be applied to properties to make a zone. However, due to the modular nature of the new zoning, it is not known where or to what extent future development may occur. Projecting the location and type of future growth as a result of the New Zoning Code outside of the Downtown Plan Area would be speculative at this time as this Project only includes the application of new zoning to land within the Downtown Plan Area.

Future environmental review of a proposed community plan update and associated zoning classifications would analyze potential community- and site-specific impacts to existing libraries. Therefore, impacts related to libraries would be ***less than significant.***

Mitigation Measures

No significant impacts related to libraries have been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

Downtown Plan

However, the construction of new libraries or expansion of existing facilities to serve the Downtown Plan Area would be required to incorporate applicable mitigation measures included in this EIR. These potentially include measures related to biological resources, cultural resources, hazards/hazardous materials, and noise.

New Zoning Code

This impact would be less than significant; therefore, mitigation is not required.

CUMULATIVE IMPACTS

The geographic area to analyze cumulatively considerable impacts to libraries includes the entire City of Los Angeles as well as areas at the City's periphery that could potentially be affected by construction of a new facility at or near the City's corporate boundary. Citywide growth through 2040 is projected add an estimated 659,000 new residents, 293,000 new households, and 345,000 new employees (SCAG 2016).

Cumulative development throughout Los Angeles would increase overall demand for library facilities and potentially create a need for new facilities. Environmental impacts associated with the construction of new or expanded facilities may have significant environmental effects. Such impacts would be addressed, as necessary, as part of project-level environmental review of individual new or expanded facilities, but cannot be predicted with any certainty at this time since the size and locations of new facilities are not currently known. The impacts of new facilities would be localized in nature and the addition of new facilities in specific locations would not result in significant cumulative impacts. The Downtown Plan would incrementally contribute to this overall cumulative impact by increasing demand for library facilities, but its contribution would not be considerable since development facilitated by the Downtown Plan would not require the construction of new or expanded facilities. Moreover, as previously discussed, 75 percent of the City's residents visit the library less than once a month, and 18 percent have not visited a public library more than once in the last five years. Furthermore, demand for library facilities may also be offset over time due to increased use of digital materials available through LAPL's online catalog; circulation of e-media is expected to increase from 2,200,000 in 2014 to 3,000,000 in 2020. However, in the event new facilities are determined to be necessary at some point in the future, such facilities would occur where allowed under the designated land use and would be generally consistent with other allowed development analyzed in this EIR. Therefore, the incremental effect of the Downtown Plan with respect to library facilities would not be cumulatively considerable.

The New Zoning Code would only apply to the Downtown Plan Area at this time. Any cumulative impacts related to future updates of other community plans would be speculative. Additionally, future community plan updates would be required to adhere to existing state and local requirements related to the provision of library facilities.

Based on the above information, the incremental effect of the Downtown Plan and New Zoning Code with respect to libraries would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

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4.14 RECREATION

This section evaluates potential impacts to recreational resources. Topics addressed include the potential deterioration of existing facilities and necessity for new recreational facilities. Impacts related to recreation are evaluated based on the adequacy of existing and planned facilities and any additional demand generated by future development.

ENVIRONMENTAL SETTING

CITYWIDE EXISTING AND PLANNED PARKS

The City of Los Angeles Department of Recreation and Parks (DRP) owns and operates parks and recreational facilities throughout the City. City park and recreation facilities include over 16,000 acres of parkland with over 444 park sites, including hundreds of athletic fields, 422 playgrounds, 321 tennis courts, 184 recreation centers, 72 fitness areas, 62 swimming pools and aquatic centers, 30 senior centers, 26 skate parks, 13 golf courses, 12 museums, and nine dog parks (DRP 2017a). The DRP also maintains 13 lakes, 92 miles of hiking trails, and operates 187 summer youth camps.

In 2012, the DRP launched the 50 Parks Initiative based on findings in the 2009 *Citywide Community Needs Assessment* indicating that park facilities are not equitably distributed across the City and that many communities do not have parks within a reasonable distance. The 50 Parks Initiative seeks to build 50 parks in densely-populated neighborhoods or communities currently lacking sufficient park space and recreational facilities (DRP 2017b).

As discussed further below under Regulatory Framework, the City of Los Angeles Public Recreation Plan states that in order to meet long-range local recreational standards, the City should maintain a minimum of two acres of neighborhood facilities and two acres of community recreational facilities for every 1,000 persons, or a combination of neighborhood and community facilities adding up to four acres. Pocket parks are another type of recreational facility not specifically addressed in the City's Recreation Plan; however, pocket parks have been used to meet City residents' recreational needs in urban settings where space and the ability to develop new neighborhood parks are limited.

Park Planning Efforts

2009 Citywide Community Needs Assessment

The Department of Recreation and Parks conducted the *Citywide Community Needs Assessment* as the first step in the preparation of a Citywide Recreation and Parks Master/Strategic Plan and a Five-year Capital Improvement Plan. The Needs Assessment identifies, quantifies, and preliminarily prioritizes the tremendous need for recreation and open space in the City. A high-level review was also performed of the Department's facilities in an attempt to address the various facilities needing improvements to meet current and future needs, prevent future maintenance problems, and offer positive alternatives to an increasingly dense and urbanized population.

Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment

The Parks & Recreation Needs Assessment, adopted in May 2016, documents existing parks and recreation facilities in the cities and unincorporated communities of Los Angeles County and uses the data to

determine the scope, scale, and location of park needs in Los Angeles County. The Parks & Recreation Needs Assessment also provides a framework for considering parks as key infrastructure; uses a new series of metrics to determine park needs; supports a need-based allocation of funding for parks and recreation; and emphasizes community priorities and deferred maintenance projects.

Downtown Plan Area Existing and Planned Parks

Table 4.14-1 summarizes the parks that would serve the Downtown Plan Area, including parks within and near the Downtown Plan Area. Listed parks include both existing parks and two sites that have been secured or are in the process of being acquired for the purpose of constructing new facilities under the 50 Parks Initiative described above under Citywide Existing and Planned Parks: Albion Riverside Park, located immediately adjacent to the northeast tip of the Downtown Plan Area, and Ord and Yale Street Park, located in Chinatown in the northern portion of the Downtown Plan Area (DRP 2012). **Tables 4.14-2** and **4.14-3** below provide the addresses for the two proposed parks. Including the planned Ord and Yale Street Park, there are 14 parks in the Downtown Plan Area, of which ten are pocket parks, two are neighborhood parks, and two are community parks. In total, parks in the Downtown Plan Area provide 86.03 acres of park land. Including the planned Albion Riverside Park, an additional three community parks are located with a half-mile of the Downtown Plan Area boundary, and five neighborhood parks and one regional park are located within two miles of the Downtown Plan Area boundary. These parks provide an additional 774.65 acres of recreational land. **Figure 4.14-1** maps the locations of existing and planned parks in and near the Downtown Plan Area and shows their location relative to land uses proposed in the Downtown Plan. The numbers on the map correspond to the figure numbers assigned to each park in **Table 4.14-1**.

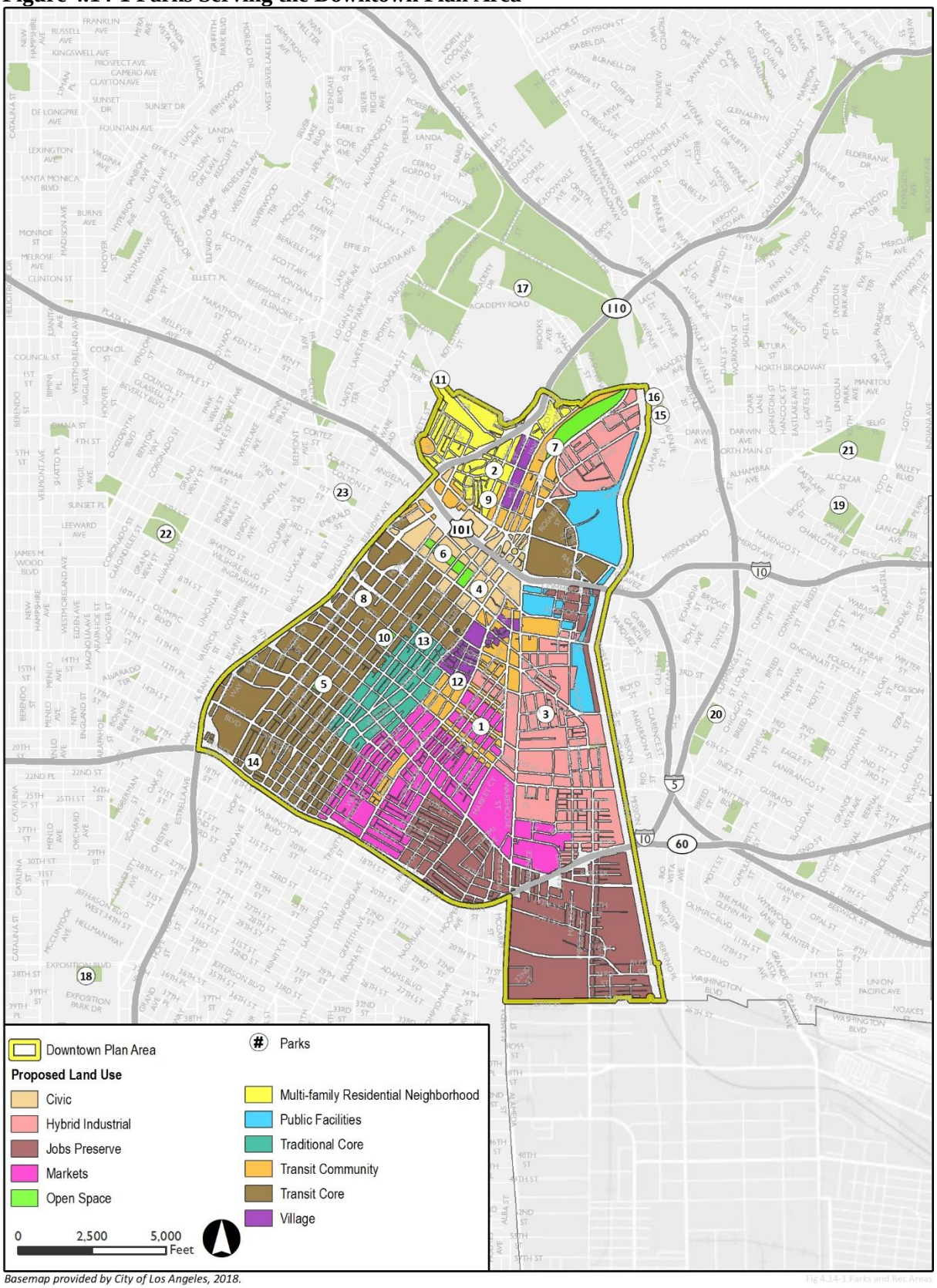
In total, existing parks in and in the vicinity of the Downtown Plan Area provide 853.8 acres of recreational land. Of this total, community, and neighborhood parks (i.e., non-regional parks) account for 244.35 acres, pocket parks account for 9.45 acres, and one regional park (Elysian Park) accounts for 600 acres. A 6.3-acre neighborhood park and a .058-acre pocket park are planned. When completed, these facilities would bring overall parkland to 860.68 acres. Based on the existing Downtown Plan Area population of 76,000, the Downtown Plan Area is currently served by approximately 3.2 acres of neighborhood and community parks per 1,000 residents. Including the planned neighborhood park, there would be about 3.3 acres of neighborhood and community parks per 1,000 residents. Including existing and planned pocket parks, there would be about 3.4 acres of non-regional parks per 1,000 residents (see **Table 4.14-2)**. The Downtown Plan Area currently does not meet the City's 4 acres per 1,000 residents goal for neighborhood and community facilities.

TABLE 4.14-1 PARKS AND RECREATIONAL FACILITIES SERVING THE DOWNTOWN PLAN AREA

Figure No.	Name	Location	Acreage	Park Type
Parks in the Downtown Plan Area				
1	6th and Gladys Park	6th & Gladys St.	0.3	Pocket
2	Alpine Recreation Center	817 Yale St.	1.0	Pocket
3	Arts District Park	501 S Hewitt St	0.5	Pocket
4	City Hall Park Center	200 N Main St	2.0	Pocket
5	Grand Hope Park	919 S Grand Ave	2.5	Pocket
6	Grand Park LA	200 N Grand Ave	12.0	Neighborhood
7	Los Angeles State Historic Park	1245 N Spring St	32.0	Community
8	Maguire Gardens	S Flower St	1.5	Pocket
9	Ord and Yale Street Park (planned)	Ord Street & Yale Street	0.58	Pocket
10	Pershing Square	532 South Olive Street	5.0	Neighborhood
11	Radio Hill Gardens	835 Elysian Park Avenue	27.0	Community
12	San Julian Park	502 San Julian St	0.3	Pocket
13	Spring Street Park	428 S Spring St	1.0	Pocket
14	Venice/Hope Park	1521 S Hope St	0.35	Pocket
Total			**86.03**	
Parks near the Downtown Plan Area				
15	Albion Riverside Park (planned)	1739 N. Albion St.	6.3	Neighborhood
16	Downey Recreation Center	1772 N. Spring Street	4.02	Neighborhood
17	Elysian Park	929 Academy Road,	600.0	Regional
18	Exposition Park (Rose Garden, Museum Lawn, Other lawns)	700 Exposition Park Drive	20.0	Community
19	Hazard Recreation Center	2230 Norfold Street	31.57	Community
20	Hollenbeck Park	415 S. St. Luis Street	21.46	Community
21	Lincoln Park	3501 Valley Boulevard	45.75	Community
22	MacArthur Park	653 S Alvarado St	34.82	Community
23	Vista Hermosa Park	100 N. Toluca St	10.73	Neighborhood
Total			**774.65**	
Neighborhood and Community Parks **Existing** **Planned** **Total**			 **244.35** **6.3** **250.65**	
Pocket Parks **Existing** **Planned** **Total**			 **9.45** **.58** **10.03**	
Regional Park			**600.00**	
Combined Total Park Land **Existing** **Planned** **Total**			 **853.8** **6.88** **860.68**	

SOURCE: Google Earth, DRP 2012.

Figure 4.14-1 Parks Serving the Downtown Plan Area



Basemap provided by City of Los Angeles, 2018.

TABLE 4.14-2 EXISTING DEMAND FOR RECREATIONAL FACILITIES

Non-Regional Park Acreage	Acres per 1,000 Persons	Goal	Meets Goal?
Neighborhood/Community Only Existing Existing + Planned	 3.2 3.3	4 acres of Neighborhood and Community Facilities per 1,000 persons	No
Neighborhood, Community & Pocket Existing Existing + Planned	 3.3 3.4		

Acres per 1,000 persons based on the total acreages from **Table 4.14-1** and the current Downtown Plan Area population of 76,000. The City's 4 acres per 1,000 residents goal relates to non-regional parks does not specifically include pocket parks so totals have been provided both with and without pocket parks.

REGULATORY FRAMEWORK

STATE

Quimby Act

The California State Legislature established the Quimby Act and codified it as California Government Code Section 66477 in 1965. The Quimby Act allows the legislative body of a city or county to establish an ordinance requiring the dedication of land, payment of fees in lieu thereof, or a combination of both, for the provision of parks or recreational facilities as a condition to the approval of a tentative tract map or parcel map. LAMC establishes the Quimby in-lieu fees for subdivisions with 50 units or more and provides guidance for park land dedication in accordance with the Quimby Act. LAMC also establishes a park mitigation fee for residential projects that are not subdivision projects, which are non-Quimby impact fees.

State Public Park Preservation Act of 1971 (PRC Section 5400–5409)

This act provides for no net loss of parkland and facilities by prohibiting cities and counties from acquiring any real property that is in use as a public park for any non-park use unless compensation or land, or both, are provided to replace the parkland acquired.

CITYWIDE

City of Los Angeles General Plan, Framework Element and Service Systems Element-Public Recreation Plan

The Public Recreation Plan of the General Plan Service Systems Element identifies existing recreational facilities and parks in the City of Los Angeles and categorizes parks into three types: neighborhood, community, and regional. Ideally, neighborhood parks have a service radius of approximately half a mile and are pedestrian-accessible without crossing a major arterial street or highway/freeway. Community parks have a service radius of two miles and are easily accessible to the area served. Regional parks provide specialized recreational facilities and/or attractions and have a service radius encompassing the entire Los Angeles region.

The Public Recreation Plan also provides the City's park standards expressed in area of parkland per population. The standards are 2 acres of neighborhood park and 2 acres of community park per 1,000 residents for, or 4 acres of some combination of neighborhood and community parks per 1,000 residents,

and a minimum of six acres of regional recreational facilities for every 1,000 residents for long-range needs; a minimum of one acre of neighborhood and community parks for every 1,000 residents to meet short- and intermediate-range standards and the overall provision of one acre of land per 1,000 residents for total recreational facilities. Per the Public Recreation Plan, neighborhood parks are defined as having a service radius of a one-half-mile and a desirable size of at least five acres (ideally 10 acres); community parks are defined as having a service radius of two miles and a desirable size of at least 15 acres (ideally 20 acres); and regional parks are defined as serving the city and region and a size of over 50 acres (Los Angeles 1980). The Public Recreation Plan also states that the types of amenities (e.g., recreation center, gym, basketball courts, etc.) offered on public parks and recreation land should be considered when determining the adequacy of park space.

LAMC Chapter II, Section 21.10.3(a)(1)

Under LAMC Chapter II, Section 21.10.3(a)(1) (Dwelling Unit Construction Tax), the City imposes a tax of $200 on every person who constructs or causes to be constructed any new dwelling unit in which the person has an equity or title. The tax is paid to the Department of Building and Safety and placed into a "Park and Recreational Sites and Facilities Fund" to be used exclusively for the acquisition and development of park and recreational sites. If a developer has already paid Quimby fees, or has dedicated in lieu parkland or recreational facilities, the park fees required may be reduced accordingly.

City of Los Angeles General Plan Framework

Chapter 9 of the City's Framework Element includes objectives and policies applicable to parks, which are summarized in **Table 4.14-3**.

TABLE 4.14-3 RELEVANT GENERAL PLAN PARK GOALS, OBJECTIVES, AND POLICIES

Framework Element – Chapter 9, Infrastructure and Public Services	
Policy 9.23.2	Prioritize the implementation of recreation and park project in areas of the City with the greatest existing deficiencies.
Policy 9.23.5	Re-evaluate the current park standards and develop modified standards which recognize urban parks, including multi-level facilities, smaller sites, more intense use of land, public/private partnerships and so on.
Policy 9.23.7	Establish guidelines for developing non-traditional public park spaces like community gardens, farmer's markets, and public plazas.
Policy 9.24.1	Phase the development of new programs and facilities to accommodate projected growth.

SOURCE: City of Los Angeles, The Citywide General Plan Framework, An Element of the City of Los Angeles General Plan, re-adopted 2001.

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the *CEQA Guidelines*, the Proposed Project would have significant impacts related to parks and recreational facilities if it would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated (Threshold 4.14-1)
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment (Threshold 4.14-2)

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. (Threshold 4.14-3)

METHODOLOGY

An impact related to recreation would occur if the Downtown Plan promotes growth patterns resulting in:

- The need for and/or the provision of new or physically altered park, the construction of which would cause significant environmental impacts in order to maintain service ratios, response times, or other performance objectives, or
- The increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

The need for or deficiency in park facilities to serve the residents or users of the Downtown Plan Area or the City is not in and of itself a CEQA impact, but a social or economic impact (*City of Hayward v. Board of Trustees* (2015) 242 Cal.App. 4th 833, 843). To the extent that the Downtown Plan causes a need for additional recreational services and facilities and that results in the construction of new facilities or additions to existing facilities and the impact from that construction results in a potential impact to the environment that is an environmental impact under CEQA that needs to be assessed in this EIR. Additionally, the deterioration of existing recreational facilities and parks caused by the Downtown Plan or New Zoning Code is an environmental impact under CEQA that needs to be assessed in the EIR. Any discussion in this EIR of social or economic impacts that relates solely to the level of recreational services provided to the residents or users of the Downtown Plan Area and its surrounding community, including any existing or future needs and deficiencies, is not determinant on its own of environmental impacts under CEQA, unless those social or economic impacts result in physical impacts. The ultimate determination of whether there is a significant impact related to park/recreational services is based on whether a significant physical impact to the environment would result from the construction of new or altered park/recreational facilities or where existing park and recreational facilities would be substantially physically deteriorated as a result of the implementation of the Downtown Plan or New Zoning Code.

This analysis estimates the number of residents that would be generated by implementation of the Proposed Project and assesses whether existing and planned public parks would have sufficient available capacity to accommodate additional users and whether new facilities would need to be constructed, the construction of which would cause significant environmental impacts; and whether the Proposed Project would result in substantial physical deterioration of park/recreational facilities.

PROJECT IMPACTS

Threshold 4.14-1	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Impact 4.14-1 **Downtown Plan:** Reasonably anticipated development from the Downtown Plan would increase the use of existing park and recreational facilities in and adjacent to the Downtown Plan Area. Due to the substantial population growth that would result from implementation of the Downtown Plan and lack of development capacity for new parks in the Downtown Plan Area, Downtown Plan implementation could accelerate the deterioration of existing parks in and around

the Downtown Plan Area. Such impacts to existing recreational facilities would be ***significant and unavoidable***.

New Zoning Code: Due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur, and therefore any impacts on the use of existing neighborhood and regional parks or other recreational facilities would be speculative. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The impact would be ***less than significant*** citywide.

Downtown Plan Impact

Downtown Plan development is anticipated to increase the population of the Downtown Plan Area from 76,000 to 252,000 by 2040. This increase in population would augment the use of existing and planned parks and recreational facilities in and near the Downtown Plan Area, particularly in areas that are designated for residential development under the Downtown Plan. The following land use designations proposed in the Downtown Plan would support residential development: Medium Residential Neighborhood, Villages, Community Center, Transit Core, and Traditional Core. All of these uses would support higher-density, multi-unit residential uses and would be spread throughout the Central City Community Plan Area and the northern portion of the Central City North Community Plan Area. Limited residential development would also be supported by the Markets and Hybrid Industrial land use designations. As shown in **Figure 4.14-1**, all existing recreational facilities in and near the Downtown Plan Area are within the service radius of proposed land uses that support residential development. Thus, Downtown Plan development and associated population growth and park use would contribute to the deterioration of the existing and planned recreational facilities listed in **Table 4.14-1**.

Developers of future residential projects in the Downtown Plan Area would be required to pay park mitigation fees (for non-subdivision projects) or dedicate land or pay Quimby in-lieu fees (for subdivision projects). Park fee amounts are reviewed and updated annually by the City. Payment of impact fees and the anticipated enhancement or maintenance of facilities with funds provided by these fees would help offset the deterioration of existing recreation facilities. The Downtown Plan promotes the provision of publicly accessible open space by offering development incentives for projects in exchange for providing community benefits such as affordable housing, community facilities and open space. The Downtown Plan would also include policies to support the provision of new recreational facilities, such as the following:

- **LU 25.3.** Promote the conversion of targeted alleys into active, recreational, and pedestrian-oriented spaces.
- **LU 29.9.** Enhance the public realm, with inviting streets, pathways, and a variety of publicly accessible open spaces for recreation, rest, and gathering.
- **LU 29.11.** Coordinate with residents and community organizations to provide opportunities for daytime activities in the neighborhood with recreational centers, libraries, and managed open spaces with engaging and culturally relevant programming
- **LU 37.2.** Encourage innovative methods to incorporate onsite landscaping, as well as open and recreational space on projects with high lot coverage.

Additional Downtown Plan policies supporting the preservation and provision of new parks are listed below under the discussion of Thresholds 4.14-2 and 4.14-3.

Existing regulations and Downtown Plan policies would provide funding for the provision of new recreational facilities and some Downtown Plan policies would also support the maintenance of existing facilities. However, as discussed in the Setting, existing and planned parks serving the Downtown Plan Area currently fail to meet the City's four acres per 1,000 residents goal for neighborhood and community parks; therefore, although recreational needs are often met in different ways in highly urban settings (e.g., use of private gymnasiums and recreational facilities, use of public rights-of-way for walking and jogging), the more than threefold increase in population accommodated by the Downtown Plan combined with the constraints on new park development in Downtown Los Angeles (discussed under Impacts 4.14-2 and 4.14-3 below) would be expected to substantially increase demands upon existing recreational facilities. All of the parks listed in **Table 4.14-1** could be adversely affected by the increase in population for the Downtown Plan Area, which may cause and accelerate deterioration of those existing parks. Impacts related to the deterioration of existing parks would be ***potentially significant***.

New Zoning Code Impact

As described in the Existing Conditions, there are over 16,000 acres of recreational facilities and 444 park sites owned and operated by the City. The 2012 DRP 50 Parks Initiative indicated that park facilities are not equitably distributed across the City and that many communities do not have parks within a reasonable distance. The New Zoning Code Form Districts would include requirements for outdoor amenity spaces that are common to tenants of a building, with incentives to make the spaces publicly accessible through the outdoor amenity space standards and through the community benefits system. These incentives to create privately-owned public space may provide relief from overuse of any existing facilities. As such, there is potential for future development in some areas of the City to result in more publicly available open space. In addition, the New Zoning Code would incorporate the requirements of the Quimby Act which requires that developers of future residential projects pay park mitigation fees (for non-subdivision projects), or dedicate land or pay Quimby in-lieu fees (for subdivision projects).

However, projecting the location and type of future growth as a result of the New Zoning Code outside of the Downtown Plan Area and any impacts (adverse or beneficial) would be speculative at this time as the Proposed Project only includes an update to the Downtown Plan. Future environmental review of a proposed community plan update and associated zoning districts would analyze potential community- and site-specific impacts to existing neighborhood and regional parks or other recreational facilities. As such, impacts would be ***less than significant.***

Mitigation Measures

Downtown Plan

Because of the lack of available space to develop new parks to serve the anticipated population growth in the Downtown Plan Area, feasible mitigation beyond the policies and initiatives included in the Downtown Plan to enhance Downtown Plan Area recreational opportunities, as described above, is not available. Therefore, this impact would be unavoidably significant.

New Zoning Code

None required.

Significance After Mitigation

Downtown Plan

Because mitigation is not available to address the impact related to deterioration of existing parks, this impact would be ***significant and unavoidable***.

New Zoning Code

Not applicable.

Threshold 4.14-2	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?
Threshold 4.14-3	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?

Impact 4.14-2, 4.14-3

Downtown Plan: Reasonably expected development from the Downtown Plan would increase demand for recreational and park facilities that serve the Downtown Plan Area and would require the construction of new and expanded facilities to meet City park standards. However, based on the urban nature of the Downtown Plan Area and the presence of constraints to the development of large park facilities, the construction and operation of new facilities would not be expected to result in significant environmental impacts. Impacts would be ***less than significant***.

New Zoning Code: Due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Therefore, impacts related to the construction or expansion of recreational facilities regarding substantial adverse physical impacts associated with the provision of new or physically altered parks and recreational facilities would be speculative. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The impact would be ***less than significant*** citywide.

Downtown Plan Impact

As discussed under Impact 4.14-1, future Downtown Plan Area development would increase the population of the Downtown Plan Area by an estimated 176,000 residents, thereby increasing use and demand for parks and recreational facilities. The current Downtown Plan Area's park ratio, not including the two proposed, unbuilt parks, falls below the City standard with 3.2 acres of park per 1,000 residents. In addition, the population of the Downtown Plan Area is expected to increase to approximately 252,000 by 2040 with implementation of the Downtown Plan. Without the construction of new parks, this would further reduce the park ratio to approximately 1.0 acre per 1,000 residents. Approximately 750 acres of new parkland would be needed in the Downtown Plan Area by 2040 to meet the City's park acreage goal.

The Downtown Plan includes a number of policies to support the development of additional park facilities, including the following:

- SO Goal 1. A well maintained, accessible, and highly utilized open space system and public realm network that serves that growing population of downtown residents, workers, and visitors.
- Policy SO 1.2. Prioritize the development of public open space in underserved communities to improve access to open space.
- Policy SO 1.3. Support the creation of different open space typologies, such as parkets, dog parks, and other facilities, to serve a variety of users and needs.
- Policy SO 1.8. Support the development of catalytic new parks and reinvestment into existing parks. Namely:
    - Pershing Square
    - Park 101
    - 6th Street Park
    - A new large park in the Fashion District
- Gil Lindsey Plaza

Based on the City's four acres of neighborhood and community parks per 1,000 persons goal, development facilitated by the Downtown Plan would generate demand for up to 750 acres of new park to meet City standards. For this reason and because Downtown Plan policies support the development of new park facilities, the Downtown Plan is anticipated to result in the construction of new recreational facilities. However, several constraints would limit the number and size of new park facilities constructed in the Downtown Plan Area, including the following:

1. A scarcity of vacant or underused land
2. High cost of real estate in Downtown Los Angeles
3. Competition with other identified community priorities, such as affordable housing

The 50 Parks Initiative exemplifies the kind of park facilities the City is currently implementing and is likely to continue implementing in the dense urban areas of Los Angeles. Most of the parks are pocket parks less than an acre in size with playground structures and exercise machines. These parks typically include zero or minimal structures and green space, and, because they are intended to serve the local community and be accessible by foot and bike, do not provide parking (Ferguson et al. 2014). The construction and operation of such small-scale facilities would be expected to have minimal environmental impacts. For example, it is anticipated that these parks would be located on vacant lots lacking biological or cultural resources; generate minimal vehicle traffic to the site, which would limit air quality, greenhouse gas, noise, and transportation impacts; and be able to accommodate a limited number of people due to their small size, which would reduce park noise levels.

Construction of new of new or expanded neighborhood or pocket park facilities to serve the Downtown Plan Area would occur in an urban center. Construction of new parks would be required to comply with applicable federal, State, and local regulations and policies discussed in this EIR, such as NPDES permit requirements, the City's Tree Ordinance and Noise Ordinance, and the California Building Code, including CALGreen requirements.

Potential environmental impacts of construction and operation of any new parks, as an allowed land use, have been evaluated throughout this EIR. Construction and operational impacts to air, noise, traffic, as well as other impacts of new developments are discussed throughout this EIR. It is not foreseeable that impacts

from the construction of new or expanded parks in the Downtown Plan Area would have greater or different impacts than those identified in this EIR for construction or operations. Similar to other types of development, the construction of new or expanded park facilities could contribute to the significant historic resource and construction noise impacts identified in sections 4.4, *Cultural Resources*, and 4.11, *Noise*, of this EIR. Based on the urban location and the limited land available, the construction of a new park facilities would likely qualify for an infill exemption or result in less–than-significant impacts with standard regulatory compliance measures and project specific design features or project specific mitigation measures identified through a project EIR or mitigated negative declaration. To the extent that any significant impacts could result from the unique characteristics of a specific site, those impacts would be speculative at this time. Furthermore, the construction of a new park facility or expansion of an existing park facility would require a project-specific environmental analysis under CEQA to address any site-specific environmental concerns. Therefore, impacts related to fire protection and emergency services would be ***less than significant.***

New Zoning Code Impact

The New Zoning Code Form Districts would include requirements for outdoor amenity spaces that are common to tenants of a building, with incentives to make the spaces publicly accessible through the outdoor amenity space standards and through the community benefits system. As such, the future application of the new Form Districts outside of the Downtown Plan Area has the potential to result in more privately-owned public space. In addition, the New Zoning Code would incorporate the requirements of the Quimby Act which requires that developers of future residential projects pay park mitigation fees (for non-subdivision projects), or dedicate land or pay Quimby in-lieu fees (for subdivision projects). However, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. The Proposed Project does not propose to implement the New Zoning Code outside of the Downtown Plan Area. Future site-specific approvals may be evaluated with consideration of the EIR under CEQA rules for subsequent approvals.

Projecting the location and type of future growth as a result of the New Zoning Code outside of the Downtown Plan Area would be speculative at this time as this Project only includes an update to the Downtown Plan. In the event that a future proposed park would have the potential for significant environmental effects, the park would need to undergo project-level environmental review under CEQA. As such, the impact would be ***less than significant***.

Mitigation Measures

Downtown Plan

None required.

New Zoning Code

None required.

CUMULATIVE IMPACTS

The geographic area to analyze cumulatively considerable recreation impacts includes the entire City of Los Angeles and surrounding areas. The *Los Angeles Countywide Comprehensive Park & Recreation Needs Assessment*, published in May 2016 by the Los Angeles County Department of Parks and Recreation (LA County DPR), evaluated recreational needs in Los Angeles County, including the City of Los Angeles (LA County DPR 2016). The report identifies many areas of the City as having a "Very High" park need (average of 0.7 acres per 1,000 residents of park land) or "High" park need (average of 1.6 acres per 1,000 residents).

Substantial Deterioration of Existing Parks

Future citywide development is expected to increase the City's residential population from just over 4 million persons in 2017 (DOF 2017) to more than 4.6 million persons in 2040 (SCAG 2016), an increase of about 600,000 residents. This increase would exacerbate the existing need for new or expanded recreational facilities over time. In the absence of new parks, the citywide increase in park demand would be expected to accelerate the deterioration of existing parks, which would be a potentially significant cumulative impact.

As discussed under Impact 4.14-1, the Downtown Plan would result in a potentially significant impact related to the deterioration of existing parks serving the Downtown Plan Area since there is not adequate space to provide sufficient park acreage to meet the projected increase in demand for parks based on the City's adopted standards. This would constitute a cumulatively considerable contribution to the significant cumulative impact related to park deterioration. The New Zoning Code, on the other hand, would not accommodate any specific development and would only be applied when a community plan is updated or through other discretionary review processes. Regardless, no provision of the New Zoning Code would be expected to increase demand for recreational facilities. Thus, this component of the Proposed Project would not contribute to this significant cumulative impact.

The Downtown Plan would make a substantial contribution to cumulative park impacts; thus, its cumulative impact is ***significant and unavoidable***.

Construction/Expansion of Parks

With respect to the construction of new parks, the City is currently in the process of constructing new parks and recreational facilities to serve its residents, as exemplified by the 50 Parks Initiative, and is anticipated to continue to do so in the future to meet increasing demand for parks. Expansion or construction of new pocket, neighborhood, community, and regional parks, or other recreational facilities, would have physical impacts to the environment (e.g., emissions of air pollutants, aesthetics impacts, noise impacts) that may be cumulatively significant. However, the any prediction of the precise impact of these parks is speculative since the size, nature, and location of any new parks are not known at this time.

As discussed under Impacts 4.14-2 and 4.14-3, the Downtown Plan would not result in a significant impact because it would not involve the development of new parks with the potential to result in significant environmental effects. As such, the Downtown Plan would not substantially contribute to the potentially significant cumulative impact associated with new park construction. Similarly, the New Zoning Code would not involve any new park construction and, thus, would not contribute to this potentially significant cumulative impact. Cumulative impacts are ***less than significant***.

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4.15 TRANSPORTATION AND TRAFFIC

This chapter provides an overview of existing and potential future transportation and mobility conditions in the Downtown Plan Area. Topics addressed in this chapter include the environmental setting, circulation and mobility systems, regulatory framework, thresholds of significance, methodology, and mitigation measures related to transportation impacts.

ENVIRONMENTAL SETTING

EXISTING ENVIRONMENTAL SETTING

Overview

Citywide Overview

The City of Los Angeles circulation system facilitates travel by multiple modes including walking, bicycling, public transit, and motor vehicles and includes an extensive network of freeways, highways, and local streets. (City of Los Angeles 2015a). These transportation networks, services, and systems are described in more detail in the following sections.

Downtown Plan Area Overview

The Downtown Plan Area is the Central City and Central City North Community Plan Areas (CPA), which covers the Downtown area of the City of Los Angeles. The analysis evaluates the transportation network within the boundaries of the Downtown Plan Area as well as the surrounding transportation network that could be potentially impacted by the Project. For the purposes of the EIR transportation impact analysis, Existing Conditions (baseline) is defined as Year 2017, which corresponds to the date of the release of the Downtown Plan Notice of Preparation (NOP).

Downtown Los Angeles, like many other urban areas throughout the country, experiences significant traffic congestion. Despite an extensive street network and transit options, vehicular circulation continues to deteriorate due to historical over-reliance on the car as the primary mode of transportation. The combination of many regional destinations, oversaturated roadways, and unreliable travel times for autos and bus transit underlie the need for creating a transportation network for the Downtown Plan Area that will better serve all modes of transportation, improve the efficiency of the overall system, and enhance the livability along major boulevards.

The Downtown Plan Area is served by a network of primarily gridded arterials, though the grid is less defined in the Central City North CPA. Rapid and local bus transit lines operate on most major and minor arterials. Metro, the primary transit provider in the region, also maintains a number of subway and light rail routes, including the Red Line, Purple Line, Gold Line, Blue Line, and Expo Line[1]. Metrolink regional commuter rail is available at Union Station, which serves the regional county area. Pedestrian facilities primarily consist of sidewalks adjacent to roadways, and a limited bicycle network is provided. The transportation network in the Downtown Plan Area is primarily auto- and bus transit-oriented.

[1] Starting as of late 2019,the Red Line is known as B Line, the Purple Line is known as the D Line, the Gold Line is known as the L Line, the Blue Line is known as the A Line, and the Expo line is known as the E Line.

Regional access is provided by the Ventura Freeway (US-101), the Santa Ana Freeway (I-5), the Santa Monica Freeway (I-10), and the Harbor Freeway (I-110/SR-110). There are several key boulevards and avenues, as well as collector and local streets.

Highway and Street System

Citywide Highway and Street System

The roadway network in the City includes seven freeways that traverse the approximately 472 square miles of the City's land area and connect the City to its outer regions. They include Interstate 5, 10, 105, 110, 210, 405, and US Highway 101. The City also includes 11 state highways (SR) including SR 1, 2, 47, 60, 90, 103, 110, 118, 134, 170, and 187 (City of Los Angeles 2015a).

The City contains over 7,500 miles of public streets that accommodate motorized vehicles, including private motorized vehicles, taxis, freight vehicles, and transit vehicles. Pedestrian and bicyclist travel are also important components of the local roadway network. A majority of roadways in the City are aligned on a grid system (City of Los Angeles 2015a). Below is a brief description of the types of facilities in the City based on the City's Mobility Plan 2035 and Complete Streets Design Guide (Los Angeles 2015).

- **Boulevard I (Major Highway Class I).** Class I Boulevards are generally defined as having three to four lanes in each direction along with a median turn lane. The width of a Class I Boulevard is usually 100 feet, with a typical sidewalk width of 18 feet and a target operating speed of 35 miles per hour (mph).
- **Boulevard II (Major Highway Class II).** Class II Boulevards are generally defined as having two to three lanes in each direction along with a median turn lane. The width of a Class II Boulevard is usually 80 feet, with a typical sidewalk width of 15 feet and a target operating speed of 35 mph.
- **Avenue I (Secondary Highway).** Class I Avenues typically have one to two lanes in each direction, a roadway width of 70 feet, a sidewalk width of 15 feet and a target operating speed of 35 mph. An Avenue I typically includes streets with a high amount of retail uses and local destinations.
- **Avenue II (Secondary Highway).** Avenue II streets usually have one to two lanes in each direction, with a typical roadway width of 56 feet, a typical sidewalk width of 15 feet and a target operating speed of 30 mph. Such streets are typically located in parts of the City with dense active uses, and a lively pedestrian environment.
- **Avenue III (Secondary Highway).** Avenue III streets are defined to have one to two lanes in each direction, with a roadway width of 46 feet, a sidewalk width of 15 feet, and a target operating speed of 25 mph. This classification was developed to maintain roadway width in older, more historic parts of the City.
- **Collector Street.** Collector Streets generally have one travel lane in each direction, with a roadway width of 40 feet and a sidewalk width of 13 feet. The target operating speed for Collector Streets is 25 mph. Such streets are typically intended for vehicle trips that start or end in the immediate vicinity of the street.
- **Industrial Collector Street.** Industrial Collector Streets vary from normal collector streets in that larger curb returns are incorporated to allow for the wider turning radii of trucks.
- **Local Street Standard.** Local Street Standard roadways typically have one lane in each direction, and are designed to have a 36-foot width, 12-foot sidewalks, and a target operating speed of 20 mph. Such streets are not designed for through traffic; rather, their focus is to allow access to and from destination points. Unrestricted parking is typically available on both sides of the street.

- **Local Street Limited.** Local Street Limited roadways typically have one lane in each direction, and are designed to have a 30-foot width, 10-foot sidewalks, and a target operating speed of 15 mph.
- **Industrial Local Street.** Although similar to the normal local streets, Industrial Local Streets differ primarily in width for the purpose of providing adequate space for trucks to maneuver. The typical roadway width for an Industrial Local Street is 44 feet, with 10-foot sidewalks and a target operating speed of 20 mph.
- **Pedestrian Walkway.** Pedestrian Walkways are designed for pedestrian use but are also appropriate for slow-moving bicyclists. Pedestrian Walkways have a width of 10 to 25 feet.
- **Shared Street.** Shared Streets provide a slow-speed environment where cars, bike, pedestrians, and scooters are able to comfortably utilize the street. Shared Streets have a minimum width of 20 feet with 5-foot buffer zones and a target operating speed of 5 mph.
- **Access Roadway.** Access Roadways are designed to have a width of 20 feet and are limited to private streets only that access no more than four dwelling units and are a maximum of 300 feet in length.
- **One-Way Service Road – Adjoining Arterial Street.** One-Way Service Roads typically have a width of 12 to 18 feet with a 3-foot curb separation from arterial streets.
- **Bi-Directional Service Road – Adjoining Arterial Streets.** Bi-Directional Service Roads typically have a width of 20 to 28 feet with a 3-foot curb separation from arterial streets.
- **Hillside Collector Street.** Hillside Collector Streets vary from normal collector streets in that sidewalks have a width of 5 feet and the target operating speed is 15mph. On-street parking is provided on both sides of the street.
- **Hillside Local Street.** Hillside Local Streets vary from normal local streets in that sidewalks have a width of 4 feet and the target operating speed is 15 mph. On-street parking is provided on both sides of the street.
- **Hillside Street Standard.** Hillside Street Standard roadways typically have one lane in each direction and are designed to have a 28-foot width, 4-foot sidewalks, and a target operating speed of 10 mph. On-street parking is provided on one side of the street.
- **Hillside Street Limited.** Hillside Street Limited roadways typically have one land in each direction and are designed to have a 20-foot width, 3-foot sidewalks, and a target operating speed of 10 mph. On-street parking is provided on one side of the street.
- **Modified Streets.** Many streets are identified under a specific roadway classification, but with a modification generally due to available width on smaller, historic streets. In these cases, typical number of lanes and traffic volumes are similar to the non-modified versions, but lane widths or available parking may be diminished.
- **Signalized Intersections and Traffic Control Devices.** The City of Los Angeles' Automated Traffic Surveillance and Control (ATSAC) system is a computer-based traffic signal control system that monitors traffic conditions and system performance to allow ATSAC operations to manage signal timing to improve traffic flow conditions. This system allows monitoring and control of the signal from a central Traffic Operations Center at City Hall. The importance of linking to the ATSAC system is the ability to coordinate the signals in relationship with other signals along a travel corridor. Signal coordination minimizes delay due to stops and enhances vehicle flow. Studies by LADOT and independent third parties have shown that the ATSAC system reduces congestion and increases average travel speeds (LADOT 2016a). The Adaptive Traffic Control System (ATCS) is an enhancement to ATSAC and provides fully traffic-adaptive signal control based on real-time traffic conditions. In addition, LADOT staff can manually adjust traffic signals

remotely from the department's command center to respond to collisions, weather, special events, and other emergencies. All signalized intersections in the Downtown Plan Area are currently operating under the City's ATSAC system and ATCS control.

Downtown Plan Area Highway and Street System

The roadway network in the Downtown Plan Area ranges from major freeways, such as US-101, I-5, I-10, and I-110/SR-110, to neighborhood-serving local roadways. **Figure 4.15-1**, Roadway Network, displays the roadways within the Downtown Plan Area and illustrates the classification of roadway facilities. The Downtown Plan Area contains the following types of facilities based on the City's Mobility Plan 2035 and Complete Streets Design Guide as described above: Boulevard I, Boulevard II, Avenue I, Avenue II, Avenue III, Collector Street, Local Street, and Modified Streets.

Existing Transportation Operations

This section presents existing transportation conditions by applying the newly approved method of studying vehicle miles traveled (VMT) to evaluate significant traffic impacts under CEQA. VMT is a measure of the number of miles driven within a defined area and are based on the number of vehicle trips (VT) multiplied by the average trip length in miles for various trip types. To obtain an average VMT per service population, the total VMT is divided by the total population and employees within the area of analysis. The section that follows provides a brief summary of these characteristics for the City of Los Angeles, and provides a detailed summary of these characteristics for the Downtown Plan Area. For more information on the use of VMT as an impact threshold, see the *Environmental Impacts* section.

Citywide Existing Transportation Operations

The City of Los Angeles' Travel Demand Forecasting Model estimates the mode split of existing (2017) peak period trips. It is estimated that nearly 80 percent of peak period person trips are made by automobile, over 13 percent by walking, almost 5 percent by transit, and over 1 percent by bicycle.

Downtown Plan Area Existing Transportation Operations

Vehicle Miles Traveled

The trip generation estimated by the Travel Demand Forecasting (TDF) model was categorized according to the origin and destination of each trip. In the following discussion regarding VMT calculation using origins and destinations, internal trips are referred to with an "I" and external trips are referred to with an "X". Internal-to-internal (II) trips remain within the Downtown Plan Area. Internal-to-external (IX) trips originate within the Downtown Plan Area and terminate at an outside destination. External-to-internal (XI) trips originate outside the Downtown Plan Area and terminate within it. The VMT calculation accounts for all internal (II) trips and trips that begin or end (IX or XI) within the Downtown Plan Area, as these trips are generated by or attracted to land uses within the Downtown Plan area. The travel behavior effects of land use and network changes within Downtown can be understood by measuring the VMT of trips originating in and/or destined for the Downtown Plan Area.

VMT is reported as Total Daily VMT per Service Population, which equates to all VMT for the Plan Area divided by the number of people living and working within the Plan Area. For more information on the use of VMT and service population, see the *Environmental Impacts* section.

An alternative method for measuring VMT is known as the "boundary method", which accounts for all vehicle miles traveled strictly within the border of a defined area. This method would include VMT for trips passing through, but not originating in or destined for, the Downtown Plan Area. Although a valid method for measuring VMT, it less effectively measures the regional travel effects of Downtown land uses,

Figure 4.15-1 Existing Roadway Network

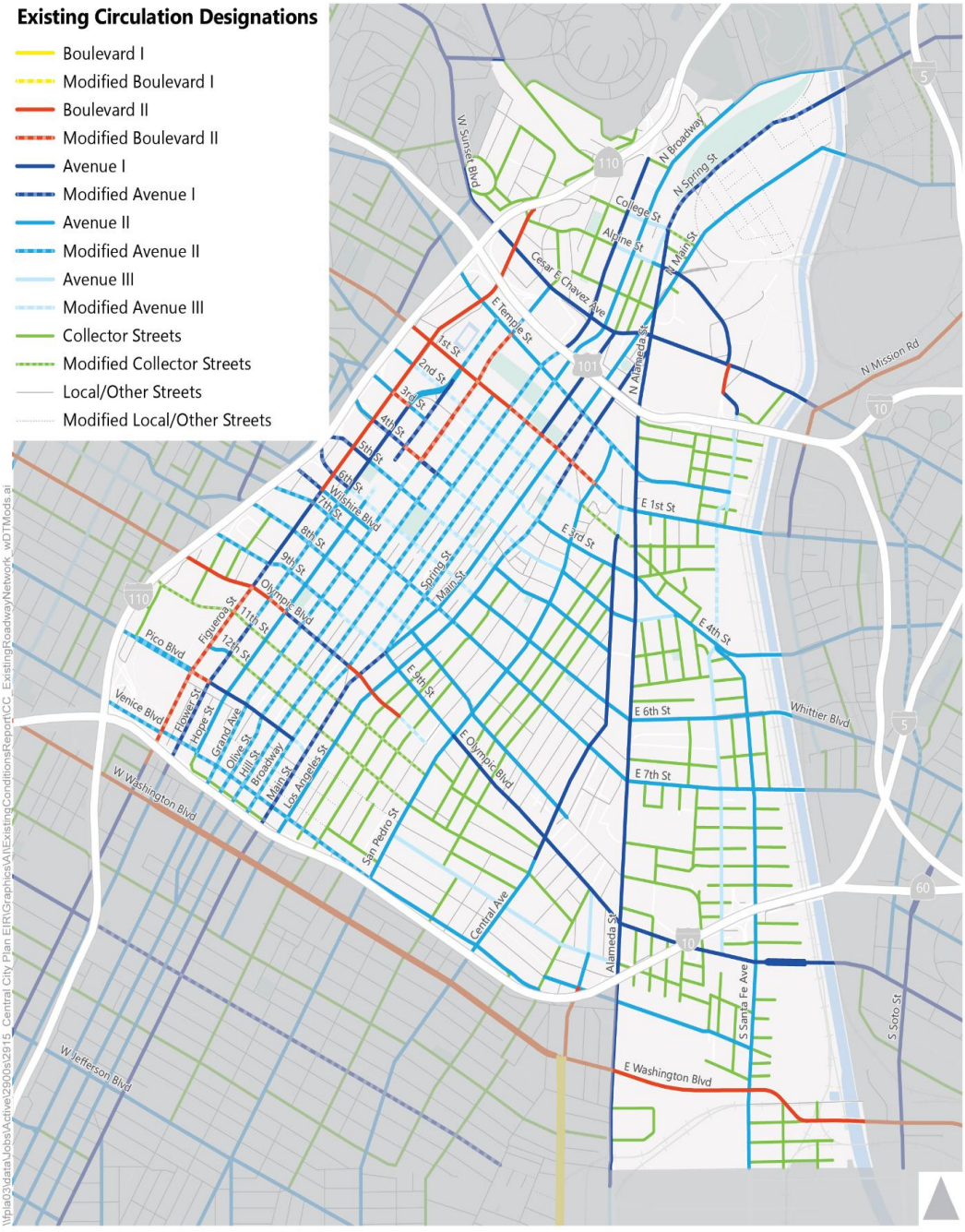


Figure 4.15-1
Existing Roadway Network

and includes travel that passes through Downtown, which is unrelated to the Community Plan land uses. This method was not used to calculate VMT for the purposes of this report.

The tables below summarize the travel characteristics under Existing Conditions for the Downtown Plan Area. **Table 4.15-1** presents the model estimates of vehicle mode split for automobiles, transit, bicycles and walk trips. According to model estimates, approximately 28% of all trips within the Downtown Plan Area are made by transit, walking or biking. This is 8% more than trips across the City of Los Angeles at large.

TABLE 4.15-1 2017 MODE SPLIT

Travel Mode	Downtown Plan Area Percentage (%)	Citywide Percentage (%)
Automobile	72%	80%
Non-Automobile (transit/bike/walk)	28%	20%
SOURCE: Fehr & Peers, *Downtown Subarea TDF Model*, 2019.		

Table 4.15-2 summarizes the Daily vehicle trips (VT) and VMT within the Downtown Plan Area. **Table 4.15-3** summarizes the Daily vehicle trips (VT) and VMT Citywide. **Table 4.15-4** summarizes the Daily vehicle trips (VT) and VMT Regional-wide based on 2016 SCAG TDF model.

TABLE 4.15-2 2017 DOWNTOWN PLAN DAILY VEHICLE TRIPS AND VEHICLE MILES TRAVELED

Transportation Metrics	Daily Total
Vehicle Trips (VT)	758,000
Total Vehicle Miles Traveled (VMT)	5,767,000
Vehicle Miles Traveled per Service Population	19.6
SOURCE: Fehr & Peers, *Downtown Subarea TDF Model*, 2019.	

TABLE 4.15-3 2017 CITYWIDE DAILY VEHICLE TRIPS AND VEHICLE MILES TRAVELED

Transportation Metrics	Daily Total
Vehicle Trips (VT)	17,197,000
Total Vehicle Miles Traveled (VMT)	133,424,000
Vehicle Miles Traveled per Service Population	23.1
SOURCE: Fehr & Peers, *Downtown Subarea TDF Model*, 2019.	

TABLE 4.15-4 2016 SCAG REGIONWIDE DAILY VEHICLE TRIPS AND VEHICLE MILES TRAVELED

Transportation Metrics	Daily Total
Vehicle Trips (VT)	82,283,000
Total Vehicle Miles Traveled (VMT)	908,573,000
Vehicle Miles Traveled per Service Population	33.9
SOURCE: Fehr & Peers, *SCAG 2016 RTP Model*, 2016.	

The Daily VMT generated by uses from, to, and within the Downtown Plan Area is approximately 5,767,000 miles, which equates to 19.6 VMT per service population. Citywide, the TDF Model estimates a total of 17,197,000 daily vehicle trips for a total of 133,424,000 daily vehicle miles traveled. This results in an average daily VMT per service population of 23.1. Regional-wide, the SCAG Model estimates a total of 82,283,000 daily vehicle trips for a total of 908,573,000 daily vehicle miles traveled. This results in an average daily VMT per service population of 33.9.

Level of Service (LOS)

Another way to understand existing traffic conditions is to study existing traffic volumes with an analysis of the operating conditions, indicated through volume-to-capacity (V/C) ratios and Level of Service (LOS). LOS was used previously as the primary method for determining CEQA transportation-related impacts but is now being used for informational purposes. Recent changes in state legislation and the related guidance from OPR have moved analysis to VMT in order to support statewide GHG goals and encourage multi-modality in our cities. Traditional mitigation measures to address increases in vehicle delay often involved increasing capacity (i.e., the width of a roadway or intersection), which has the potential to induce more trips/VMT and does not support State goals.

As an informational metric, LOS is a measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. LOS can be determined by dividing the number of vehicles (i.e., volume (V)) by roadway capacity (C), and the resulting V/C ratio is then used to obtain the corresponding LOS. To determine the operations of the roadway network during peak commute hours, a LOS analysis was conducted for the roadways in the Downtown Plan Area.

The highest peak period traffic volume during the AM peak period (6AM – 9 AM) or PM peak period (3 PM – 7PM) on roadways within the Downtown Plan Area are displayed in **Figure 4.15-2** and **Figure 4.15-3**, AM Peak Period Level of Service and PM Peak Period Level of Service, respectively. It should be noted that because traffic volumes are a result of the collective travel choices of thousands of individual drivers, variation in the daily and peak period volumes on any given facility is both expected and observed. The Federal Highway Administration (FHWA) guidelines recommend traffic models are calibrated to within 7 to 15% for freeway and arterial volumes to account for this regular variation. This range is based on studies that show that this range represents the average daily fluctuation in traffic for major roadways. Accordingly, the estimates of both existing and future conditions are subject to regular variation due to fluctuations in travel demand (or the travel choices of the thousands of individual drivers using the Downtown Plan Area roadways).

The LOS of the study corridors was determined based on the V/C ratio using the Downtown Plan subarea TDF model. This ratio was calculated by comparing peak period traffic volumes to the roadway capacity for each facility. The roadway capacities reflect the operating characteristics of the study corridors, such as functional classifications, number of lanes, and travel speeds. Functional classification is a scale that determines the vehicles-per-lane-per-hour capacity; higher classifications generally have more and wider lanes and are designed to facilitate a higher volume of vehicles per hour. **Table 4.15-5** summarizes the typical travel conditions for the roadway network (using a weighted average V/C ratio) and the percentage of roadway segments operating at LOS E or F. The weighted average V/C ratio represents typical travel conditions for the roadway network in the Downtown Plan Area.

TABLE 4.15-5 EXISTING 2017 ROADWAY SEGMENT LEVEL OF SERVICE (LOS)

Transportation Metrics	Analyzed Time Period	
	AM Peak Period	PM Peak Period
Weighted Average V/C	0.63 (LOS B)	0.65 (LOS B)
Percentage (%) of Street Segments at LOS E or F	14%	16%
Weighted Average V/C by Facility Type		
Avenue	0.63 (LOS B)	0.65 (LOS B)
Boulevard	0.64 (LOS B)	0.68 (LOS B)
Local / Collector	0.57 (LOS A)	0.58 (LOS A)

SOURCE: Downtown Subarea TDF Model, Fehr & Peers, 2019.

Approximately 14-16% of the roadways operate at an LOS E or F during the AM and PM peak periods. The weighted average V/C ratio is 0.63 (LOS B) in the AM peak period and 0.65 (LOS B) in the PM peak period. As a general matter, this means approximately 14-16% of the road network (Avenues, Boulevards, and Local/Collector streets) in the Central City and Central City North area experiences substantial delay during the peak period, and while much of the network is far from reaching the limits of its capacity.

Reliability

Citywide and Downtown Plan Area Reliability

The VMT results presented in this section reflect typical weekday (Tuesday through Thursday) conditions within the Los Angeles Model and the Downtown Plan Area without major incidents and under mild weather conditions. Atypical traffic conditions, such as a collision on the freeway, rainy weather or a special event, can impact travelers in a given plan area. The reliability of the roadway network can be impacted by these occurrences and is a common frustration for drivers. The bus transit system can also be affected by these events.

Emergency Access

Citywide Emergency Access

California state law requires that drivers yield the right-of-way to emergency vehicles and remain stopped until the emergency vehicles have passed. Generally, multi-lane roadways allow the emergency vehicles to travel at higher speeds and permit other traffic to maneuver out of the path of the emergency vehicle. In addition, the LAFD in collaboration with LADOT has developed a Fire Preemption System (FPS), a system that automatically turns traffic lights to green for emergency vehicles travelling on designated streets in the City (LADOT 2016a). The City has over 205 miles of routes equipped with FPS (LAFD 2008).

Within the City of Los Angeles, fire prevention and suppression and emergency medical services are provided by the LAFD. Public protection service and law enforcement are provided by LAPD. New development projects in the City may increase the demand for fire protection and emergency medical services, and the LAFD evaluates new project impacts on a project-by-project basis. Consideration is given to project size and components, required fire-flow, response time and distance for engine and truck companies, fire hydrant sizing and placement standards, access, and potential to use or store hazardous materials (Los Angeles 2006). The adequacy of emergency service may be influenced by factors such as staffing levels, emergency response times, and technology improvements, management strategies, and mutual aid agreements. Every year, LAFD assesses its resources and reallocates them based on demand and need citywide. The provision of new fire stations varies as a function of not only the geographic distribution of physical stations but also due to the availability of fire trucks, ambulances, and other equipment as well as access to reciprocal agreements with neighboring jurisdictions. The City requires that development plans be submitted to the City for review and approval to ensure that new development has adequate access, including driveway access and turning radius in compliance with existing City regulations.[2]

[2] LAMC Section 12.21.A.5 “Design of Parking Facilities”.

Figure 4.15-2 Existing AM Peak Period Level of Service

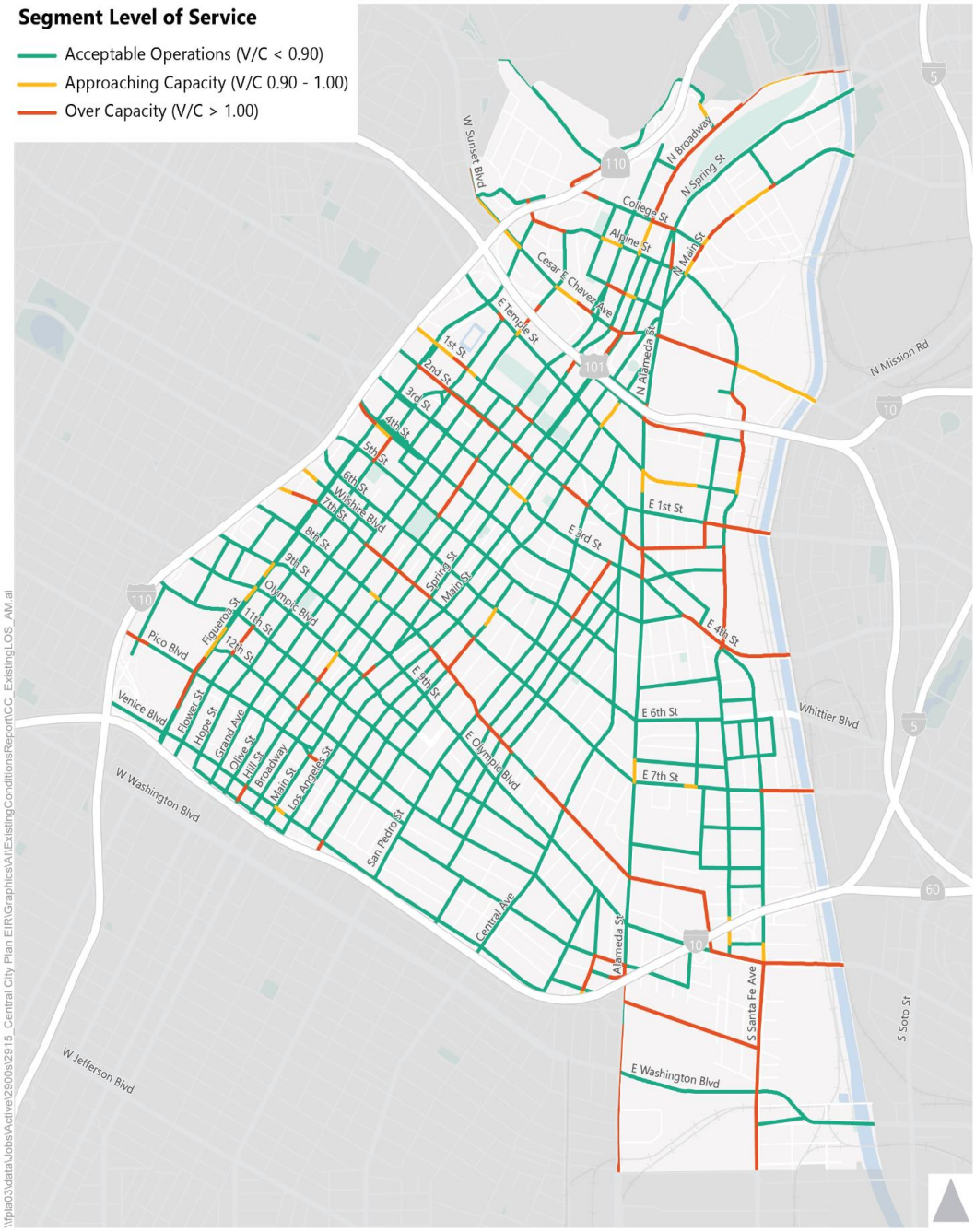


Figure 4.15-2

Existing AM Peak Period Level of Service

Figure 4.15-3 Existing PM Peak Period Level of Service

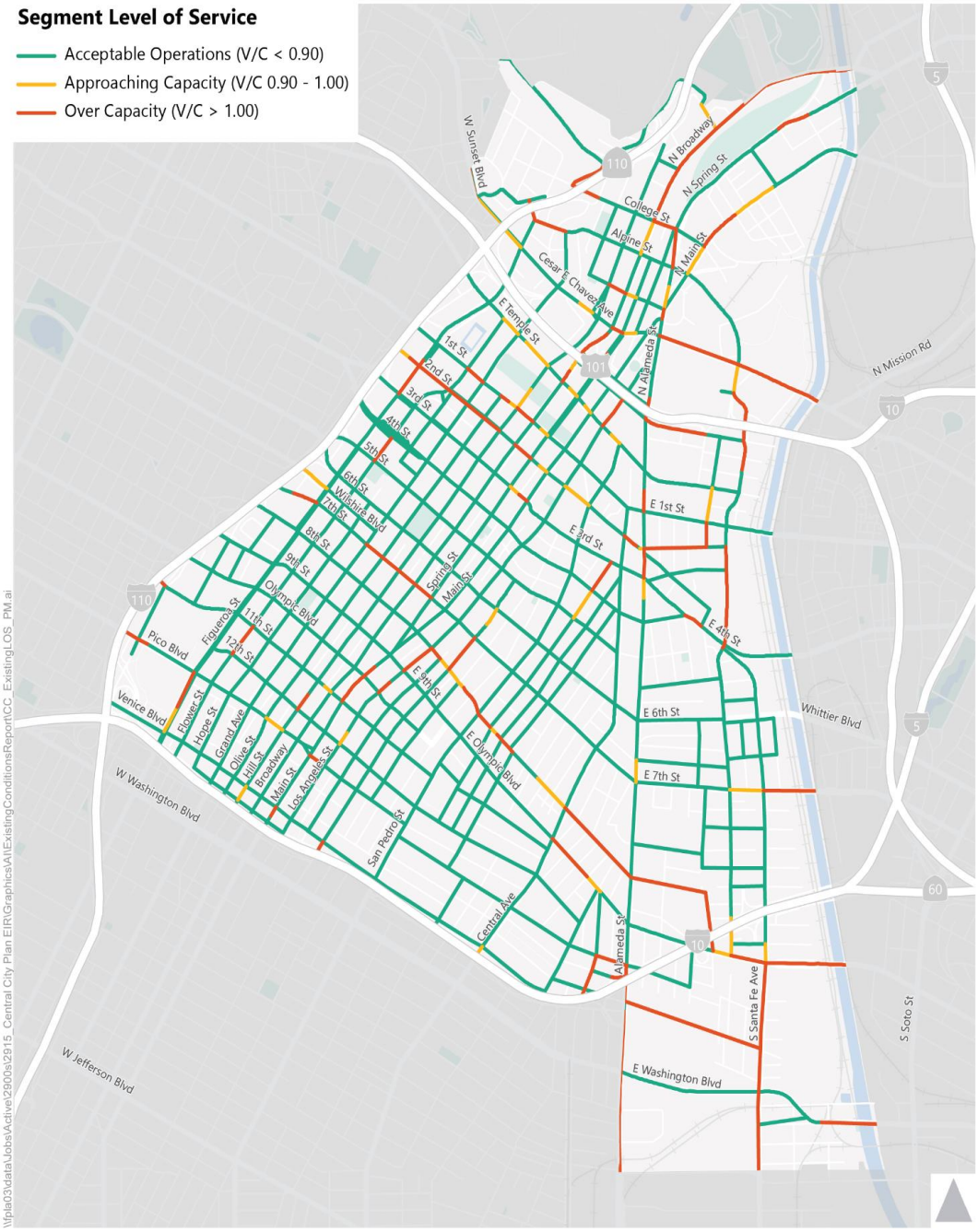


Figure 4.15-3

Existing PM Peak Period Level of Service

Downtown Plan Area Emergency Access

As discussed above, multi-lane roadways allow emergency vehicles to travel at higher speeds and allow other traffic to maneuver out of the path of emergency vehicles. Within the Downtown Plan Area, multi-lane roadways include:

North-South Multi-Lane Roadways

- Figueroa Street*
- Flower Street*
- Hope Street
- Grand Avenue
- Olive Street
- Hill Street
- Broadway †
- Spring Street*
- Main Street* †
- Los Angeles Street
- San Pedro Street
- Central Avenue
- Alameda Street

East-West Multi-Lane Roadways

- Sunset Boulevard/Cesar Chavez Avenue
- Temple Street
- 1st Street
- 3rd Street*
- 4th Street*
- 5th Street*
- 6th Street*†
- Wilshire Boulevard
- 7th Street
- 8th Street*†
- 9th Street*†
- Olympic Boulevard
- 11th Street*
- 12th Street*
- Pico Boulevard
- Venice Boulevard
- Washington Boulevard

*One-way roadways with multiple lanes
†Roadways with segments that narrow or change from one-way to two-way

Additionally, the US-101, I-110 and I-10 freeways provide primary emergency access to and from locations within the Downtown Plan Area. Secondary emergency access routes include Sunset Boulevard/Cesar Chavez Avenue, 1st Street, Figueroa Street, San Pedro Street, and Alameda Street.

Table 4.15-6, following, identifies the existing fire stations in the Plan Area and provides the 2019 average response times for Non-EMS and EMS calls.

TABLE 4.15-6 LAFD FIRE STATIONS SERVING THE DOWNTOWN PLAN AREA

Fire Station	Address	LAFD Community	2019 Average Response Times (mins) /a/	
			Non-EMS	EMS
3	108 N Fremont Ave, Los Angeles, CA 90012	Central Bureau	**06:02**	**06:44**
4	450 E Temple St, Los Angeles, CA 90012	Central Bureau	**6:09**	**6:26**
9	430 East 7th Street Los Angeles, CA 90023 CA	Central Bureau	**06:23**	**06:39**
10	1335 South Olive Street Los Angeles, CA 90015 CA	Central Bureau	**06:23**	**06:23**
17	1601 South Santa Fe Avenue Los Angeles, CA 90021 CA	Central Bureau	**06:23**	**06:39**

Note: Non-EMS = fire and other services; EMS = Emergency Medical Services
/a/ Average response metrics for January-October 2019.
SOURCE: LAFD, *FireStatLA*, www.lafd.org, Navigate LA, 2019.

Public Transit Service

Citywide Public Transit Service

The primary origin/destination for transit in Downtown Los Angeles and the city at large is Los Angeles Union Station. Located in the north east portion of the Downtown Plan area, Union Station was built in 1939 to serve as a terminal for local railroads. Today, it serves as a major transportation hub for the region, with Metro, Metrolink, and Amtrak train service, as well as bus service from multiple operators.

Services are provided by multiple transit operators, including Metro Rail, Rapid buses, Express buses, Local buses, LADOT Commuter Express buses, Downtown Area Short Hop (DASH) buses, and other local operators. Below are brief descriptions of the transit operators that provide service within the City:

Metro

Metro is the primary transit operator in Los Angeles County, providing bus, light rail, and subway services as described below.

- Rail & Bus Rapid Transit: There are two Metro heavy rail lines (Red and Purple), four Metro light rail lines (Blue, Green, Gold, Expo) and two bus rapid transit (BRT) lines (Orange and Silver) operating in exclusive rights-of-way. Headways for Metro rail and bus rapid transit lines are typically as frequent as 15 minutes or less. Bicycles are allowed in designated areas on Metro trains at no extra charge.
- Rapid, Express & Local Bus Lines: Metro also operates approximately 180 bus routes in mixed traffic, with services varying considerably in speed, frequency and capacity. Headways for Metro Rapid buses are typically 10 minutes during peak hours, and 20 minutes during off-peak times. Metro Express buses operate during peak hours only. All buses are equipped with two bicycle racks at the front of the bus, and bicyclists may load their bicycles on the rack when there is space available at no extra charge. If the rack is full, bicyclists are asked to wait for the next bus.

LADOT

LADOT provides local Downtown Area Short Hop (DASH) buses and Commuter Express bus services in the City of Los Angeles. DASH operates 32 community circulator routes covering Downtown Los Angeles and many outlying communities within the City. DASH buses provide local access in addition to first/last-mile connections to and from Metro Rail stations. Headways for DASH buses vary between 5-20 minutes depending on the selected route. The Commuter Express operates 14 routes, making a limited number of stops and transporting passengers between Downtown Los Angeles and other major centers within the City. Most Commuter Express routes operate during the peak hours only in the peak direction. All LADOT buses are equipped with three bicycle racks at the front of the bus, and bicyclists may load their bicycles on the rack when there is space available at no extra charge. If the rack is full, bicyclists are asked to wait for the next bus.

Metrolink

Metrolink operates on seven routes across six-counties, including Los Angeles, Orange, Riverside, San Bernardino, Ventura, and a portion of northern San Diego County. Each Metrolink train accommodates three bicycles on the lower level at no extra charge. To accommodate more bicycles on select trains, "bike cars" (identified with yellow decals on the side of the train) have been added to hold up to nine bikes on the lower level. All Metrolink lines operate during the peak hours only in the peak direction. The following Metrolink services operate within and through the City:

- Antelope Valley Line
- Inland Empire – Orange County Line
- Orange County Line
- Riverside Line
- San Bernardino Line
- Ventura County Line
- 91/Perris Valley Line

Amtrak – Pacific Surfliner

Amtrak is a nationwide rail network, serving more than 500 destinations in 46 states, the District of Columbia and three Canadian provinces. The Pacific Surfliner, which operates within and through the Downtown Plan Area, connects San Luis Obispo and San Diego through Los Angeles and Santa Barbara. This line offered 11 daily round-trip services between San Diego and Los Angeles as of 2017, and five between Santa Barbara and San Diego. Each Amtrak train can accommodate 6 bicycles per train and must be stored in designated racks. Passengers are recommended to make reservations for bicycle racks at no extra cost.

LAX FlyAway – Union Station

The LAX FlyAway buses offer daily, regularly scheduled round-trips between each terminal at LAX and six locations (Hollywood, Long Beach, Orange Line, Union Station, Van Nuys, and Westwood). FlyAway buses provide services every 30 minutes to an hour. Bicycle racks are not provided on these buses. In Downtown Los Angeles, Flyaway buses depart from Union Station at the Patsaouras Transit Plaza on the east side of the facility.

Other Transit Operators

There are several other transit operators with routes throughout the City: Antelope Valley Transit Authority, Foothill Transit, Gardena GTrans, Greyhound Buses, Montebello Bus Lines, Orange County Transit Authority Express, Santa Clarita Transit Commuter Express, Santa Monica Big Blue Bus, and Torrance Transit.

Downtown Plan Area Public Transit Service

Figure 4.15-4, Existing Transit Service, shows Metro and LADOT transit service coverage in the Downtown Plan Area.

Metro

The following Metro lines currently provide transit service in and through the Downtown Plan Area:

Metro Rail

- Red Line, Purple Line, Blue Line, Expo Line, Gold Line

Metro Bus Rapid Transit (with exclusive rights-of-way)

- Silver Line

Metro Rapid Lines (in mixed traffic)

- 704
- 720
- 728
- 733
- 745
- 760
- 770
- 794

Metro Express Lines (peak-hours only)

- 442
- 460
- 487/489

Metro Local Lines

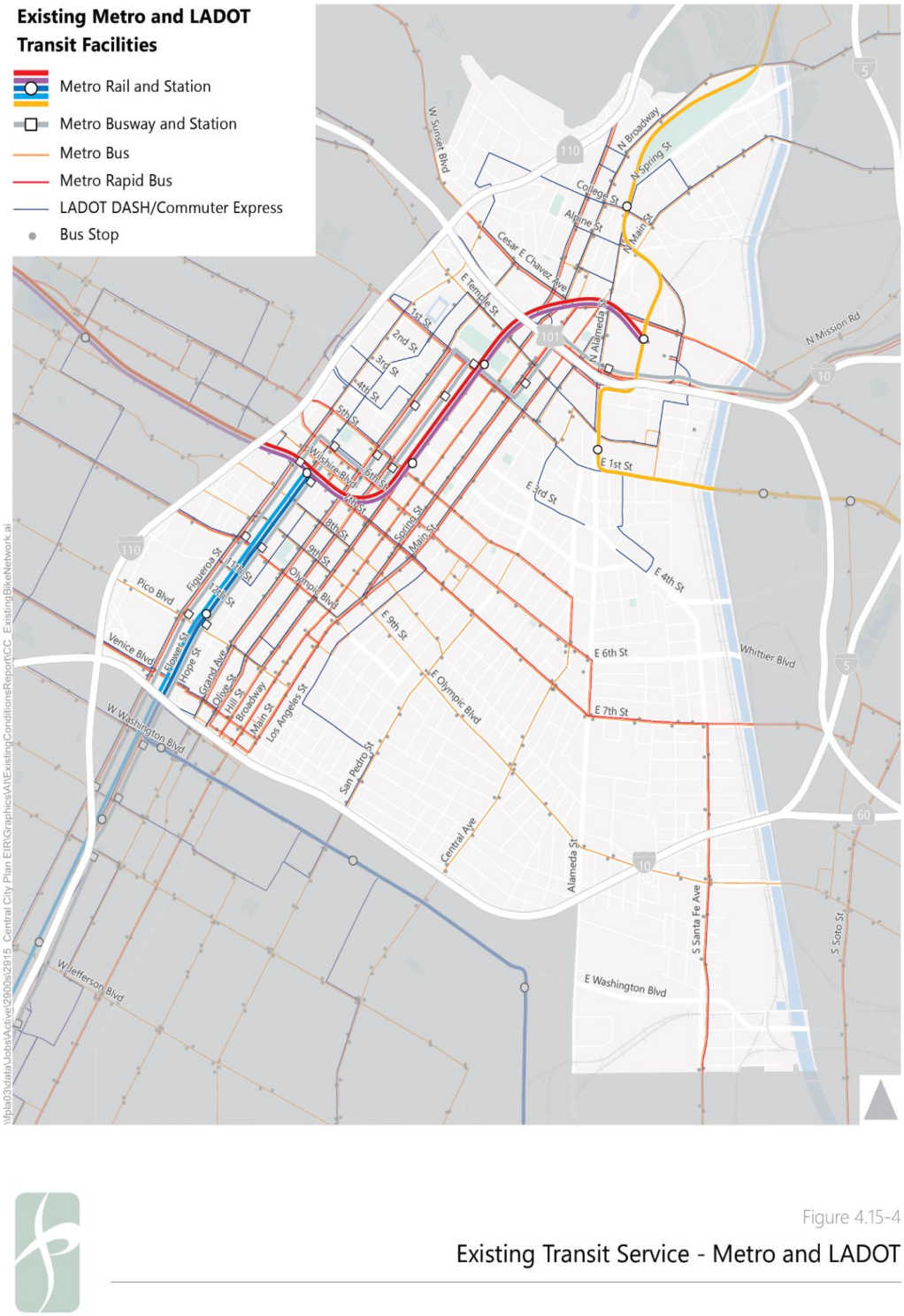
- 2/302
- 4
- 10
- 14
- 16/17/316
- 18
- 20
- 28
- 30/330
- 33
- 35
- 37
- 38
- 40
- 45
- 48
- 51/52/351
- 53
- 55/355
- 60
- 62
- 66
- 68
- 70
- 71
- 76
- 78/79/378
- 81
- 83
- 90/91
- 92
- 94
- 96

LADOT

The following LADOT services operate within and through the Downtown Plan Area:

- DASH A (Little Tokyo, City West)
- DASH B (Chinatown, Financial District)
- DASH D (Union Station, South Park)
- DASH E (City West, Fashion District)
- DASH F (Financial District, Exposition Park, USC)
- DASH Lincoln Heights/Chinatown
- DASH Commuter Express 409, 419, 422, 423, 431, 437, 438, 448, 534

Figure 4.15-4 Existing Transit Service – Metro and LADOT



Note: This map represents the Existing Conditions year for the purposes of this study as 2017, consistent with the analysis for the scoping year of the project. DASH lines may have since been updated.

Other Transit Operators

Other transit operators with routes to and from Downtown Los Angeles include:

- Antelope Valley Transit Authority, Route 785
- Foothill Transit, Lines 493, 495, 497, 498, 499, 699
- Gardena GTrans, Line 1X
- Greyhound Buses, Los Angeles Bus Station
- Montebello Bus Lines, Route 40, 50 and 90
- Orange County Transit Authority Express, Route 701 and 721
- Santa Clarita Transit Commuter Express, Route 799/794
- Santa Monica Big Blue Bus, Rapid 10
- Torrance Transit, Line 4X

Bicycle and Pedestrian Facilities

Citywide Bicycle and Pedestrian Facilities

The City's existing bicycle network consists of approximately 500 miles of on- and off-street facilities including approximately 58 miles of Class I bikeways (bicycle paths), 324 miles of Class II bikeways (bicycle lanes), and 121 miles of Class III bikeways (bicycle routes and bicycle friendly streets) (City of Los Angeles 2015a). Bicycle facilities are defined as off-street bicycle paths (Class I), on-street signed and striped bicycle lanes (Class II), on-street signed bicycle routes (Class III), and protected bicycle lanes or cycle tracks (Class IV). The design features of the various types of bicycle facilities are summarized below.

- **Bicycle Path:** A paved pathway separated from motorized vehicular traffic by an open space or barrier and either within the highway rights-of-way or within an independent alignment. Bicycle paths may be used by bicyclists, skaters, wheelchairs users, joggers, and other non-motorized users. Caltrans refers to this facility as Class I Bikeway, which "provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flow of motorists minimized."
- **Buffered Bike Lanes:** Buffered bicycle lanes provide on-street right-of-way in the form of a painted buffer that directs motorists to travel away from the bike lane and provides room for bicyclists to pass another bicyclist without entering the adjacent motor vehicle travel lane. A buffered bicycle lane is considered a Class II bikeway.
- **Bicycle Lane:** A striped lane for 1-way bicycle travel on a street or highway. Caltrans refers to this facility as a Class II bikeway.
- **Bicycle Route:** is a shared roadway specifically identified for use by bicyclists, providing a superior route based on traffic volumes and speeds, street width, directness, and/or cross-street priority, denoted by signs only. Caltrans refers to this facility as a Class III Bikeway.
- **Protected Bicycle Lane (Cycle Track):** A bicycle lane that provides further protection from other travel lanes with a physical roadway intervention. This is considered a Class IV Bikeway.

Pursuant to the California Vehicle Code, bicycles are allowed on any street within the local street system. Pursuant to Los Angeles City Code, bicycles are also allowed on the sidewalk (LAMC 56.15). Bicyclists are able to bring their bikes on board transit in designated areas on Metro trains and on most Metro and LADOT buses on bicycle racks at the front of the bus at no extra cost (City of Los Angeles 2015a). Metrolink and Amtrak also allow bicycles on board.

There are approximately 40,000 intersections in the City, of which 4,300 are signalized and approximately 22,000 contain marked crosswalks (City of Los Angeles 2015a). Conditions vary widely in terms of sidewalk condition, pavement marking visibility, and obstructions in the sidewalk realm. An estimated 42%

of the City's 10,750 miles of sidewalks are in disrepair (Times 2012). In April 2015, the City of Los Angeles agreed to spend $1.3 billion over the next 30 years to fix sidewalks throughout the City and produce two reports per year to document its progress in repairing substandard sidewalks.

Pedestrian travel in the City varies based on the circulation network in any given area. Areas that have pedestrian-oriented uses fronting the sidewalk offer a pedestrian-friendly atmosphere whereas other areas characterized by long blocks fronting surface parking lots and industrial land uses offer little pedestrian amenities. In general, sidewalks range from 10 to 12 feet wide. The City of Los Angeles General Plan designates commercial and neighborhood activity centers that are characterized by ground floor retail and service uses oriented to pedestrians along the sidewalk as Pedestrian Priority Street segments. Pedestrian Priority Street segments are recommended to have wider sidewalks of 15 to 17 feet in width and other pedestrian friendly features such as curb side parking, wide crosswalks with a minimum width of 15 feet, and traffic signal modifications (City of Los Angeles 2015a).

Downtown Plan Area Bicycle and Pedestrian Facilities

The Downtown Plan Area includes of a network of bicycle facilities; pedestrian facilities primarily consist of sidewalks adjacent to roadways. Pedestrian access to transit in the Downtown Plan Area ranks above average for major transit stops/stations in Los Angeles County, with an average rating of 98 out of 100, as reported by WalkScore.com (WalkScore 2018). Walk Score is a company that provides walk scores, transit scores, and bike scores for neighborhoods ranging from 0-100. A walk score is created by assessing the walkability of an area dependent upon how many errands can be completed by foot. Walking routes available in the area are assessed. Amenities with a five-minute walk proximity are scored the highest. Bike scores are created by evaluating available bicycle infrastructure available in an area, frequency of hills, the number of bicycle commuters, and road connectivity. All four components are weighted equally to create a bike score. Bicycle access to major transit stops in the area is less robust, receiving an average score of 78 out of 100, as reported by WalkScore.com. Most roadways are aligned on a grid system providing multiple route options for traveling throughout the Downtown Plan Area.

Within the Downtown Plan Area, there are several existing bicycle facilities in addition to bicycle racks provided at various public and private locations throughout the Downtown Plan Area. **Figure 4.15-5**, Existing Bicycle Network, shows the locations of the existing bicycle facilities within the Downtown Plan Area.

The pedestrian network includes sidewalks, crosswalks, and curb ramps, as well as pedestrian amenities such as street trees and benches in some areas. Similar to many areas in the City, the Downtown Plan Area has an aging network of pedestrian facilities including sidewalks of varying widths. Many areas have pedestrian-friendly features such as curb-side parking, wide crosswalks at most major intersections and traffic signal modifications to ensure longer pedestrian crossing times, where warranted.

Special Event Transportation Operations

Citywide Special Event Transportation Operations

Special events such as the Los Angeles Marathon, Chinese New Year Festival & Parade, AIDS/Lifecycle bike ride, CicLAvia, weekly farmers' markets, organized marches, races, block parties and similar events frequently require partial or full closure of city streets, including sidewalks and crosswalks, for periods of several hours to several days at a time.

Downtown Plan Area Special Event Transportation Operations

In addition to Citywide street closures, several destinations within the Downtown Plan Area host special events that attract large crowds. These venues include but are not limited to:

L.A. LIVE

L.A. LIVE is a sports and entertainment district that surrounds Staples Center, Microsoft Theater, and the Los Angeles Convention Center. Situated along Figueroa Street, between Olympic Boulevard and Pico Boulevard, the campus is a destination for sports and music venues, with some of the city's iconic restaurants, museums, nightclubs, hotels and movie theaters. Venues include the Microsoft Theater, a 7,100-seat capacity theater for concerts and awards shows, and The Novo by Microsoft, a 2,300-person entertainment and event space. The district provides several parking garage structures for visitors. Specific parking structures are recommended depending on restaurant, movie or event parking.

Visitors are encouraged to take advantage of several transportation options to L.A. LIVE. Access by public transportation include the Metro Blue or Expo Line to Pico Station or the Metro Red or Purple Line to 7th St/Metro Center Station. Metro Bus lines 30, 81, 442, 260, the Silver Line, and DASH Bus Route F provide services that stop near the district. Free connections to the Metro bus and rail lines for Metrolink riders is provided on weekends. For bicyclists, bike racks are available in the East Garage, located at Olympic Blvd and Francisco Street.

STAPLES Center

The STAPLES Center, located at 1111 S Figueroa Street, is most notable as the home of four professional sports franchises—NBA's Los Angeles Lakers and Los Angeles Clippers, NHL's Los Angeles Kings, and WNBA's Los Angeles Sparks. With a seating capacity of 20,000, the arena has also been known to host several high-profile events ranging from professional sports, live music, family shows, boxing and special events. It puts on approximately 250 events and attracts over 4 million guests annually. There are 3,300 on-site parking spaces at STAPLES Center-owned parking lots, and additional parking is available on nearby lots within a short walking distance. These lots may also be shared by L.A. LIVE visitors. Public transportation access for the STAPLES Center visitors is similar for those visiting L.A. Live.

Los Angeles Convention Center

The Los Angeles Convention Center (LACC) located at 1201 South Figueroa Street is a leading destination for conventions, trade shows, and exhibitions that hosts approximately 350 events and attracts more than 2 million visitors annually. The LACC complex is incorporated into the L.A. Live entertainment campus and has been known to host several high-profile entertainment events, including the Emmy Awards Governors Ball, the Grammy Awards Celebration, and the BET Experience. Situated where the I-110 and I-10 freeways meet, LACC provides convenient access by car with 5,400 available on-site parking spaces, with additional parking available in surrounding structures and surface lots shared by L.A. LIVE visitors. Public transportation access for LACC visitors is similar for those visiting L.A. Live.

Los Angeles State Historic Park

Los Angeles State Historic Park is located at 1245 North Spring Street and sits on 34 acres of open space directly adjacent to Chinatown. Reopened in April 2017, the park continues to host several outdoor concerts, weekend-long music festivals, evening movie screenings, educational events and exhibitions, craft fairs, and other special events. Additionally, visitors just wishing to enjoy the park can wander and hike its pathways, go for a bike ride, and enjoy a view of Downtown.

The park is accessible by the Metro Gold Line to the Chinatown stop, and Metro Bus lines 76 (Main & Anne stop), 84, 83, and 81. By car, nearby on-street parking and off-street lots are available.

Figure 4.15-5 Existing Bicycle Network

Figure 4.15-5
Existing Bicycle Network

Civic Center

The Civic Center includes the Los Angeles Street Civic Building, Los Angeles City Hall, the Los Angeles Police Department Headquarters, the Los Angeles Department of Transportation, and the United States District Courthouse, Metro Detention Center, Japanese American National Museum, Geffen Contemporary, and Los Angeles Fire Station No. 4. Civic Center primarily serves government employees but includes museums within its vicinity.

Civic Center is accessible by Metro Red and Purple Lines, multiple Metro bus lines, LADOT Commuter Express, DASH, Foothill Transit, Torrance Transit, and Antelope Valley Transit Authority bus lines.

Pershing Square

Pershing Square located at 532 South Olive Street is a small public park on square block in size in downtown Los Angeles. Pershing Square hosts a variety of public events, including an eight-week free summer concert series, an annual outdoor ice skating rink November through January of each year, and an outdoor farmer's market on Wednesdays.

Pershing Square is accessible by Metro Red and Purple Lines, Metro bus lines, DASH, Foothill Transit, and the Antelope Valley Transit Authority bus lines.

Grand Park

Grand Park is located at 200 N Grand Avenue and sits on 12 acres of open space directly adjacent to Los Angeles City Hall. Grand Park is divided into four distinct areas featuring amenities such as restored historic Arthur J. Will Memorial Fountain with a new wade-able membrane pool, a small intimate performance lawn, a community terrace, and a grand event lawn.

Grand Park is accessible by Metro Red and Purple Lines, Metro bus lines, DASH, Foothill Transit, and the Antelope Valley Transit Authority bus lines.

Olympics 2028

The City of Los Angeles has agreed to host the 2028 Olympic and Paralympic Games. Los Angeles will maximize its existing sports infrastructure all over the city to ensure a sustainable long-term impact on the city. The City of Los Angeles had a goal of completing twenty-eight new transportation infrastructure by 2028.

REGULATORY FRAMEWORK

FEDERAL

Americans with Disabilities (ADA) Act of 1990

Titles I, II, III, and V of the ADA have been codified in Title 42 of the United States Code, beginning at Section 12101. Title III prohibits discrimination based on disability in "places of public accommodation" (businesses and non-profit agencies that serve the public) and "commercial facilities" (other businesses). The regulation includes Appendix A through Part 36 (Standards for Accessible Design), establishing minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility. Examples of key guidelines include detectable warnings for pedestrians entering traffic where there is no curb, a clear zone of 48 inches for the pedestrian travel way, and a vibration-free zone for pedestrians.

STATE

Complete Streets Act

Assembly Bill 1358, the Complete Streets Act (Government Code Sections 65040.2 and 65302), was signed into law by Governor Arnold Schwarzenegger in September 2008. As of January 1, 2011, the law requires cities and counties, when updating the part of a local general plan that addresses roadways and traffic flows, to ensure that those plans account for the needs of all roadway users. Specifically, the legislation requires cities and counties to ensure that local roads and streets adequately accommodate the needs of bicyclists, pedestrians and transit riders, as well as motorists.

At the same time, the California Department of Transportation (Caltrans), which administers transportation programming for the State, unveiled a revised version of Deputy Directive 64 (DD-64-R1 October 2008), an internal policy document that now explicitly embraces Complete Streets as the policy covering all phases of state highway projects, from planning to construction to maintenance and repair.

Complete Streets Directive

California Department of Transportation (Caltrans) enacted Complete Streets: Integrating the Transportation System (Complete Streets Directive) in October 2008, which required cities to plan for a "balanced, multimodal transportation network that meets the needs of all users of streets" (Caltrans 2014a). A complete street is a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. Every complete street looks different, according to its context, community preferences, the types of road users, and their needs.

Statewide Transportation Improvement Program (STIP)

Caltrans administers transportation programming for the State. Transportation programming is the public decision-making process that sets priorities and funds projects envisioned in long-range transportation plans. It commits expected revenues over a multi-year period to transportation projects. The STIP is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the State Highway Account and other funding sources.

Senate Bill (SB) 743

SB 743 directs the Office of Planning and Research (OPR) to develop revisions to the California Environmental Quality Act (CEQA) Guidelines by July 1, 2014 to establish new criteria for determining the significance of transportation impacts and define alternative metrics for traffic LOS. On September 27, 2013, California Governor Jerry Brown signed SB 743 into law and started a process that changes transportation impact analysis as part of CEQA compliance. These changes will include elimination of auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts for land use projects and plans in California. Further, parking impacts are not considered significant impacts on the environment for particular types of development projects within certain infill areas with nearby frequent transit service. According to the legislative intent contained in SB 743, these changes to current practice were necessary to "…more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions."

On January 20, 2016, OPR released the Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA, which was an update to Updating Transportation Impacts Analysis in the CEQA Guidelines, Preliminary Discussion Draft of Updates to the CEQA Guidelines Implementing Senate Bill 743, which had been released August 6, 2014.

In November 2017, OPR submitted the final guidelines to the Natural Resources Agency. The subsequent "rulemaking" process took just over one year, with the guidelines certified and adopted in December 2018. SB 743 will now go into effect, with agencies having an opt-in period until July 1, 2020.

Parking Cash Out

Assembly Bill (AB) 2109, is a state law requiring employers of 50 or more employees who lease their parking and subsidize any part of their employee parking to offer their employees the opportunity to give up their parking space and rideshare to work instead. In return for giving up their parking space, the employer pays the employee the cost of the parking space.

Assembly Bill 32 (AB32) and Senate Bill 375 (SB 375)

With the passage of AB 32, the Global Warming Solutions Act of 2006, the State of California committed itself to reducing statewide greenhouse gas (GHG) emissions to 1990 levels by 2020. The California Air Resources Board (California ARB) is coordinating the response to comply with AB 32.

On December 11, 2008, California ARB adopted its Proposed Scoping Plan for AB 32. This scoping plan included the approval of SB 375 as the means for achieving regional transportation-related GHG targets. SB 375 provides guidance on how curbing emissions from cars and light trucks can help the state comply with AB 32.

There are five major components to SB 375. First, regional GHG emissions targets: California ARB's Regional Targets Advisory Committee guides the adoption of targets to be met by 2020 and 2035 for each Metropolitan Planning Organization (MPO) in the state. These targets, which MPOs may propose themselves, are updated every eight years in conjunction with the revision schedule of housing and transportation elements.

Second, MPOs are required to prepare a Sustainable Communities Strategy (SCS) that provides a plan for meeting regional targets. The SCS and the Regional Transportation Plan (RTP) must be consistent with each other, including action items and financing decisions. If the SCS does not meet the regional target, the MPO must produce an Alternative Planning Strategy that details an alternative plan to meet the target.

Third, SB 375 requires that regional housing elements and transportation plans be synchronized on 8-year schedules. In addition, Regional Housing Needs Assessment (RHNA) allocation numbers must conform to the SCS. If local jurisdictions are required to rezone land as a result of changes in the housing element, rezoning must take place within three years.

Fourth, SB 375 provides CEQA streamlining incentives for preferred development types. Certain residential or mixed-use projects qualify if they conform to the SCS. Transit-oriented developments (TODs) also qualify if they (1) are at least 50% residential, (2) meet density requirements, and (3) are within 0.5 mile of a transit stop. The degree of CEQA streamlining is based on the degree of compliance with these development preferences.

Finally, MPOs must use transportation and air emissions modeling techniques consistent with guidelines prepared by the California Transportation Commission (CTC). Regional Transportation Planning Agencies, cities, and counties are encouraged, but not required, to use travel demand models consistent with the CTC guidelines.

California Vehicle Code (CVC)

The CVC provides requirements for ensuring emergency vehicle access regardless of traffic conditions. Sections 21806(a)(1), 21806(a)(2), and 21806(c) define how motorists and pedestrians are required to yield the right-of-way to emergency vehicles.

REGIONAL

A number of regional improvement plans affect transportation in the City of Los Angeles. They include the Los Angeles County Congestion Management Program (CMP) and the Long Range Transportation Plan (LRTP) prepared by Los Angeles County Metropolitan Transportation Authority (Metro), the RTP/SCS, the Regional Transportation Improvement Plan (RTIP), prepared by the Southern California Association of Governments (SCAG), and the City of Los Angeles General Plan, which includes the Mobility Plan 2035.

Metro 2009 Long Range Transportation Plan

The 2009 LRTP includes funding for general categories of improvements, such as Arterial Improvements, Non-motorized Transportation, Rideshare and Other Incentive Programs, Park-and-Ride Lot Expansion, and Intelligent Transportation System (ITS) improvements for which Call for Project Applications can be submitted for projects in Los Angeles County. Metro also has a Short Range Transportation Plan to define the near-term (through year 2024) transportation priorities in Los Angeles County. In addition to the regional transportation plans, Metro has recently adopted a Complete Streets Policy and a First Last Mile Strategic Plan.

Metro Complete Streets Policy

Metro's recently adopted Complete Streets policy is reinforcing the California Complete Streets Act (AB 1358). Effective January 1, 2017, Metro is requiring that all local jurisdictions within LA County must adopt a Complete Streets Policy, an adopted city council resolution supporting Complete Streets, or an adopted general plan consistent with the California Complete Streets Act of 2008 in order to be eligible for Metro capital grant funding programs, starting with the 2017 grant cycles.

Metro Short Range Transportation Plan (SRTP)

The 2014 Metro SRTP is a 10-year action plan that guides future Metro programs and projects through 2024 and advances Metro towards the long-term goals identified in the 2009 Metro LRTP. The SRTP identifies the short-term challenges, provides an analysis of our financial resources, proposes action plans

for the public transportation and highway modes, and includes other project and program initiatives. In addition, it addresses sustainability, future funding strategies, and lastly, measures the Plan's performance (Metro 2014).

Southern California Association of Governments 2016-2040 Regional Transportation Plan and Sustainable Communities Strategy and Regional Transportation Improvement Program.

SCAG adopted the 2016-2040 RTP/SCS in April 2016. The RTP/SCS is a planning document required under state and federal statute that encompasses the SCAG region, including six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The RTP/SCS forecasts long-term transportation demands and identifies policies, actions, and funding sources to accommodate these demands. The RTP/SCS consists of the construction of new transportation facilities, transportation systems management strategies, transportation demand management and land use strategies. The RTIP, also prepared by SCAG based on the RTP/SCS, lists all of the regional funded/programmed improvements over a 6-year period.

LOCAL

City of Los Angeles General Plan Framework and Safety Elements

The Citywide General Plan Framework (Framework), an element of the City of Los Angeles General Plan, is a guide for Community Plans to implement growth and development policies by providing a comprehensive long-range view of the City as a whole. It provides a comprehensive strategy for accommodating long-term growth should it occur as predicted. Chapter 9 Infrastructure and Public Services of the Framework Element addresses fire prevention, fire protection and emergency medical services provided to the City. The Safety Element of the General Plan identifies existing police, fire, and emergency services and the service needs of the City of Los Angeles in the event of a natural disaster. The Safety Element goals, objectives, policies, and programs are broadly stated to reflect the comprehensive scope of the Emergency Operations Organization (EOO), which is the program that implements the Safety Element. The Framework and Safety Elements include goals, objectives, and policies that are applicable to emergency services.

Los Angeles Municipal Code

LAMC Section 12.26 contains required Transportation Demand Management (TDM) and Trip Reduction Measures. TDM is defined as the alteration of travel behavior through programs of incentives, services, and policies, including encouraging the use of alternatives to single-occupant vehicles such as public transit, cycling, walking, carpooling/vanpooling and changes in work schedule that move trips out of the peak period or eliminate them altogether (as in the case in telecommuting or compressed work weeks). Trip Reduction is defined as reduction in the number of work-related trips made by single-occupant vehicles. Specific requirements for developments of various sizes are summarized from the code below:

- Development in excess of 25,000 square feet of gross floor area shall provide a bulletin board, display case, or kiosk (displaying transportation information) where the greatest numbers of employees are likely to see it. The transportation information displayed should include, but is not limited to current routes and schedules for public transit serving the site; telephone numbers for referrals on transportation information including numbers for the regional ridesharing agency and local transit operations; ridesharing promotion material supplied by commuter-oriented organizations; regional/local bicycle route and facility information; and a listing of on-site services or facilities that are available for carpoolers, vanpoolers, bicyclists, and transit riders.

- Development in excess of 50,000 square feet of gross floor area shall provide the above plus: (1) designated parking areas for employee carpools and vanpools as close as practical to the main pedestrian entrance(s) of the building(s); (2) one permanent, clearly identified (signed and striped) carpool/vanpool parking space for the first 50,000 to 100,000 square feet of gross floor area and one additional permanent, clearly identified (signed and striped) carpool/vanpool parking space for any development over 100,000 square feet of gross floor area; and (3) parking spaces clearly identified (signed and striped) shall be provided in the designated carpool/vanpool parking area at any time during the building's occupancy sufficient to meet employee demand for such spaces. Absent such demand, parking spaces within the designated carpool/vanpool parking area may be used by other vehicles and other amenities.
- Development in excess of 100,000 square feet of gross floor area shall provide the above plus: (1) a safe and convenient area in which carpool/vanpool vehicles may load and unload passengers other than in their assigned parking area; (2) sidewalks or other designated pathways following direct and safe routes from the external pedestrian circulation system to each building in the development; (3) possible bus stop improvements; and (4) safe and convenient access from the external circulation system to bicycle parking facilities on-site.
- The LAMC is currently undergoing a comprehensive update to all Zoning Code sections as part of the re:code LA effort. re:code LA, which started in 2013 and will continue through 2020, will update the Zoning Code to make the Code more streamlined, visual, and easy to use. The existing Zoning Code regulations are not being repealed as part of this Project. The existing Zoning Code will continue to be located in Chapter 1 of the Los Angeles Municipal Code, while the New Zoning Code will be located in a new Chapter 1A of the Los Angeles Municipal Code. Relevant components of re:code LA are described in detail in Chapter 3.0, *Project Description*.

City of Los Angeles Mobility Plan 2035

The City updated the Transportation Element of the City's General Plan, now referred to as Mobility Plan 2035 or MP 2035, to reflect policies and programs that lay the policy foundation for safe, accessible, and enjoyable streets for pedestrians, bicyclists, transit users, and vehicles throughout the City of Los Angeles. The MP 2035 and Final EIR were adopted on August 11, 2015. MP 2035 is compliant with the 2008 Complete Streets Act (AB 1358), which mandates that the circulation element of a city's General Plan be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan. The goals and objectives of MP 2035 that are relevant to the Proposed Project are as follows:

- **Safety First:** focuses on topics related to crashes, speed, protection, security, safety, education, and enforcement.
    - Objective: Vision Zero: Decrease transportation related fatality rate to zero by 2035.
- **World Class Infrastructure:** focuses on topics related to the Complete Streets Network (walking, bicycling, transit, vehicles, green streets, and goods movement), Great Streets, Bridges, Street Design Manual, and demand management.
    - Objective: Provide 95% on-time arrival reliability of buses traveling on the Transit Enhanced Network by 2035. Establish an off-peak 5-minute bus frequency on 25% of the Transit Enhanced Network by 2035.
    - Objective: Increase vehicular travel time reliability on all segments of the Vehicle Enhanced Network by 2035.

  - Objective: Maintain the Automated Traffic Control Surveillance and Control System (ATSAC) Communications Network.
- **Access for all Angelenos**: focuses on topics related to affordability, least cost transportation, land use, operations, reliability, demand management, and community connections.
  - Objective: Ensure that 90% of households are within one mile of the Transit Enhanced Network by 2035.
  - Objective: Ensure that 90% of all households have access within one-half mile of high quality bicycling* facilities by 2035 (*protected bicycle lanes, paths, and neighborhood enhanced streets).
  - Objective: Increase the combined mode split of persons who travel by walking, bicycling or transit to 50% by 2035.
- **Collaboration, Communication & Informed Choices:** focuses on topics related to real-time information, open source data, transparency, monitoring, reporting, emergency response, departmental and agency cooperation and data base management.
  - Objective: Install street parking occupancy-detection capability at 50% of on-street parking locations by 2035.
  - Objective: Implement coordinated wayfinding at all major transit stations by 2035.
- **Clean Environment and Healthy Communities:** focuses on topics related to environment, health, clean air, clean fuels and fleets, and open street events.
  - Objective: Decrease vehicle miles traveled (VMT) per capita by 5% every five years, to 20% by 2035.
  - Objective: Meet a 9% per capita GHG reduction for 2020 and a 16% per capita reduction for 2035 (SCAG RTP).
  - Objective: Reduce the number of unhealthy air quality days to zero by 2025.

California's Complete Streets Act (AB 1358) was signed into law in 2008 and mandates that complete street policies and standards be incorporated into a city's general plan. The idea behind Complete Streets is to make streets safe, comfortable, and convenient for people of all mode types. Mobility Plan 2035 also sets forth street designations and related standards in a Complete Street Design Guide. The Guide provides a compilation of design concepts and best practices that promote the major tenets of Complete Streets, safety and accessibility. The Guide is not meant to supersede existing technical standards provided for in other City or national manuals. Rather, it is meant to supplement existing engineering practices and requirements in order to meet the goals of Complete Streets.

Due to specific site and operational characteristics associated with any given street, any proposed street improvement project must still undergo detailed technical analyses by the appropriate city departments. Overall, this Design Guide will indoctrinate the concept of Complete Streets into Los Angeles' present and future street design so that all stakeholders are able to plan for, implement, and maintain safe and accessible streets for everyone.

Great Streets for Los Angeles/LADOT Strategic Plan

In September 2014, the Mayor's Office and LADOT released the Great Streets for Los Angeles, LADOT's first strategic plan to turn the city's essential infrastructure -- its streets and sidewalks -- into safer, more livable 21st century public spaces that accommodate everyone who uses them. The plan builds upon Mayor Garcetti's Great Streets Initiative, which looks at Los Angeles's streets as valuable assets that can help revitalize neighborhoods across the City and make it easier for Angelenos to get around whether they walk,

bike, drive, or take transit. The plan also stresses the importance of working closely with other city and regional agencies, such as the Bureau of Street Services and Metro, to improve safe, accessible transportation services and infrastructure.

The plan focuses on Mayor Garcetti's priorities of making the city safe, prosperous, and livable with a well-run government and includes the following key goals:

- **Vision Zero:** Eliminate traffic deaths by 2025 and design streets to increase the safety of pedestrians, including adding 100 new high-visibility continental crosswalks.
- **Great Streets:** Implement changes to the 15 Great Street corridors and launch programs to reduce dangerous speeding in residential neighborhoods. Increase bike infrastructure and launch a regional bikeshare program. Expand bus service and improve its quality and connectivity with surrounding neighborhoods.
- **A 21st Century DOT:** Streamline LADOT's operations to implement needed safety and mobility projects quickly and efficiently. Enhance technologies to manage traffic, meters, and parking operations.
- **World-Class Streets for a World-Class Economy:** Real-time traffic information and more efficient allocation of the street to support local foot traffic and better manage freight traffic. Build Great Streets for vibrant and prosperous neighborhood business districts.

Los Angeles Department of Transportation (LADOT)

As part of project review, LADOT determines whether a project requires a traffic study and evaluates project site plans to ensure that they follow standard engineering practice and City design regulations. In 2019, LADOT published the Transportation Assessment Guidelines (TAG) to effectuate a review process that advances the City's vision of developing a safe, accessible, well-maintained, and well-connected multimodal transportation network. The TAG to replaces the former Transportation Impacts Study Guidelines to clarify the new transportation impact methodology using vehicle miles traveled (VMT). On July 30, 2019, the City adopted VMT as the transportation impact criteria under CEQA in compliance with SB 743.

The TAG establishes the methodology that transportation planning practitioners are to follow to understand VMT impacts of land use and transportation investment decisions. Through the TAG, LADOT also provides direction on to evaluate potential operational constraints that land use projects may impose on circulation, access, and safety, and how to address those constraints so that LADOT can deliver a safe, livable, and well-run transportation system in the city and region.

Los Angeles Fire Department (LAFD) Strategic Plan 2018-2020

The Strategic Plan focuses on nine goals and corresponding strategic actions that guide the LAFD. The primary goals that apply to the Proposed Project include providing exceptional public safety and emergency service and implementing and capitalizing on advanced technologies. Some of the key priorities associated with these goals include:

- Improving response times by utilizing data and metrics to identify gaps in LAFD's response strategies and exploring response time improvements through dialogue, cognitive inquiry, innovation, and follow-up;
- Delivery of emergency medical services by expanding LAFD Emergency Medical Service (EMS) response capabilities for special events and addressing period of high vehicle traffic; and

- Implementing advanced technologies by developing performance metrics, tracking standards, data collection, analysis and reporting procedures (FireStatLA).
- The Strategic Plan also focuses on the development of an even more professional workforce and promotion of a positive work environment to address risk management issues and strengthening community relationships to improve preparedness and enhance resiliency during emergency events.

ENVIRONMENTAL IMPACTS

This section explains the metrics used to measure the impacts of the Proposed Project to VMT. The metrics used are from the proposed CEQA Guidelines from the California State Office of Planning and Research (OPR) from December 2018.

HISTORY

Senate Bill 743 directed OPR to "prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed revisions to the guidelines adopted pursuant to Section 21083 establishing criteria for determining the significance of transportation impacts of projects within transit priority areas… Upon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion within a transit priority area, shall not support a finding of significance pursuant to this division…"[3]

On January 20, 2016, OPR updated the CEQA Guidelines "Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA," the evaluation of vehicle miles traveled (VMT) was recognized as "generally the most appropriate measure of transportation impacts." OPR also states that lead agencies may tailor their analysis to include other measures.

On November 2017, OPR proposed a new section, 15064.3, to help determine the significance of transportation impacts. This section was updated July 2, 2018 and finalized on December 28, 2018 with criteria for analyzing transportation impacts and is seen below in the section *Thresholds of Significance*. Its purpose is to describe specific elements for considering the transportation impacts of a given project given the use of VMT as the primary measurement.

Per the guidance from OPR, "a lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide" (CNRA 2018). In order to comply with the guidelines understood to become the standard in our state, this EIR evaluates vehicle trips and VMT consistent with the intent of SB 743. This EIR also includes vehicular level of service (LOS) for its primary impacts for historical comparison and informational purposes. As discussed below, it is also considered for its secondary impacts to emergency services under Threshold 4.15-4.

PERFORMANCE METRICS

The current metrics shift the focus from level of service (LOS) to vehicle trips (VT) and vehicle miles traveled (VMT). These are defined as follows, with methodology specifics outlined in the following *Methodology* section:

Vehicle Trips (VT). VT are defined as the number of trips undertaken in an automobile, such as in single occupancy vehicles, private automobiles, and vehicles that contain two or more travelers, such as carpools,

[3] SB 743, 2013-2014 CA State Cong. § 386 (2013)

taxis, or ride-share vehicles. A reduction in VT over time can be used as an indicator of reduced reliance on the automobile as well as an indicator of more travel by carpools.

Vehicle Miles Traveled (VMT). VMT is a measurement of miles traveled (e.g., private automobiles, trucks and buses) by all land uses (e.g., residential, retail, office) in the Downtown Plan Area. To compare scenarios, VMT per service population is used. A reduction in VMT overall and in VMT per service population can be used as an indicator of reduced reliance on vehicular travel, primarily by private automobiles.

Service Population. Service Population is the sum of population and employment. It is used in this study to represent both residents and employees. Some VMT metrics focus on VMT per capita and VMT per employee as separate markers of these indications; however, VMT per service population showcases the effects of all vehicular movement in an area. It includes not only trips that are attracted and produced by home and work trips, but those that fit in neither category (i.e. school to grocery store) as well as truck trips. It is therefore more representative of the effect of users and trips on the roadways in this CPA.

THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the aforementioned CEQA Guidelines, the Proposed Project would have a significant impact related to transportation if it would:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities (Threshold 4.15-1).
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) (Threshold 4.15-2).
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (Threshold 4.15-3).
- Result in inadequate emergency access (Threshold 4.15-4).

Text of CEQA Guidelines Section 15064.3, Subdivision (b):

Land Use Projects. *Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.*

Transportation Projects. *Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.*

Qualitative Analysis. *If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.*

Methodology. *A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.*

The Proposed Project would have an impact related to transportation if it would result in VMT per service population that exceeded an applicable threshold of significance. OPR recommends that a per capita or per employee VMT that is fifteen percent below that of existing development regionally may be a reasonable threshold. However, the "region" identified for the City of Los Angeles is the six-county SCAG region, which is very large and not representative of the Downtown Plan area. Holding this Plan Area to that as a threshold would not accurately disclose a relevant change in VMT outputs to the Plan, as it is significantly lower than the region's VMT already. Additionally, the use of per capita and per employee is not as representative of all travel in the area as per service population. As "CEQA generally defers to lead agencies on the choice of methodology to analyze impacts" (OPR 2018), the City of Los Angeles is choosing to use the following as part of a two-pronged threshold:

- The Proposed Project would result in average total VMT per service population in the plan horizon year that exceeds 15% below the regional average total VMT per service population from the most recent regional metric available.
- The Proposed Project would result in average total VMT per service population in the plan horizon year that exceeds the average total VMT per service population for the "project area" for the baseline year.

METHODOLOGY

The transportation analysis for the Downtown Plan component of the Proposed Project has been developed through a process that includes the use of the City of Los Angeles Travel Demand Forecasting (TDF) Model and developing the Downtown Subarea Travel Demand Forecasting (TDF) Model for the analysis of the 2017 baseline year and the future 2040 scenario, as well as the use of the SCAG TDF Model for the analysis of the 2016 SCAG RTP/SCS to represent the region. This *Methodology* section describes the procedures used to assess impacts on the transportation system. It includes an overall discussion of methodology and assumptions, followed by a discussion of how the Proposed Project is expected to perform in comparison to the thresholds described above. Citywide impacts of the New Zoning Code are assessed qualitatively for each threshold.

Study Area and Reporting Framework

The Downtown Plan Area is defined by the boundaries of the Central City and Central City North Community Plan Areas in the City of Los Angeles, as shown in **Figure 4.15-6**. This study is defined by the potential impacts of the Proposed Project to transportation and its related elements in the study area, which includes the CPA, the City, and the surrounding areas.

VMT Methodology

In order to determine whether the socio-economic and transportation network included in the Downtown Plan would result in an impact (as outlined in the *Environmental Impacts* section previously), VMT calculated for 2017 Baseline and 2016 SCAG Region is compared to the 2040 Downtown Plan. This is calculated using the following outputs from the City of Los Angeles, Downtown Subarea, and SCAG TDF Models.

Figure 4.15-6 Central City and Central City North Community Plan Areas

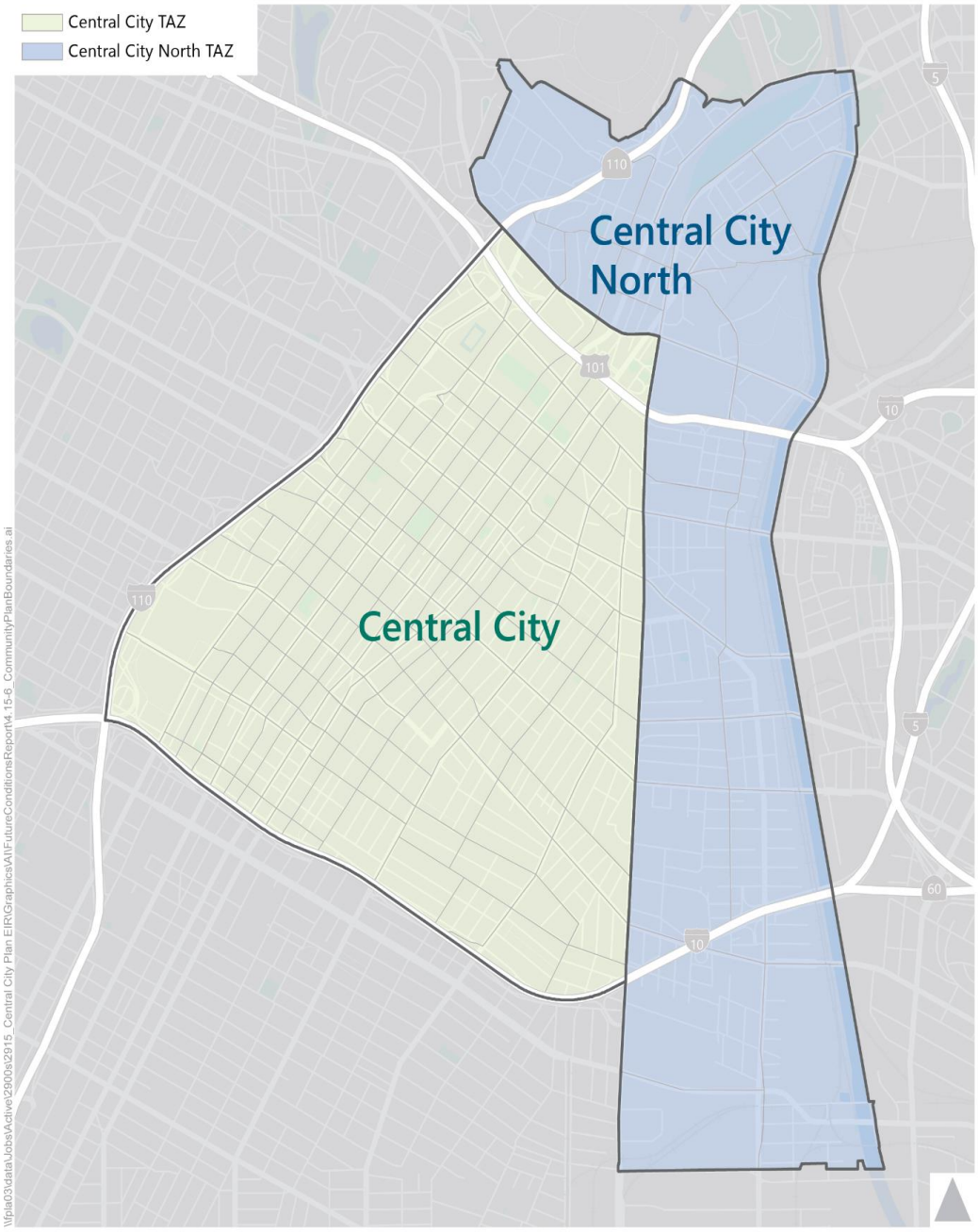


Figure 4.15-6

Central City and Central City North Community Plan Areas

Vehicle Trips (VT)

Vehicle Trips are defined as the number of trips undertaken in an automobile or a truck, such as in single-occupancy private automobiles, vehicles that contain two or more travelers, such as carpools, taxis, or ride-share vehicles, and trucks including light truck, medium truck, and heavy truck. While the total number of vehicle trips is expected to increase as growth occurs in the Downtown Area and in the region, a reduction in vehicle trips per service population over time can be used as an indicator of reduced reliance on the automobile as well as an indicator of more travel by walk, bike, take transit, carpools, etc. A reduction in the number of vehicle trips per service population also helps meet the State's goal of reducing GHG emissions, as mandated by AB 32 and SB 375. An increase in the number of daily vehicle trips per service population would be an undesirable outcome of the Downtown Plan, but would not constitute a significant impact.

Vehicle trips are calculated from outputs of the Downtown TDF model and SCAG TDF model. With estimated population relevant to each model's year, household and employment values input into each model Traffic Analysis Zone (TAZ), the models develop a vehicle trip calculation for the Downtown Area and SCAG Region. A Traffic Analysis Zone is a spatial unit that includes socioeconomic data such as population, households, and employees of a particular region.

Vehicle Miles Traveled (VMT)

VMT is a measurement of miles traveled (e.g., private automobiles, trucks and buses) generated by all land uses (e.g., residential, retail, office). While the total VMT is expected to increase as growth occurs in the Downtown Area and in the region, a reduction in VMT per service population over time can be used as an indicator of reduced reliance on the automobile. Reducing VMT helps meet the State's goals of reducing GHG emissions, as mandated by AB 32 and SB 375. Any increase in the total number of VMT per service population would be an undesirable outcome of the Downtown Plan, and would constitute an impact. VMT was forecasted for the Plan Area with the Downtown Subarea TDF model.

For this analysis, VMT is reported as Total Daily VMT per Service Population. The Total Daily VMT per Service Population is the total VMT divided by the number of people living or working within the community plan area. This VMT is generated by both downtown residents and employees within downtown as well as travel between downtown and other areas.

The reported VMT results include both personal vehicles and truck VMT. The VMT calculation accounts for internal trip ends and trips that begin or end within the Downtown Area, as these trips are generated by or attracted to land uses within the Downtown Area. The travel behavior effects of land use changes in Downtown can be understood by measuring the VMT of trips originating in and/or destined for the Downtown Area and comparing them to the 2017 Baseline and 2016 SCAG Region outputs.

VMT is calculated by multiplying the vehicle trip length by the number of trips estimated through the Downtown TDF model. VMT takes in consideration population, household, and employment values, as well as travel patterns of origins and destinations, including all of these inputs in the Downtown and SCAG TDF models, which makes them sensitive to each land use and network scenario tested.

Roadway Segment and Freeway Mainline Level of Service Methodology

In addition to the VMT methodology, the Downtown Plan component of the Proposed Project was also analyzed using LOS changes on road segments, as described below. As discussed above, under SB 743, LOS as metric for traffic congestion is not used to determine CEQA impacts. However, congestion may still be considered for safety and therefore, this information is used to inform the analysis related to

emergency access in Impact Threshold 4.15-4, as well as for informational and historical comparison purposes.

LOS is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. LOS definitions for street segments are summarized in **Table 4.15-7.** LOS can be determined by dividing demand V/C, and the resulting V/C ratio is then used to obtain the corresponding LOS. The capacity values for analyzed roadway segments were obtained from the Downtown Subarea TDF Model.

TABLE 4.15-7: ROADWAY SEGMENT LEVEL OF SERVICE (LOS) DEFINITIONS

Level of Service (LOS)	Volume to Capacity Ratio (V/C)	Description
A	0.00 – 0.60	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers have freedom of operation.
B	>0.60 – 0.70	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.
C	>0.70 – 0.80	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.
D	>0.80 – 0.90	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long standing traffic queues. This level is typically associated with design practice for peak periods.
E	>0.90 – 1.00	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.
F	>1.00	Forced flow. Represents jammed conditions. Backups from locations downstream or in the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.

SOURCE: Transportation Research Board, *Highway Capacity Manual, Special Report 209*, Washington, D.C., 2000.

Plans that involve large areas and are not expected to be fully implemented until 2040 or beyond are not analyzed effectively by detailed intersection V/C analyses. In addition, detailed roadway designs for improvements to individual intersections are not yet available. Consequently, roadway segment analysis is commonly used to determine the average service capacity of the roadway network. Street segment capacity impacts are generally evaluated in program-level analyses (such as community plans or long-range development projects) for which details regarding specific land use types, sizes, project access points, etc., are not known.

LOS can be determined by dividing the number of vehicles (i.e., volume (V)) by roadway capacity (C), and the resulting V/C ratio is then used to obtain the corresponding LOS. The volume-weighted V/C ratio is used in order to obtain aggregate statistics regarding the transportation conditions, allowing a comparison of different scenarios and alternatives. The weighted average V/C ratio represents typical travel conditions for the roadway network in the Downtown Plan Area. The volume-weighted average V/C ratio is calculated by taking the volume of each street segment and multiplying it by its corresponding V/C ratio. This is divided by the sum of the total volumes, and essentially represents the average V/C ratio for the roadway network in the Downtown Plan Area.

Travel Demand Model Development

The City of Los Angeles TDF Model provides the ability to evaluate the transportation system, use performance indicators for land use and transportation alternatives, provide information on regional pass-through traffic versus locally generated trips, and graphically display these results. The model considers forecast growth in City of Los Angeles and surrounding areas, including special generators, such as airports and universities, and is sensitive to emerging land use trends through improved sensitivity to built environment variables. The model forecasts AM and PM peak period and daily vehicle and transit flows on the transportation network in the City. In essence, the travel demand model serves as a tool to implement, manage and monitor the City of Los Angeles' transportation plans, projects, and programs, providing a suitable starting point for additional refinement as part of a more local application, such as the Downtown Plan.

The potential impacts associated with implementation of the Downtown Plan are evaluated using a refined version of the City of Los Angeles' Travel Demand Model within the Downtown Plan area and the adjacent Boyle Heights Plan Area. The reason for including refinements to the Boyle Heights Plan Area is that both Community Plans are being developed in conjunction, and as such the future network modifications for each Plan Area were included in the each other's refining process. The Downtown Subarea Travel Demand Forecasting Model (referred to as the Downtown Subarea Model) utilizes the TransCAD Version 7.0 R4 Build 12410 modeling software (consistent with the citywide model). The Downtown Subarea Model builds on the citywide model update and refines the level of detail within the Downtown Area for improved sensitivity in measuring the effect of land use development and transportation network changes. The model has a future horizon year of 2040 and was designed to produce daily and AM and PM peak hour vehicle and transit flows on roadways within the Downtown Plan Area based on comprehensive land use and socioeconomic data (SED) and uses a conventional 4-step process of trip generation, trip distribution, modal split and assignment. For modeling purposes, the Los Angeles model area is divided into 4,192 Transportation Analysis Zones (TAZs) and the Downtown Plan Area is divided into 233 TAZs, each with corresponding SED and connections to the roadway and transit networks.

The Downtown Subarea Model was built from the City of Los Angeles model (consistent with 2016-2040 RTP/SCS model) and contains City of Los Angeles SED and updates to the transportation network based on Mobility Plan 2035, which is discussed in detail in the section below titled *Downtown Plan Mobility Network*. The Downtown Subarea Model was used to generate the 2017 Baseline and 2040 Downtown Plan data for the transportation impact analysis. The Downtown Subarea Model Development Report is contained in Appendix K. The SCAG TDF Model, developed by SCAG, was used to generate the 2016 SCAG Region scenario.

Impact Analysis

The purpose of the transportation analysis is to identify potential transportation system deficiencies resulting from vehicle trips generated by the employment and population growth anticipated under the Downtown Plan and the proposed transportation network improvements, and to identify feasible mitigation measures. The Downtown Plan is a long-term plan that will be implemented over many years in conjunction with already approved development projects in the study area, and regional growth and transportation projects outlined in the 2016-2040 RTP/SCS. The Downtown Plan is represented by the 2040 Downtown Plan scenario and is compared to 2017 Baseline and 2016 SCAG Region scenarios in order to show the potential impacts of the plan.

The Downtown Subarea Model is built upon and includes the entirety of the City of Los Angeles Travel Demand Forecasting Model, which is consistent with the 2016-2040 SCAG RTP/SCS model and includes all reasonably foreseeable development and regional transportation improvements for the year 2040 in the City of Los Angeles as well as the adjacent Cities, such as West Hollywood, Burbank and Glendale. Thus,

the Downtown Subarea Model includes the regional growth forecast for both inside and outside of the Plan area for the purpose of analyzing 2040 Downtown Plan conditions. The Downtown Subarea Model refines the level of detail within the Plan Area for improved sensitivity in measuring the effects of land use and transportation network changes for the 2040 Downtown Plan.

The analysis tools used to forecast future travel patterns are long-range models of travel demand. Long-range travel demand models primarily focus on forecasting auto use, with limited sensitivity to other modes of travel such as transit, bicycling, and walking. This is consistent with the traffic forecasting methods used by most cities and is consistent with the state of the transportation and traffic engineering practice. Recently, new travel behavior trends have emerged that traditional travel demand models are not designed to accommodate. Transportation and traffic experts continue to evaluate the anticipated longevity of these trends and the impact they may have on travel behavior in the future. Factors that affect long-term trends in travel behavior include recessionary effects on employment, changes in younger generations' interest in driving and vehicle ownership, baby boomer retirement choices and their continued participation in the workforce, increasing preference across generations for urban living, fuel prices, increased availability of on-demand delivery of goods and services, and greater travel options through autonomous vehicles and shared use mobility (e.g., Lyft, Uber, bikeshare programs).

The transportation analysis approach used in this EIR applies established traffic forecasting tools that have been empirically proven and previously accepted under CEQA. However, these may prove to be conservative if some of the recent trends in travel persist. It is not clear what direction the trends will take at this point. VMT per capita has been generally dropping since around 2004 but increased for many decades prior. If the trends toward higher levels of walking, bicycling, and transit use exceed what is forecast in the EIR, this could result in fewer driving-related impacts than the plan conservatively accounts for in the EIR. It is possible, however, that innovations in autonomous and driverless vehicles, transportation network companies (e.g., Lyft and Uber), and same-day delivery will increase future VMT per capita. A variety of factors contribute to VMT, and transportation technologies along with demographic trends will influence future travel behavior. It would be speculative to make assumptions about how these new technologies and changes in transportation may affect travel behavior long-term; therefore, the methodologies and travel forecasts applied in this analysis rely on the state-of-the-practice at this time as previously accepted under CEQA.

Downtown Plan Mobility Network

Mobility Plan 2035 (MP 2035) is the Mobility Element of the City of Los Angeles' General Plan. MP 2035 provides the framework for future community plan updates, which take a closer look at the transportation system in specific areas of the City and recommend more detailed implementation strategies to be realized by 2035. The MP 2035 reflects policies and programs that lay the foundation for safe, accessible, and enjoyable streets for pedestrians, bicyclists, transit users, and vehicles throughout the City of Los Angeles, including the Downtown Plan Area. MP 2035 was adopted by the City in August 2015 and updated in 2016. It is compliant with the 2008 Complete Streets Act (AB 1358), which mandates that the circulation element of a City's General Plan be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.

The transportation improvements planned for the Downtown Plan primarily originated from the MP 2035. The enhanced network treatments envisioned through MP 2035 were reviewed and refined to complement the anticipated growth areas as well as the Downtown Plan's goals and policies. Since MP 2035 does not prescribe or mandate how the enhanced network treatments are implemented within each community plan, the refinements to the enhanced network treatments primarily consisted of developing potential implementation options within the Downtown Plan Area.

The Downtown Plan Transportation Improvement Project List is presented in **Table 4.15-8**. The Project List is not exhaustive but is representative of the types of improvements proposed for inclusion in the Community Plan. In addition, the Downtown Plan would not, itself, entitle or otherwise approve any transportation projects. Nevertheless, potential impacts of implementing the transportation improvements contained in the Project Lists were analyzed at a programmatic level as part of the Downtown Plan. Similar to the MP 2035, the Downtown Plan does not prescribe how the enhanced network treatments will be implemented within each community plan. Therefore, the enhanced network treatments in the Plan Area were reviewed in relation to the roadway characteristics, such as roadway width, right-of-way, street designations and adjacent land uses. **Figure 4.15-5**, Downtown Plan Network, shows the following enhanced network treatments for roadways in the Downtown Plan. The Downtown Plan Network in the Downtown Plan Area reflects the refinements to MP 2035 (**Table 4.15-9**).

- **Bicycle Enhanced Network (BEN)**
  - Tier 1 Protected bike lane: bicycle facilities with a physical separation from the vehicular lanes
  - Tier 2 bike lane: bicycle lanes painted on the roadway and adjacent to vehicular lanes, anticipated to be built by 2035
  - Tier 3 bike lane: bicycle lanes painted on the roadway and adjacent to vehicular lanes, not anticipated to be built by 2035
- **Transit Enhanced Network (TEN)**
  - Moderate: stop enhancements and increased service; bus operates in mixed-flow with vehicles
  - Moderate Plus: moderate treatments, plus peak-period bus-only lanes
  - Comprehensive: moderate treatments, plus full-time bus-only lanes
- **Vehicle Enhanced Network (VEN)**
  - Peak period or full-time parking and turning movement restrictions

Parking

Parking deficits are not CEQA impacts. They are considered socio-economic impacts, rather than impacts on physical environment as defined by CEQA, unless there are secondary impacts, such as safety impacts.

TABLE 4.15-8 DOWNTOWN PLAN TRANSPORTATION IMPROVEMENT PROJECT LIST

Project Location	Endpoints	Project Description
Figueroa St	10 FWY to 7th St	BEN: Protected bike lane; TEN: Comprehensive treatments
Figueroa St	Wilshire Blvd to Cesar E Chavez Blvd	BEN: Tier 2 bike lane
Flower St	10 FWY to 2nd St	BEN: Tier 3 bike lane
Hope St	Pico Blvd to 6th St	BEN: Tier 3 bike lane
Grand Ave	10 FWY to 5th St	BEN: Protected bike lane
Olive St	10 FWY to 5th St	BEN: Protected bike lane
Hill St	10 FWY to 4th St	TEN: Comprehensive treatments
Broadway	10 FWY to Pasadena Ave/LA River	TEN: Moderate Plus treatments
Spring St	9th St to Cesar E Chavez Ave	BEN: Protected bike lane
Spring St	College St to Broadway	BEN: Tier 2 bike lane
Main St	10 FWY to Venice Blvd	BEN: Protected bike lane
Main St	Venice Blvd to 9th St	BEN: Protected bike lane; TEN: Moderate treatments
Main St	9th St to Cesar E Chavez Ave	BEN: Protected bike lane
Main St	Cesar E Chavez Ave to Albion St/LA River	BEN: Protected bike lane; TEN: Moderate treatments
Los Angeles St	2nd St to Alameda St	BEN: Protected bike lane
San Pedro St	10 FWY to 1st St	BEN: Protected bike lane; TEN: Moderate treatments
San Pedro St	1st St to Temple St	BEN: Protected bike lane
Central Ave	10 FWY to 2nd St	BEN: Protected bike lane; TEN: Moderate treatments
Central Ave	2nd St to 1st St	BEN: Tier 2 bike lane; TEN: Moderate treatments
Alameda St	10 FWY to Temple St	VEN
Mateo St	Olympic Blvd to 7th St	BEN: Tier 3 bike lane
Mateo St	7th St to 4th St	BEN: Tier 2 bike lane
Santa Fe Ave	Washington Blvd to 4th St	BEN: Tier 3 bike lane
Santa Fe Ave	4th St to 2nd St	BEN: Tier 2 bike lane (one side)
Santa Fe Ave	2nd St to 1st St	BEN: Protected bike lane
Center St	1st St to 101 FWY	BEN: Protected bike lane
Ramirez St/ Center St	Ramirez St to Vignes St	BEN: Protected bike lane
Vignes St	Ramirez St to Main St	BEN: Protected bike lane
Alpine St	Main St to Broadway	BEN: Protected bike lane
College St	Hill St to Main St	BEN: Tier 3 bike lane
Cesar E Chavez Ave	Beaudry Ave to Spring St	BEN: Tier 2 bike lane; TEN: Moderate Plus treatments
Cesar E Chavez Ave	Spring St to Mission Rd/LA River	TEN: Comprehensive treatments
1st St	110 FWY to Spring St	BEN: Tier 2 bike lane; TEN: Comprehensive treatments
1st St	Spring St to Alameda St	BEN: Protected bike lane; TEN: Moderate treatments
1st St	Alameda to Myer St/LA River	BEN: Protected bike lane
2nd St	110 FWY to Main St	BEN: Protected bike lane
2nd St	Main St to Central Ave	BEN: Tier 2 bike lane
3rd St	Spring St to Los Angeles St	BEN: Protected bike lane
3rd St	Los Angeles St to Alameda St	BEN: Tier 2 bike lane
4th St	Spring St to Mission Rd/LA River	BEN: Protected bike lane
5th St	110 FWY to Central Ave	TEN: Moderate Plus treatments
6th St	110 FWY to Central Ave	TEN: Moderate Plus treatments
6th St	Central Ave to Mission Rd/LA River	BEN: Protected bike lane; TEN: Moderate Plus
7th St	110 FWY to Los Angeles St	BEN: Protected bike lane
7th St	Los Angeles St to Mission Rd/LA River	BEN: Protected bike lane
9th St	Main St to San Pedro St	TEN: Moderate treatments
Olympic Blvd	San Pedro St to Central Ave	TEN: Moderate treatments

TABLE 4.15-8 DOWNTOWN PLAN TRANSPORTATION IMPROVEMENT PROJECT LIST

Project Location	Endpoints	Project Description
Olympic Blvd	Central Ave to LA River	BEN: Tier 3 bike lane; TEN: Moderate treatments
10th St	Main St to Central Ave	BEN: Tier 3 bike lane
11th St	Figueroa St to Main St	BEN: Protected bike lane
12th St	Figueroa St to Flower St	BEN: Protected bike lane
Pico Blvd	110 FWY to Central Ave	BEN: Tier 3 bike lane
Venice Blvd	110 FWY to Figueroa St	BEN: Tier 2 bike lane; TEN: Comprehensive treatments
Venice Blvd	Figueroa St to Main St	BEN: Tier 2 bike lane; TEN: Moderate Plus treatments
16th St	Main St to Hooper Ave	BEN: Tier 2 bike lane
Washington Blvd	Alameda St to LA River	BEN: Tier 3 bike lane

TABLE 4.15-9 DOWNTOWN PLAN CHANGES TO MP 2035

Project Location	Endpoints	Removed	Added
Hope St	Pico Blvd to 6th St		BEN: Tier 3 bike lane
Grand Ave	7th St to 5th St		BEN: Protected bike lane
Olive St	7th St to 5th St		BEN: Protected bike lane
Hill St	10 FWY to 4th St	BEN: Tier 3 bike lane	TEN: Comprehensive
Broadway	10 FWY to College St	TEN: Comprehensive	TEN: Moderate Plus
Spring St	Ord St to College St	BEN: Tier 2 bike lane	
Main St	Venice Blvd to 9th St	TEN: Moderate Plus	TEN: Moderate
Los Angeles St	2nd St to Alameda St	BEN: Tier 2 bike lane	BEN: Protected bike lane
San Pedro St	10 FWY to Temple St		BEN: Protected bike lane
Central Ave	2nd St to 1st St	BEN: Protected bike lane	BEN: Tier 2 bike lane
Mateo St	Olympic Blvd to 7th St		BEN: Tier 3 bike lane
Santa Fe Ave	Washington Blvd to 4th St		BEN: Tier 3 bike lane
Santa Fe Ave	4th St to 2nd St		BEN: Tier 2 bike lane (one side)
College St	Hill St to Main St		BEN: Tier 3 bike lane
Cesar E Chavez Ave	Beaudry Ave to Spring St	BEN: Protected bike lane	BEN: Tier 2 bike lane
Cesar E Chavez Ave	Spring St to Mission Rd/LA River	BEN: Tier 2 bike lane TEN: Moderate Plus	TEN: Comprehensive
1st St	110 FWY to Spring St	TEN: Moderate Plus	TEN: Comprehensive
1st St	Spring St to Alameda St	TNE: Moderate Plus	TEN: Moderate
3rd St	Los Angeles St to Alameda St	BEN: Protected bike lane	BEN: Tier 2 bike lane
4th St	Spring St to Mission Rd/LA River		BEN: Protected bike lane
5th St	110 FWY to Central Ave	TEN: Comprehensive	TEN: Moderate Plus
6th St	110 FWY to Mission Rd/LA River	TEN: Comprehensive	TEN: Moderate Plus
7th St	Central Ave to Mission Rd/LA River	BEN: Tier 2 bike lane	BEN: Protected bike lane
9th St	Main St to San Pedro St	TEN: Moderate Plus	TEN: Moderate
Olympic Blvd	San Pedro St to LA River	TEN: Moderate Plus	TEN: Moderate
12th St	Figueroa St to Flower St		BEN: Protected bike lane
Venice Blvd	Figueroa St to Main St	TEN: Comprehensive	TEN: Moderate Plus

Figure 4.15-7 2040 Downtown Plan Network

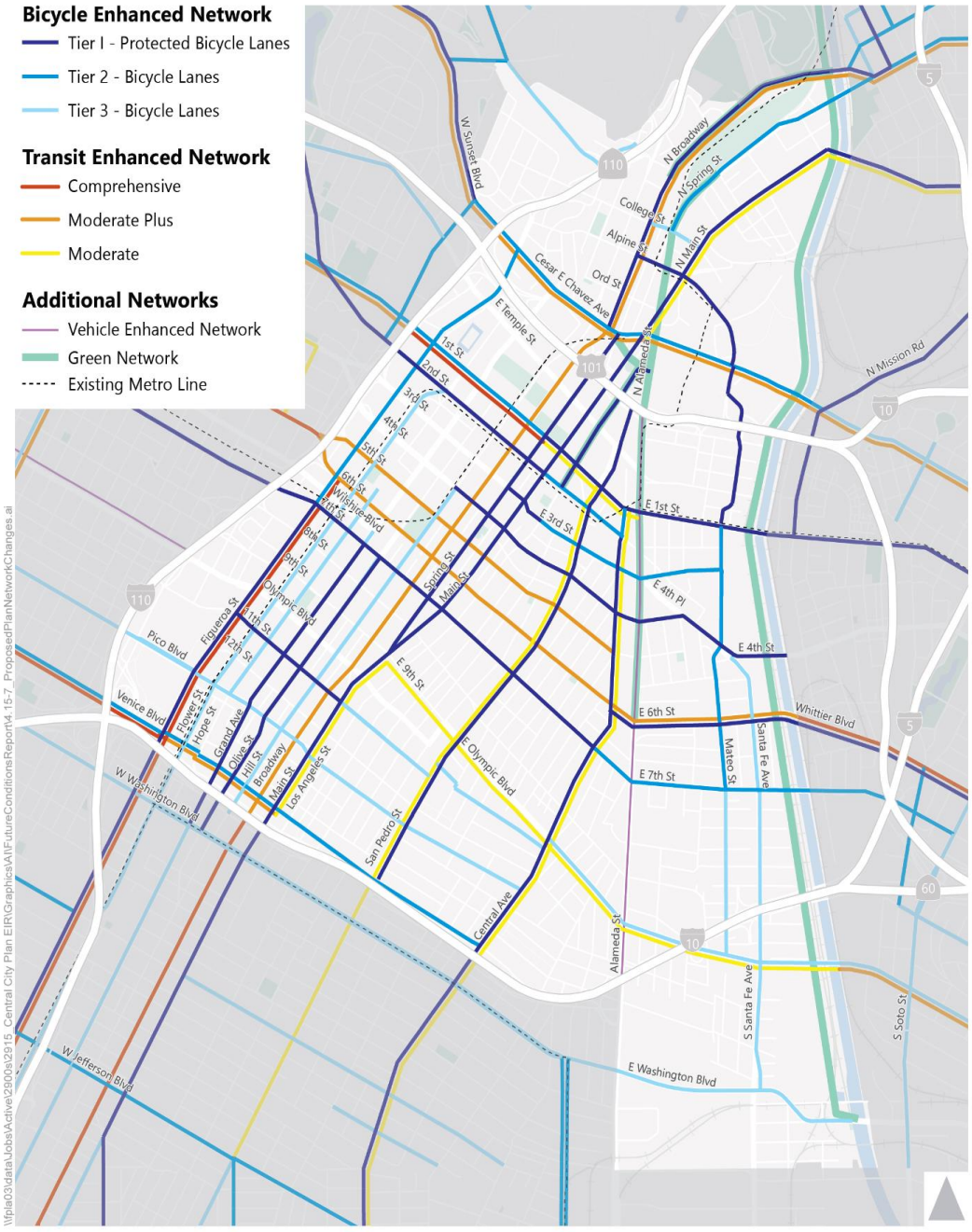


Figure 14.5-7
2040 Proposed Plan Network

PROJECT IMPACTS

The impacts and mitigation discussion presented below reflects proposed CEQA requirements as finalized on December 28, 2018. Delay-based metrics are included in some cases for informational purposes, and are not discussed in mitigation.

Threshold 4.15-1	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities

Impact 4.15-1

Downtown Plan: The Downtown Plan would not conflict with adopted City and state policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance of safety of such facilities. This impact would be ***less than significant.***

New Zoning Code: The New Zoning Code does not include any standards that would conflict with the goals and policies of the MP 2035 or SCAG 2016-2040 RTP/SCS. Furthermore, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This impact would be ***less than significant***.

Downtown Plan Impact

The Downtown Plan seeks to enhance access to all modes in the local circulation system, improving access on transit, roadways, bicycle and pedestrian facilities. This is accomplished through applying new land use and zoning regulations to encourage mixing and scales of use as well as site design supportive of all modes. The Downtown Plan also implements MP 2035 with a refined lens on the Downtown Area, and is consistent with the objectives of the SCAG 2016-2040 RTP/SCS.

The types of transportation improvements envisioned as part of the Downtown Plan are within the framework established in MP 2035. The proposed updates to the Plan are consistent with the City's municipal approach to transportation planning and apply such principles to the Downtown Plan. The proposed mobility improvements would provide transportation options and accommodations for multiple modes of travel (i.e., transit, bicycle, pedestrian, and vehicle) as part of the transportation system.

In addition to MP 2035, the Downtown Plan would support the City's Plan for a Healthy LA by creating more opportunities for people to live and work in areas of the City where travel by active transportation can be part of daily life. The implementation of active transportation facilities is anticipated to improve safety and is in alignment with the City's Vision Zero Action Plan. The existing subway stations create opportunities for the City to further enhance first- and last-mile opportunities through the creation of mobility hubs. In addition, individual development projects will need to adhere to the requirements in LADOT's recently adopted Transportation Assessment Guidelines. The Downtown Plan would not conflict with adopted City and state policies, plans or programs regarding public transit, bicycle, or pedestrian facilities. Therefore, a ***less than significant impact*** related to consistency with other plans with respect to this impact category may occur.

New Zoning Code Impact

The New Zoning Code would provide zone districts for a range of densities, ranging from no maximum density required to restricting the permitted density to one unit per lot, which could be applied elsewhere in the City through future community plan updates or amendments. As such, due to the modulatory nature of the New Zoning Code, it is not known where or to what extent future development and associated circulation may occur as application of the New Zoning Code would be driven by the policy intent and vision of future community plan updates and amendments.

Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing policies related to the circulation system, such as the Transportation Demand Management (TDM) ordinance. The intent of the existing TDM standard is to reduce vehicle trips generated by development by encouraging the use of alternatives to single-occupant vehicles, which is consistent with the goals and policies of MP 2035 and the SCAG 2016-2040 RTP/SCS, and is an implementation program of the MP 2035. No substantive changes to the content or standards of the existing TDM standards are proposed as part of the Proposed Project; however, the Department of City Planning is, through a separate effort, updating the TDM ordinance.

The New Zoning Code includes zoning districts that, if applied outside the Downtown Plan Area, have the ability to implement the goals and policies of MP 2035, the SCAG 2016-2040 RTP/SCS, and other plans, policies, and ordinances discussed above in the Regulatory Framework section. For example, most of the new Form, Frontage, Standards, Use, Density Districts and Development Standards sets intended for application in the Downtown Plan Area are tailored for application near transit and have the potential to reduce vehicular traffic and accommodate multiple modes of transportation. In addition, many new Use Districts encourage a wide-range of uses within the same geographic area. This has the potential to result in residential uses near commercial and employment uses which would encourage more walking and biking, consistent with the objectives of MP 2035 and the SCAG 2016-2040 RTP/SCS. In areas where there are existing transit facilities, locating a wide-range of uses in the same area has the potential to result in enhanced access to transit to a variety of employment, shopping, entertainment, and residential uses.

Many parts of the Downtown Plan Area are served by high-quality transit and other multi-modal options. A potential reduction in off-street parking may result in a reduction to VMT, as it encourages other modes of transportation such as transit, bicycling, and walking.

If applied outside of the Downtown Plan Area, the New Zoning Code has the potential to implement the goals and policies of MP 2035, SCAG 2016-2040 RTP/SCS, and other plans, policies, and ordinances discussed above in the Regulatory Framework section. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential conflicts with MP 2035 and the SCAG 2016-2040 RTP/SCS. The impact would be ***less than significant.***

Mitigation Measures

Significant impacts have not been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

Threshold 4.15-2	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)

Impact 4.15-2

Downtown Plan: The Downtown Plan would not conflict with CEQA Guidelines section 15064.3, subdivision (b) related to VMT thresholds. There would be ***no impact.***

New Zoning Code: The New Zoning Code does not include any standards that would conflict or be inconsistent with the VMT projections established in the SCAG 2016-2040 RTP/SCS, pursuant to CEQA Guidelines section 15064.3. Furthermore, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This impact would be ***less than significant***.

Downtown Plan Impact

The Downtown Plan would have an impact if its VMT exceeds either of the following:

- The Downtown Plan results in average VMT per service population for the 2040 Downtown Plan that exceeds 15% below the regional average total VMT per service population from 2016 SCAG Region.
- The Downtown Plan results in average total VMT per service population for the 2040 Downtown Plan that exceeds the average total VMT per service population for the Downtown Plan Area from 2017 Baseline.

Table 4.15-10 shows vehicle trips and VMT for the 2016 SCAG Region conditions and 2040 Downtown Plan conditions, and **Table 4.15-11** shows vehicle trips and VMT for the 2017 Baseline conditions and 2040 Downtown Plan conditions.

TABLE 4.15-10 FUTURE TOTAL VEHICLE MILES TRAVELED (VMT) COMPARED TO 2016 SCAG REGION

Metric	2016 SCAG Region Conditions	2040 Downtown Plan Conditions	Percent Difference
Total Daily VT	82,283,000	1,375,000	N/A*
Total Daily VT per Service Population	3.1	2.5	-19%
Total Daily VMT	908,573,000	8,842,000	N/A*
Total Daily VMT per Service Population	**33.9**	**15.9**	**-53%**

SOURCE: Fehr & Peers, 2019. SCAG 2016 RTP 2016 Base Year Model, 2016.
** Notes: Comparison here is not applicable as the conditions represented come from different geographic areas, the SCAG region and the Downtown Plan Area respectively*

TABLE 4.15-11 FUTURE TOTAL VEHICLE MILES TRAVELED (VMT) COMPARED TO 2017 BASELINE			
Metric	**2017 DT Plan Baseline Conditions**	**2040 Downtown Plan Conditions**	**Percent Difference**
Total Daily VT	758,000	1,375,000	81%
Total Daily VT per Service Population	2.6	2.5	-4%
Total Daily VMT	5,767,000	8,842,000	53%
Total Daily VMT per Service Population	**19.6**	**15.9**	**-19%**
SOURCE: Fehr & Peers, 2019.			

Given that service population VMT for the Downtown Plan is more than 15% below the 2016 SCAG Region and less than the 2017 Baseline for the Downtown Plan Area, the Downtown Plan would have ***no impact***.

New Zoning Code Impact

As discussed above under Impact 4.15-1, the New Zoning Code includes new Form, Frontage, Standard, Use, and Density Districts tailored for application near transit that have the potential to reduce vehicular traffic and accommodate multiple modes of transportation. In addition, new Use Districts encourage a wide-range of uses within the same geographic area, which has the potential to result in residential uses near commercial and employment uses which would encourage more walking and biking. In areas where there are existing transit facilities, locating a wide-range of uses in the same area has the potential to result in enhanced access to transit to a variety of employment, shopping, entertainment, and residential uses.

If applied outside of the Downtown Plan Area, these different Form, Frontage, Standards, Use, Density Districts and Development Standards sets could result in reduced VMT. However, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update or amendment and associated zone changes would analyze potential impacts related to conflicts with the projected VMT, during which community-specific reasonably anticipated development would be estimated and the effect on VMT would be evaluated. Like the Downtown Plan, it is expected that the development capacity of communities undergoing future community plan updates and amendments would be developed in accordance with SCAG VMT projections and the proposed vision for the community as established in the City's adopted General Plan Framework Element and MP 2035. Further, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect conflicts or inconsistencies with SCAG VMT projections from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The impact would be ***less than significant***.

Mitigation Measures

Significant impacts have not been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

Threshold 4.15-3	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)

Impact 4.15-3

Downtown Plan: The Downtown Plan would not substantially increase hazards due to geometric design features (such as sharp curves or dangerous intersections) or incompatible uses. However, there could be safety impacts related to off ramp queuing as growth occurs pursuant to the Plan. This impact would be ***significant and unavoidable.***

New Zoning Code: The New Zoning Code does not include any standards that would substantially increase hazards due to a geometric design feature or incompatible uses. Furthermore, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This impact would be ***less than significant***.

Downtown Plan Impact

The Downtown Plan describes the reasonably expected future development for a portion of the City and does *not* constitute a commitment to any project-specific development within the Downtown Area. Furthermore, none of the regulations included in the Downtown Plan would promote sharp curves, dangerous intersections, or incompatible uses that could present safety hazards. Rather, numerous policies and programs included in the Downtown Plan emphasize transportation safety for all people using the transportation system, support implementation of transportation treatments that are designed to improve roadway safety and help implement other City initiatives (such as Vision Zero or Safe Routes to School) which aim to improve the safety of the City's transportation facilities.

None of the transportation system improvements envisioned in the Downtown Plan or Project List would introduce new safety hazards or incompatible uses at intersections or along roadway segments, as most would be designed to improve safe circulation and access to the transit stations for all users. The multi-modal improvements envisioned in the Downtown Plan are intended to help minimize conflicts between pedestrians and vehicles. Furthermore, design standards in the Downtown Plan are intended to limit the number, width, and location of new driveways along major streets and in areas of high pedestrian activity, thereby improving pedestrian safety.

The implementation of bicycle and pedestrian facilities identified in the Downtown Plan and Project List are anticipated to improve the safety of bicyclists and pedestrians. Automobile speed is a major factor in the severity of collisions with bicyclists and pedestrians, the most vulnerable roadway users. Collisions with a vehicle traveling at 20 miles per hour result in a five percent pedestrian fatality rate, and fatalities increase to 40, 80 and 100 percent when the vehicle speed increases to 30, 40 and 50 mph, respectively (USDOT 1999). Bicycle lanes, when accompanied by travel lane reductions can help reduce overall vehicle speeds (FWHA). When modified from four travel lanes to two travel lanes with a two-way left-turn lane, research along 45 corridors throughout the country has found a range of 19 to 47 percent reduction in all roadway crashes. The upgrade to fully protected bicycle lanes or cycle tracks has been shown to reduce the risk of injury by 90 percent (Teschke 2012).

The bicyclist and pedestrian improvements associated with the Downtown Plan and Project List are also anticipated to increase the number and visibility of bicyclists and pedestrians on the City's transportation network. Of 68 cities across California with highest per capita pedestrian and bicycle collisions, per capita injury rates to pedestrians and bicyclists are shown to fall precipitously as the number of bicyclists

increases, revealing a non-linear relationship between bicycle safety and the level of bicycling (Jacobsen 2003). This study showed as much as an eight-fold variation of collisions (expressed as a percentage of those that bike or walk to work) in comparing low and high bicycling cities. The underlying reason for this pattern is that motorists drive slower when bicyclists and pedestrians are visible either in number or frequency and drive faster when few pedestrians and bicyclists are present, resulting in higher overall travel speeds. This effect of modified driving behavior is consistent with other research focused on 24 California cities that shows that higher bicycling rates among the population generally show a much lower risk of fatal crashes for all road users (Marshall et.al 2011). Comparing these low versus high bicycling communities, there was a ten-fold reduction in fatality rate for motorists, and eleven-fold reduction in fatality rate for pedestrians, and an almost fifty-fold reduction in fatality rate for bicyclists.

The Downtown Plan is responding to changing demographics, a younger population desirous of safe and accessible active transportation options (bike, walk), a growing number of residents and employees seeking alternatives to the car, and an aging population that may need to rely more and more on transportation alternatives to the automobile. In 2030, senior citizens will make up 1/5 of Los Angeles County's population. This older population (as well as children and the disabled) will benefit from longer pedestrian crossing times, shorter street crossing distances, wider, shaded sidewalks, street benches, increased transit service and separated bicycle facilities. Ultimately, nothing in the Downtown Plan is expected to significantly reduce pedestrian mobility, including but not limited to the disabled, those with strollers, and bus riders.

Freeway Analysis

As part of individual development project entitlements, the Interim Guidance for Freeway Safety Analysis released by LADOT in May 2020 requires that individual land use projects evaluate the potential for safety impacts related to freeway off ramp queuing. The specific concern relates to the possibility that the speed differential between vehicles traveling on freeway mainlines (the 5, 10, 110, and 101 Freeways, in particular) and vehicles queuing at freeway off-ramps may create the potential for collisions if drivers on the freeway mainline lack sufficient time to slow or stop once they are aware of a queuing situation. Generally speaking, it is anticipated that freeway mainline traffic would slow at times when high levels of off ramp queuing occurs and that the speed differential would be sufficiently small that mainline drivers would have sufficient warning about a queuing situation; however, it is possible that queuing at individual off ramps could occur at times when mainline traffic congestion is low, thus creating a potential safety issue. Because the Downtown Plan is programmatic in nature, it does not include specific development projects or details about the size, nature, or location of individual developments. In addition, future traffic levels and speeds at individual off ramps in and near the Downtown Plan Area cannot be predicted with any degree of certainty at this time because it is not known how conditions may change over an approximately 20-year period and what measures the City and Caltrans may implement to address any off ramp queuing issues that arise. Therefore, any detailed analysis of potential future impacts related to off ramp queuing would be speculative. Nevertheless, queuing-related safety issues could potentially arise as additional development occurs in the Downtown Plan Area, although it is anticipated that the City and Caltrans would address any such issues as they arise, it cannot be determined with certainty that queuing-related safety issues would not occur. As such, safety impacts related to off ramp queuing as growth occurs pursuant to the Plan are ***potentially s****ignificant*.

New Zoning Code Impact

The New Zoning Code does not propose any specific development or transportation system improvement. The New Zoning Code would not substantially increase hazards due to a design feature or incompatible uses. The New Zoning Code would introduce a range of Form, Frontage, Standards, Use, and Density Districts that could be applied in a manner that would encourage a mix of land uses near transit, bicycle, and pedestrian facilities, which has the potential to place additional bicyclists and pedestrians near existing

roads. However, the parking and access standards also provide adequate and safe arrangement of pedestrian circulation facilities, driveways, and parking and loading space. For example, in certain Development Standard Sets that limit the amount of parking required and prioritize walking and biking, the New Zoning Code would require pedestrian connections in long blocks to facilitate pedestrian movement and contribute to a pedestrian-friendly environment. The New Zoning Code also includes parking and access standards that encourage cross-access. Cross-access would provide internal vehicular circulation to facilitate movement of vehicles from lot to lot without generating additional turning movements on public streets. Cross-access is also encouraged for pedestrian facilities which would avoid internal cross-access hazards.

Prior to issuance of a building permit, the City Bureau of Engineering and Department of Transportation requires that future projects submit a parking and driveway plan that incorporates design features intended to reduce collisions. The New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development regulations, such as those required by the City, intended to avoid potential hazards. As such, it is not foreseeable that the New Zoning Code would increase hazards to bicyclists or pedestrians from the Form, Frontage, Standards, Use, and Density District provisions.

The New Zoning Code would provide a range of Form, Frontage, Standards, Use, Density Districts and Development Standards sets that could be applied elsewhere in the City through future community plan updates or amendments. However, due to the modulatory of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. It is anticipated that as community plans are revised and amended, the roadway network in each community planning area would be refined in concert with land use changes. Without such detail, it is not possible, using available traffic analysis procedures, to estimate some types of impacts. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze if the zoning applied would substantially increase hazards due to a geometric design feature or incompatible uses. The impact would be ***less than significant***.

Mitigation Measures

Significant and unavoidable impacts have been identified in relation to the potential for project-specific ramp queuing safety impacts as growth occurs pursuant to the Plan. Potential mitigation may include transportation demand management strategies to reduce a project's trip generation, investments to active transportation infrastructure, or transit system amenities, and/or operational changes to the ramp terminal such as lane reassignment, traffic signalization, signal phasing or timing modifications, etc. However, without specific information on where safety impacts may occur as a result of freeway off ramp queuing, it is not possible to identify appropriate mitigation measures. Therefore, no feasible mitigation can be identified for the Downtown Plan. It is anticipated that subsequent land use development projects that are seeking approval under the plan study freeway queuing and safety impacts in more detail per the Interim Guidance for Freeway Safety Analysis.

Significance After Mitigation

Impacts related to highway safety as a result of design features or incompatible uses would be ***significant and unavoidable***. All other safety related issues from hazards are ***less than significant***.

Threshold 4.15-4	Result in inadequate emergency access

Impact 4.15-4

Downtown Plan: The Downtown Plan would not result in inadequate emergency access. This impact would be ***less than significant.***

New Zoning Code: The New Zoning Code does not include any standards that would result in inadequate emergency access. Furthermore, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This impact would be ***less than significant***.

Downtown Plan Impacts

In the City of Los Angeles, fire prevention and suppression and emergency medical services are provided by the LAFD. Public protection service and law enforcement are provided by LAPD. This impact analysis provides an evaluation of impacts to emergency services as they relate to transportation. (EIR Section 4.14 considers the impacts to emergency services and whether that will result in impacts to the environment from the construction of new fire or emergency service or police facilities.) For individual development projects, this impact criterion considers whether a project would have adequate access to emergency services based on the road configuration and project design. At the Downtown Plan level, individual project design level details, such as location of driveway location and design, are unknown. Therefore, the Draft EIR does not consider impacts to emergency access to particular properties in the Downtown Plan Area or particular streets based on roadway configurations. The Draft EIR considers, at the detail available, the reasonably foreseeable impacts to roadway congestion from the Downtown Plan and the associated impacts to emergency access from any forecasted congestion.

Therefore, the discussion will first consider the Downtown Plan' impacts to roadway congestion using levels of services (LOS) and volume-to-capacity (V/C) criteria when compared to existing conditions (2017) and then discuss the emergency access impacts associated with roadway congestion.

Roadway Congestion

Many factors influence the LOS and V/C analysis including, but not limited to, land use patterns, the relationship between land use and transportation, how transportation treatments are designed within the existing roadways, how and where the Downtown Plan directs anticipated growth within the Plan Area, and growth anticipated in the region surrounding the Plan Area.

Land Use Patterns

Where and how the Downtown Plan directs anticipated growth in relation to transportation will affect transportation use; therefore, land use patterns are factored into the analysis of the circulation system. The Downtown Plan would create new housing and employment opportunities, mostly in areas around existing transit systems.

Regional Background Growth

On a regional level, traffic in the Downtown Plan Area is anticipated to increase in conjunction with regional population, housing, and employment growth projected to occur in the future by SCAG. This growth will occur with or without implementation of the Downtown Plan. The background growth influences the transportation analysis by accounting for the increased activity levels under Downtown Plan conditions, although those increases would occur with or without the Plan. Background growth is included

in the Downtown TDF Model, which is built from the City of Los Angeles Model as described in the Model Development Report included in the Appendix K.

Level of Analysis

At the aggregate Plan scale, the traffic operation results reflect the impacts related to the Downtown Plan and the number of vehicle travel lanes. However, turn lanes, signal timings, and driveways are not accounted for in the analysis at this scale. Each of these features has the potential to affect operations, delay, VMT, and rerouting of traffic at the neighborhood level. Plans that involve large areas and are not expected to be fully implemented until Year 2040 or beyond are not analyzed effectively by detailed intersection V/C analyses. Consequently, roadway segment analysis is commonly used to determine the average service capacity of the roadway network. Street segment capacity impacts are generally evaluated in program-level analyses (such as community plans or long-range development projects) for which details regarding specific land use types, sizes, project access points, etc., are not known (Los Angeles 2006).

Circulation System Analysis

As identified above, two criteria (weighted average V/C ratio and the number of street segments at LOS E or F) are used to evaluate the impacts of the Downtown Plan when compared to Existing conditions. **Table 4.15-12** presents the volume-weighted V/C ratios and LOS results for the AM peak period. With the implementation of the Downtown Plan and regional growth anticipated in Year 2040, the weighted V/C ratio worsens from 0.626 (LOS B) to 0.921 (LOS E). The percentage of roadway segments operating at LOS E or F also increases from 15% to 44%. **Table 4.15-13** presents the volume-weighted V/C ratios and LOS results for the PM peak period. With the implementation of the Downtown Plan and regional growth anticipated in Year 2040, the weighted V/C ratio worsens from 0.648 (LOS B) to 0.965 (LOS E). The percentage of roadway segments operating at LOS E or F also increases from 16% to 48%.

TABLE 4.15-12 AM PEAK PERIOD ROADWAY OPERATIONS

Transportation Metrics	2017 Baseline	2040 Downtown Plan
Weighted Average V/C	0.626 (LOS B)	0.921 (LOS E)
Percentage (%) of Street Segments at LOS E or F	15%	44%
Percentage (%) of Center-Line Miles at LOS E or F	17%	43%
Weighted Average V/C by Facility Type		
Boulevard/Parkway	0.635 (LOS B)	0.924 (LOS E)
Avenue	0.632 (LOS B)	0.937 (LOS E)
Local / Collector	0.576 (LOS A)	0.818 (LOS D)

Source: Fehr & Peers, 2019.

TABLE 4.15-13 PM PEAK PERIOD ROADWAY OPERATIONS		
Transportation Metrics	**2017 Baseline**	**2040 Downtown Plan**
Weighted Average V/C	0.648 (LOSB)	0.965 (LOS E)
Percentage (%) of Street Segments at LOS E or F	16%	48%
Percentage (%) of Center-Line Miles at LOS E or F	18%	46%
Weighted Average V/C by Facility Type		
Boulevard/Parkway	0.682 (LOS B)	0.965 (LOS E)
Avenue	0.652 (LOS B)	0.984 (LOS E)
Local / Collector	0.584 (LOS A)	0.853 (LOS D)
Source: Fehr & Peers, 2019.		

Emergency Access Impacts Associated with Roadway Congestion

Within the City of Los Angeles, fire prevention and suppression and emergency medical services are provided by the LAFD. Public protection service and law enforcement are provided by LAPD.

While the Downtown Plan would impact segment-level LOS as shown above, there is not a direct relationship between predicted travel delay and response times as California state law does require drivers to yield the right-of-way to emergency vehicles and even permits emergency vehicles to use opposing lane of travel, the center turn lanes, or bus-only lanes. LAFD in collaboration with LADOT has developed a Fire Preemption System (FPS), a system that automatically turns traffic lights to green for emergency vehicles traveling on designated streets in the City. (LAFD 2008a). The City of Los Angeles has over 205 miles of routes equipped with FPS. In some instances, roadway reconfigurations with the implementation of the transportation improvements as part of the enhanced network treatments could improve emergency access. For example, a roadway reconfiguration could improve emergency access where a bus-only lane or a contiguous center left-turn lane is introduced where it did not exist. Emergency vehicles are permitted to use bus-only lanes for local access to emergency destinations. People traveling by bicycle are required to pull to the side of the road to yield access to emergency providers regardless if they are traveling in a bus-only lane or in a standard travel lane. It is more likely that when in route to an emergency incident, general traffic will be expected to merge into the bus-only lane, permitting the emergency vehicle to pass in the through lane to the left. Emergency responders also routinely use the center left-turn lanes, or even travel in opposing travel lanes if needed. Generally, multi-lane roadways allow the emergency vehicles to travel at higher speeds and permit other traffic to maneuver out of the path of the emergency vehicle.

Knowing exactly how fire and emergency service response times will be affected calls for a great deal of speculation. As explained above, it is not possible to exactly predict the Downtown Plan impacts at the street level. This is one factor as to why it is not possible to forecast response times. The other is that, as explained above, the relationship between emergency access and traffic and potential impacts associated with emergency access is complex and involves factors such as the following:

- The proximity of LAFD and LAPD (and other) facilities to those they serve.
- The staffing and equipment at fire stations.
- The opportunity for emergency responders to use alternative routes in an area.
- The specific street configuration. LAFD, in cooperation with LADOT and LADCP, actively participates in the design of specific roadway changes in order to ensure adequate fire/emergency access is maintained. LAFD, in reviewing street and right-of-way projects, comments on particular

street configuration designs, and will raise concerns if roadways present particular access challenges, and can recommend no changes be done at all or alternative changes be undertaken if fire and emergency access are particularly impacted.

- As identified in the Thresholds Guide (Los Angeles 2006), on any given project review, LAFD can implement project specific mitigation requirements, such as requiring fire retardant landscaping, prohibiting construction in fire hazard areas, requiring design features that reduce fire potential and developing emergency response plans.
- The changing demand for service is complex. For example, with increasing populations there may be more density and more construction, though new buildings are constructed in accordance with increasingly stringent building and fire codes making them safer and more resistant to fires, such as requiring fire sprinklers. The population is aging, which may increase demand for service. But it is also feasible that the population may not need additional service, as healthcare and other technologies evolve and are improved.
- Future factors that could increase efficiencies in response, including improvements in technology and management, such as changes in deployment of equipment and staff and mutual aid agreements.

As discussed in Section 4.13, *Public Services*, LAFD has a Constitutional mandate to provide fire services as, "the protection of the public safety is the first responsibility of local government." Cal. Const. Art. XIII, Sec. 35, subd. (a)(2). LAFD "preserves life and property, promotes public safety and fosters economic growth through a commitment to prevention, preparedness, response and recovery as an all risk life safety response provider." It is the nation's second busiest provider of Emergency Medical Services (EMS); more than 85% of LAFD's daily responses are related to EMS. The types of medical response calls received range from minor cuts to trauma and heart attacks. The call volume for structure and brush fires is less frequent.

In 2015, LAFD published a Strategic Plan 2015-2017, A Safer City, that focuses on nine goals and corresponding strategic actions that would guide the LAFD for the next three years (LAFD 2015). The primary goals that are applicable to the Project include providing exceptional public safety and emergency service and implementing and capitalizing on advanced technologies. Some of the key priorities associated with these goals include:

- Improving response times by utilizing data and metrics to identify gaps in LAFD's response strategies and exploring response time improvements through dialogue, cognitive inquiry, innovation, and follow-up;
- Delivery of emergency medical services by expanding LAFD EMS response capabilities for special events and addressing periods of high vehicle traffic; and
- Identifying and implementing advanced technologies to support and improve performance metrics, tracking standards, data collection, analysis and reporting procedures (FireStatLA).

The LAFD Strategic Plan also focuses on the development of an even more professional workforce, promotion of a positive work environment to address risk management issues and strengthening community relationships to improve preparedness and enhance resiliency during emergency events.

In 2018, LAFD released the new Strategic Plan 2018-2020, A Safer City 2.0, which reports that since the previous Strategic Plan was released, LAFD has hired hundreds of new firefighters, implemented the Four Bureau Reorganization, and created innovative resources such as the Advanced Provider Response Unit (APRU), the Sober Response Unit and the Fast Response Vehicle program as well as other pilot programs (LAFD 2018). The new Strategic Plan has updated goals that are more refined. The five goals are 1) Provide exceptional public safety and emergency service, 2) Embrace a healthy, safe and productive work

environment, 3) Capitalize on Advanced Technology, 4) Enhance LAFD sustainability and community resiliency, and 5) Increase opportunities for personal growth and professional development. Goal 1 includes improving emergency response times, the delivery of EMS, resource deployment and readiness to respond to disasters. Goal 1 includes an objective to complete the Standards of Cover deployment analysis to determine the optimal distribution and concentration of resources and ensure a safe and effective response force for fire suppression, EMS and specialty response situations. The recommendations from the Standards of Cover are expected to be identified based on different geographic areas in the City; the Standards of Cover study was funded in the City's 2019-2020 budget and is expected to be completed within the next few years (LAFD 2019).

In the interim, LAFD has been implementing innovative resources and pilot programs especially in relation to public health. By addressing EMS related incidents with new resources, such as specialized medical units, other resources, such as fire engines and fire trucks and associated personnel, would be able to respond to other incidents, such as fires or other emergencies. This strategy is for better resource deployment and to help reduce response times. In the Downtown Plan Area, Fire Station #4 has a Sober Response Unit, which consists of a physician's assistant or nurse practitioner working alongside a firefighter paramedic as well as a social worker. This unit can provide medical treatment in the field, such as stitches and lab work, and determine if patients can be treated in the field without being transported to a hospital, or connect patients directly to a mental health facility or sobering center (LAFD 2020).

In 2015, Planning Department staff discussed the LAFD Strategic Plan and its relationship to growth and traffic with LAFD staff in order to understand how LAFD responds to growth and changes in traffic (LAFD 2015a). LAFD advised that although increasing congestion is a factor in how they address emergency response, their ongoing planning efforts, including the LAFD Strategic Plan take into account such increases in congestion and LAFD continues to plan for and maintain public safety and emergency service as required. LAFD monitors any impact on-the-ground implementation of the Downtown Plan may have on response times and make adjustments as necessary. These adjustments may or may not include redeploying resources, adding staff or building new fire stations. In the summer of 2019, Planning Department staff met with LAFD staff on the same topic due to public comments received about congestion and emergency response (LAFD 2019a). LAFD staff indicated that there are ongoing assessments of increases in call load or types of calls throughout the City, and LAFD continuously makes resource and deployment adjustments to address these changes, such as hiring additional medical personnel, acquiring new apparatus or flex staffing of personnel during the busiest hours of the day. LAFD staff said incremental changes are currently being addressed but the pending Standards of Cover is expected to have new recommendations for the long term. The Standards would include levels of staffing of firefighters and other personnel, target response times, new facilities and apparatus needed by geography, and address a City where development is expected to become denser and taller around transit infrastructure systems.

LAFD has some adopted response times that are consistent with the response times stated in the National Fire Protection Association guidelines, including call processing, turnout for EMS and non-EMS calls, and travel. LAFD holds regular FireStat meetings to review response times throughout the City. These meetings include battalion chiefs and captains from the four Geographic Bureaus (Central, South, Valley, and West) and the Administrative Bureaus in the City, and uses the FireStat data to exercise performance management and spot trends to adjust practices, methods or identify other solutions to maintain response times. Metrics are compared between stations and even across shifts or platoons to determine if there is an issue and to continue always to work on reducing all response times to get closer to the NFPA guidelines. If response times are shown to be increasing, battalion chiefs and captains will be tasked with identifying the reason and put in place mediations to resolve the issue. For example, if it is shown that one platoon is managing a four-minute average response and another platoon at the same station in similar conditions has an average response time of four and a half minutes, the responsible officers for the station will need to determine why one platoon is doing better than another, such as whether one platoon is taking a different route, and resolve

the differences to improve the slower numbers. If the factors are external to LAFD, LAFD will coordinate with other City departments, such as LADOT or ITA to adjust street light timing, or look for completely new solutions, in order to improve response times. In general, LAFD is constantly monitoring FireStat and utilizing all available resources so that appropriate and feasible response times are being maintained.

Many members of the public focus on response times as operational measures to assess system performance (Fitch 2005) or believe that faster response times mean better patient outcome. Nationwide, the most widely referenced response time standard for advanced life support (ALS) incidents in urban settings has been for emergency responders to respond within 8 minutes and 59 seconds, when including call processing time, for 90 percent of incidents. The National Fire Protection Association *1710 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments* is for an ALS unit to respond within 8 minutes to 90 percent of incidents, without including call processing time (Fitch, 2010). This response goal time has been commonly cited since Dr. Mickey Eisenberg published a study in 1979, which concluded that survival from cardiac arrest is maximized if the time between collapse to receiving CPR is four minutes and the time from collapse to receiving definitive care (e.g. defibrillation) is 8 minutes, which has led to a widespread goal of an 8-minute response for ALS units responding to life-threatening emergencies (Blanchard et al., 2012).

LAFD publishes average operational response times citywide and by specific fire stations online through FIRESTATLA (http://www.lafd.org/fsla/stations-map), and was the first fire agency in the United States to release response times to the public (Los Angeles 2019). ALS operational response times are provided for the full calendar year (January through December) starting with the year 2016; when this document was prepared in September 2019, the data available through FIRESTATLA online for 2019 was January through August. Operational response time is the time interval that starts when first contact is made (either through 911 or the fire dispatch center) and ends when the first Standard Unit arrives on-scene. A Standard Unit has the capacity or equipment to administer the full suite of lifesaving services (LAFD 2019b). Average ALS operational response times for the City and for the five stations in the Downtown Plan Area is less than the 8 minute 59 seconds standard, including call processing time. See **Table 4.15-14**.

TABLE 4.15-14 LOS ANGELES FIRE DEPARTMENT RESPONSE TIMES

Year	**Station 3** 108 N Fremont Ave, Los Angeles, CA 90012	**Station 4** 450 E Temple St, Los Angeles, CA 90012	**Station 9** 430 East 7th Street Los Angeles, CA 90023	**Station 10** 1335 South Olive Street Los Angeles, CA 90015 CA	**Station 17** 1601 South Santa Fe Avenue Los Angeles, CA 90021 CA
2016	5:23	5:30	4:40	5:15	5:40
2017	5:40	5:30	4:49	5:29	5:35
2018	5:39	5:43	4:52	5:35	5:37
2019 /a/	5:48	5:36	4:47	5:33	5:45

/a/ Metrics for 2016, 2017, and 2018 are for January-December; for 2019, the available months were January-November when sourced in December 2019.
SOURCE: LAFD, FIRESTATLA, 2019.

From the data, the average operational response times for ALS incidents for the five fire stations in the Plan Area have generally slightly increased in recent years, but remain under the 8 minutes 59 seconds standard. Based on all of the above, it is not reasonably foreseeable that the City will not continue to stay below the 8 minutes and 59 second standard for average emergency response times in the Plan Area in consideration of the increasing congestion in the Plan Area identified above. It is reasonably foreseeable that LAFD will continue to meet its own mission statement and constitutional mandate to provide necessary fire and emergency services to the residents and visitors of the City. LAFD is currently preparing a Standards of Cover that will establish the City's response time standard and identify the facilities, equipment and staff to maintain that response time, including in consideration of increasing congestion identified above.

Additionally, LAFD continues to develop, obtain and innovate new methods, resources and equipment to meet the needs of the City for fire and emergency response, including in the Plan Area. Based on the above, the impact of the Downtown Plan on emergency medical services and fire protection and police protection would be ***less than significant***.

New Zoning Code Impact

The New Zoning Code would not result in inadequate emergency access. The City requires that development plans be submitted to the City for review and approval to ensure that new development has adequate access, including driveway access and turning radius in compliance with existing regulations. In addition, many roadway configurations shown in the City's Complete Streets Design Guide would include continuous center left turn lanes, which facilitate emergency access when the thru lanes experience delays. The New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development regulations, such as those required by the City, intended to avoid inadequate emergency access.

The primary Development Standard Set being used in the Downtown Plan Area has no minimum parking requirements and allows for off-site parking for both non-residential and residential uses which, if applied outside of the Downtown Plan Area, has the potential to lead to additional, unintended congestion as drivers search for parking. If this Standard Set were to be applied in areas that are not served by high-quality transit, it is possible that its application could contribute to congestion. However, it is speculative as to if and where this Development Standard Set would be applied outside of the Downtown Plan Area.

The New Zoning Code would provide a range of Form, Frontage, Standards, Use, Density Districts and Use Development Standards sets that could be applied elsewhere in the City through future community plan updates or amendments. However, due to the modulatory of the New Zoning Code, it is not known where or to what extent future development may occur and if there would be any effects to emergency access. Projecting the location and type of future growth would be speculative at this time; therefore, impacts cannot be identified. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. It is anticipated that as community plans are revised and amended, the roadway network in each community planning area would be refined in concert with land use changes. Without such detail, it is not possible, using available traffic analysis procedures, to estimate some types of impacts. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze if the zoning applied would result in inadequate emergency access. The impact would be ***less than significant.***

Mitigation Measures

No significant impact has been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

CUMULATIVE IMPACTS

Cumulative transportation and traffic impacts consider regional population, housing and employment growth projections prepared by SCAG and found in the 2016-2040 RTP as well as growth anticipated in the Downtown Plan Area. The RTP also includes a Sustainable Communities Strategy (SCS) that provides guidance on land use planning and transportation to ensure that the region meets CARBs region-specific GHG reduction goals. The RTP also includes large-scale transportation improvements to show how linking transportation and land use planning can reduce automobile trips and greenhouse gas emissions. The 2016-

2040 RTP/SCS identifies transportation corridors and transit routes, High Quality Transit Areas (HQTAs), and a variety of strategies to be employed across the region.

MP 2035 and SCAG 2016-2040 RTP/SCS Consistency

The adopted City of Los Angeles Mobility Plan 2035 (MP 2035) could have overlapping impacts with the Downtown Plan. In August 2015, the City of Los Angeles adopted MP 2035. MP 2035 (formerly the Transportation Element of the City's General Plan) is the transportation blueprint for the City of Los Angeles. MP 2035 identifies a number of changes to the City's circulation system, including policies, an Enhanced Complete Street System, an Action Plan, a Complete Streets Design Guide, and a revised Bicycle Plan, all of which will influence the network conditions in the Plan Area and adjacent areas in the City of Los Angeles.

MP 2035 provides the framework for future community plans and specific plans, which take a closer look at the transportation system in specific areas of the City and recommend more detailed implementation strategies to realize MP 2035. MP 2035 was prepared in compliance with the 2008 Complete Streets Act, which mandates that the circulation element of a city's General Plan be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.

The Downtown Plan contains a Project List that reflects the vision of MP 2035 and the analysis above considers two options for implementing MP 2035 in the Downtown Plan Area; however, the Future transportation impact analysis does not reflect full buildout of MP 2035 in adjacent areas of the City of Los Angeles. In the remaining portion of the City of Los Angeles outside the Plan Area, buildout of MP 2035 was not included in the Future with Downtown Plan analysis because, although MP 2035 has been adopted, the timing of implementation has not yet been identified. However, the cumulative impacts analysis evaluates the impacts of the Downtown Plan in conjunction with full buildout of MP 2035 throughout the City of Los Angeles.

The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would conflict with the goals and policies of the MP 2035 or SCAG 2016-2040 RTP/SCS. Neither the Downtown Plan nor the New Zoning Code would have a cumulatively considerable impact related to MP 2035 or SCAG 2016-2040 RTP/SCS consistency. Cumulative impacts are ***less than significant***.

CEQA Guidelines Section 15064.3, Subdivision (b) Consistency

The Downtown Plan meets the City adopted threshold of not exceeding baseline conditions, and therefore does not create a transportation impact itself. While this Plan cannot be used to determine the impact of individual development projects or adjacent community plans, the inclusion of the regionally used future forecasts accounts for potential cumulative impacts in this analysis. Therefore, the Downtown Plan would not have a substantial contribution to any cumulative impacts related to the VMT projections, and would therefore maintain consistency with CEQA Guidelines Section 15064.3, Subdivision (b).

Due to the modulatory of the New Zoning Code, it is not known where or to what extent future development may occur, therefore no specific transportation and traffic impacts would occur. Further, projecting the location and type of future growth would be speculative at this time as future application of the New Zoning Code would be driven by the policy intent and vision of future community plan updates and amendments. Future community plan updates or amendments would be required in order to apply the New Zoning Code

to other parts of the City, which would include environmental review and calculate VMT based on the density and intensity proposed. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Therefore, the New Zoning Code would not have a cumulatively considerable impact related to consistency with VMT projections. Cumulative impacts are ***less than significant***.

Hazards Due to a Geometric Design Feature or Incompatible Uses

The Downtown Plan does not include any elements that would promote sharp curves, dangerous intersections, or incompatible uses that could present safety hazards, and promotes policies and programs to encourage safety of users across all modes. Although the Downtown Plan describes a reasonably expected future and cannot constitute a commitment to any project-specific development, individual projects would be expected to align with the safety principles of the Downtown Plan as well. However, queuing-related safety issues could potentially arise as additional development occurs in the Downtown Plan Area and elsewhere in the region and, although it is anticipated that the City and Caltrans would address any such issues as they arise, it cannot be determined with certainty that queuing-related safety issues would not occur. Thus, cumulative impacts related to freeway off ramp queuing are considered significant and unavoidable and the Downtown Plan may make a cumulatively considerable contribution to freeway safety impacts.

The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would result in hazards due a geometric design feature or incompatible use. For these reasons, cumulative impacts related to transportation safety as a result of design features or incompatible uses would not be significant and the New Zoning Code would not have a substantial contribution to any cumulative impact related to transportation safety.

Cumulative impacts related to queuing-related safety issues are ***significant and unavoidable.*** All other cumulative impacts related to transportation hazards are ***less than significant.***

Emergency Access

The Downtown Plan would increase traffic in the Downtown Plan Area, which could result in potential delays for emergency vehicles. However, while the MP2035 includes proposed roadway changes, they do not provide intersection-level detail in the Plan Area. It is feasible that some of these improvements to the network would provide benefits to emergency access as well. As noted above, the Department of City Planning staff have discussed the LAFD Strategic Plan and its relationship to growth and traffic with LAFD staff. While LAFD acknowledged the possible effects of congestion on their efforts, their ongoing planning efforts and new Strategic Plan consider increased congestion and the possible adjustments necessary. These adjustments may include redeploying resources, adding staff, or building new fire stations as deemed necessary. LAFD will continue to monitor growth in the Downtown Plan Area and any impact they identify will be addressed when needed. Therefore, the Downtown Plan would not have a cumulatively considerable impacts related to emergency access.

The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to the remainder of the City only at such time as applicable community plan updates or amendments are adopted. Regardless, no provision of the New Zoning Code would result in inadequate emergency access. For these reasons, cumulative impacts related to emergency access would not be significant and neither the Downtown Plan nor the New Zoning Code would not have a cumulatively considerable impact related to emergency access. Cumulative impacts are ***less than significant.***

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4.16 TRIBAL CULTURAL RESOURCES

This section provides an overview of tribal cultural resources and evaluates impacts associated with the Proposed Project. The Proposed Project is evaluated in terms of whether implementation of the Central City and Central City North Community Plans (Downtown Plan) Update and New Zoning Code would impact tribal cultural resources.

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

For a full discussion of the prehistoric and ethnographic setting of the Downtown Plan Area, see Section 4.4, *Cultural Resources*.

Native American Consultation/Sacred Lands Files

The City of Los Angeles prepared and mailed AB 52 notification letters to each tribe listed by the NAHC on August 8, 2017. These letters are included in Appendix L. No responses were received within the 30-day consultation window or as of the date of this EIR.

Citywide Sacred Lands Files

The AB 52 notification letter mailed to each tribe listed by the NAHC on August 8, 2017 included project details related to the citywide provisions. As discussed above, no responses were received within the 30-day consultation window or as of the date of this EIR.

While the Citywide provisions of the New Zoning Code would be adopted as part of this Project and apply Citywide, a Sacred Lands File request was not completed for the entire City of Los Angeles. This is because the New Zoning Code would only be operative in other parts of the City once property is rezoned as part of a community plan update process. A future community plan update would entail a Community Plan amendment and rezoning, and associated environmental analysis, during which a Sacred Lands File request would be completed.

Downtown Plan Sacred Lands Files

A Sacred Lands File request was completed for the Downtown Plan Area with positive results. The results were provided by the Gabrielino Band of Mission Indians – Kizh Nation, who did not respond to the City's AB 52 notification letter. Given the location of the Downtown Plan Area, the results likely refer to the approximate location of *Yangna*, an ethnographic village site thought to be located near the present-day location of Los Angeles Union Station.

REGULATORY FRAMEWORK

This section includes a discussion of the applicable laws governing tribal cultural resources, which must be adhered to before and during implementation of the proposed project.

CITYWIDE

Assembly Bill 52

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." Assembly Bill 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments, and respecting the interests and roles of project proponents, it is the intent of AB 52 to:

1) Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.

2) Establish a new category of resources in CEQA called "tribal cultural resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.

3) Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.

4) Recognize that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated. Because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources.

5) In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, at the earliest possible point in CEQA environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision making body of the lead agency.

6) Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to CEQA.

7) Ensure that local and tribal governments, public agencies, and project proponents have information available, early in CEQA environmental review process, for purposes of identifying and addressing potential adverse impacts to tribal cultural resources and to reduce the potential for delay and conflicts in the environmental review process.

8) Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.

9) Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be adopted or certified. AB 52 requires that lead agencies "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

DOWNTOWN PLAN AREA

No additional regulatory framework information is required. As discussed in the Regulatory Framework subsection of Section 4.4, *Cultural Resources*, CEQA requires a lead agency to determine whether a project could have a significant effect on tribal cultural resources (PRC Section 21074 [a][1][A]-[B]). CEQA Guidelines Section 15064.5 also prescribes a process and procedures for addressing the existence or probable likelihood of Native American human remains, as well as the unexpected discovery of any human remains during implementation of a project. This includes consultations with appropriate Native American tribes.

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance were developed based on Appendix G of the CEQA Guidelines. The Proposed Project would have a significant impact to tribal cultural resources if it would:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe (Threshold 4.16-1).

METHODOLOGY

The methodologies employed for the tribal cultural resources impacts analyses are described in the Regulatory Setting and Thresholds, above.

PROJECT IMPACTS

Threshold 4.16-1	Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: · Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or · A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact 4.16-1

Downtown Plan: New reasonably anticipated development from the Downtown Plan would involve ground disturbance with the potential to disturb as yet undiscovered tribal cultural resources. However, impacts would be ***less than significant with mitigation incorporated*.**

New Zoning Code: The New Zoning Code would not cause a substantial adverse change in the significance of a tribal cultural resource and the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations intended to avoid impacts. Due to the modularity of the New Zoning Code, it is not known where or to what extent future development may impact tribal resources. Projecting the location and type of future growth would be speculative. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The impact would be ***less than significant***.

Downtown Plan Impact

Effects on tribal cultural resources are only known once a specific development has been proposed because the effects are highly dependent on both the individual development site conditions and the characteristics of the proposed activity. Future discretionary development under the Downtown Plan that is subject to CEQA must comply with the requirements of AB 52, including consultation with California Native American tribes as each project is proposed which may result in the identification of tribal cultural resources. As described in Section 4.4, *Cultural Resources*, Los Angeles has a long history of Native American occupation; therefore, tribal resources could be present and development activities that could be accommodated under the Downtown Plan would have the potential to significantly impact tribal cultural resources. The Sacred Lands File search conducted for the Plan Area was positive and the Tongva ethnographic village site of Yangna is thought to be located near Union Station, so although no tribes responded to the AB 52 letters sent for the Downtown Plan and thus no tribal cultural resources have been

identified in the Downtown Plan Area, tribal cultural resources are potentially present. As such, grading and excavation associated with individual development projects that disturb previously undisturbed soils could potentially encounter intact tribal cultural resources. Individual discretionary projects that are subject to CEQA would be subject to AB 52 Native American consultation requirements and, as appropriate, analysis of and/or monitoring for cultural resources. However, "by right" projects would not be subject to either AB 52 or CEQA. Therefore, impacts to tribal cultural resources would be ***potentially significant.***

New Zoning Code Impact

As described in Section 4.4, *Cultural Resources*, Los Angeles has a long history of Native American occupation; therefore, the potential exists for tribal cultural resources to be present. The New Zoning Code would provide options for a range of densities and intensities that could be applied elsewhere in the City through future community plan updates or amendments. However, due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative at this time therefore, impacts cannot be identified. Additionally, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative.

The New Zoning Code does not include any standards or provisions that would cause a substantial adverse change in the significance of a tribal cultural resource. Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development standards and policies, such as those within AB 52 and the California Public Resources Code as discussed in Regulatory Setting, intended to avoid these effects.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific impacts, during which a Sacred Lands File request would be completed. Future community plan updates and associated zone changes that may occur would also be required to comply with the requirements of AB 52, including consultation with California Native American tribes as future discretionary projects subject to CEQA are proposed which may result in the identification of tribal cultural resources. A ***less than significant impact*** would occur.

Mitigation Measures

Downtown Plan

Individual projects subject to CEQA would be required to adhere to Assembly Bill 52 and discretionary projects would be subject to mitigation measures 4.4-2(a), (b), (c) and (d) in Section 4.4, *Cultural Resources*. In addition, the following measures are required for projects in the Downtown Plan Area.

4.16-1(a) Native American Consultation and Monitoring for Discretionary Projects

For all discretionary projects where excavation could extend below previously disturbed levels, notification shall be provided to California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project site and have submitted a written request to the Department of City Planning to be notified of proposed projects in that area. If the potential for tribal resources exists, excavation in previously undisturbed soils shall be monitored by a qualified tribal monitor. If tribal resources are discovered during excavation, grading, or construction activities, work shall cease in the area of the find until an appropriate Tribal Representative has evaluated the find. Construction personnel shall not collect or move any tribal resources. Construction activity may continue unimpeded on other portions

of the project site. Any tribal resources shall be treated with appropriate dignity and protected and preserved as appropriate.

4.16-1(b) Notices for Non-Discretionary Projects

For all projects not subject to 4.16-1(a) that are seeking excavation or grading permits, the Department of Building and Safety shall issue the following notice and obtain an acknowledgment of receipt of the notice from applicants:

- Several federal and state laws regulate the treatment of tribal resources and make it a criminal violation to destroy those resources. These include, but are not limited to:
    - California Penal Code Section 622.5 provides the following: "Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor."
    - Public Resources Code Section 5097.5 (a) states, in part, that:

      No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express written permission of the public agency having jurisdiction over the lands.

- Best practices to ensure that tribal cultural resources are not damaged include but are not limited to the following steps:
    - A qualified tribal monitor or archaeologist qualified to identify tribal resources would monitor excavation and grading activities in soils that have not been previously disturbed, to identify, record, and evaluate the significance of any archaeological finds during construction.
    - If tribal resources are uncovered (in either a previously disturbed or undisturbed area), all work ceases in the area of the find until an appropriate Tribal Representative has evaluated the find or, if no Tribal Representative is identified, the qualified archaeologist has evaluated the find in accordance with federal, state, and local guidelines.
    - The found deposits shall be treated with appropriate dignity and protected and preserved as appropriate with the agreement of the Tribal Representative and in accordance with federal, state, and local guidelines.
    - An agreement will be reached with the Tribal Representative to mitigate or avoid any significant impacts to identified tribal cultural resources.
    - The location of the find of tribal cultural resources and the type and nature of the find will not be published beyond providing it to public agencies with jurisdiction or responsibilities related to the resources, the qualified archaeologist, and tribal representatives.
    - Absent an agreement with the Tribal Representative, as provided in Public Resources code Section 21083.2, archaeological resources should be preserved in place or left in an undisturbed state. When preserving in place or leaving in an undisturbed state is not possible, excavation should not occur unless testing or studies already completed have adequately recovered the scientifically consequential information form and about the resource and this determination is document by a qualified archaeologist.
    - Personnel of the project shall not collect or move any archaeological or tribal resources or associated materials, or publish the location of tribal cultural resources.

- Construction activity may continue unimpeded on other portions of the project site if cleared by the Tribal Representative or qualified archaeologist.
- Construction activities in the area where resources were found may commence once the identified resources are properly assessed and processed by a Tribal Representative or, if not Tribal Representative is identified, a qualified archaeologist.

New Zoning Code

None required.

Significance after Mitigation

Downtown Plan

Implementation of the above measures, in combination with **Measures 4.4-2(a)** through **(d)** in Section 4.4, *Cultural Resources*, would reduce impacts to tribal cultural resources to a less than significant level by requiring a process to identify and, if necessary, avoid and/or recover identified tribal cultural resources throughout the Downtown Plan Area, including areas where resources have been previously identified. The impact would be ***less than significant with mitigation*** incorporated.

New Zoning Code

Not applicable.

CUMULATIVE IMPACTS

Cumulative development citywide could disturb areas that may potentially contain tribal cultural resources. The potential for impacts from individual developments is site-specific and depends on the location and nature of each individual development proposal. All future development projects, including projects in the Downtown Plan Area, would continue to be subject to existing federal, state, and local requirements and discretionary projects may be subject to project-specific mitigation requirements under CEQA. It is anticipated that significant cumulative tribal cultural resource impacts can be avoided both Citywide and in the Downtown Plan Area. The New Zoning Code would only apply to the Downtown Plan Area at this time and would not involve any new development or infrastructure that could disturb tribal cultural resources. Further, projecting the location and type of future growth would be speculative at this time as future application of the New Zoning Code would be driven by the policy intent and vision of future community plan updates and amendments. Based on this information, the incremental effect of the Downtown Plan and New Zoning Code to tribal resources would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

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4.17 UTILITIES AND SERVICE SYSTEMS

This section describes the utilities and service systems and evaluates the construction and operational impacts associated with the Downtown Plan and the New Zoning Code. Topics addressed include wastewater, water, and solid waste.

Wastewater and Stormwater Drainage

ENVIRONMENTAL SETTING

EXISTING CONDITIONS

Citywide Wastewater System

The City of Los Angeles sewer system includes more than 6,600 miles of sewers serving a population of more than four million. The Los Angeles sewer system is comprised of three systems: Hyperion Sanitary Sewer System, Terminal Island Water Reclamation Plant Sanitary Sewer System, and Regional Sanitary Sewer System. To comply with Waste Discharge Requirements (WDRs), a Sewer System Management Plan (SSMP) was prepared for each of these systems (LADPW 2017).

The Hyperion Sanitary Sewer System is the largest of the City's three sanitary sewer systems. An average wastewater flow rate of approximately 300 mgd is generated by the system, which includes the Donald C. Tillman Water Reclamation Plant and the Los Angeles-Glendale Water Reclamation Plant. The Donald C. Tillman Water Reclamation Plant serves the area between Chatsworth and Van Nuys in the San Fernando Valley. The Los Angeles-Glendale Water Reclamation Plant is located in the San Fernando Valley and services the communities in east San Fernando Valley that are both within and outside of the City limits. Approximately 60 mgd is treated at Donald C. Tillman and Los-Angeles Glendale Water Reclamation Plants. All other flows in the system, and the biosolids from the Donald C. Tillman and Los-Angeles Glendale Water Reclamation Plants that are returned to the collection system, are treated at the Hyperion Water Reclamation Plant (HWRP) located in Playa Del Rey (LADPW 2017b). The HWRP has a treatment capacity of 450 million gallons per day (mgd) and was designed to accommodate a maximum peak wet weather flow of 800 mgd. On average, approximately 275 million gallons of wastewater enter the HWRP on a dry weather day (LADPW 2018). The HWRP performs pretreatment of wastewater (i.e., the removal of large objects), followed by primary and secondary treatments (i.e., elimination of harmful biological contents). In January 2019, an SSMP was prepared for the Hyperion Sanitary Sewer System pursuant to the State Water Resources Control Board's (SWRCB) May 2, 2006 Statewide General Waste Discharge Requirements (WDRs) (LASAN 2019).

The Terminal Island Water Reclamation Plant Sanitary Sewer System covers residential areas in San Pedro, Harbor City, and parts of Wilmington; and industrial areas on Terminal Island (LADPW 2017c). The Terminal Island Water Reclamation Plant has the capability to provide high quality tertiary treatment for up to 30 mgd and currently treats approximately 15 mgd. Sixty percent of the incoming flow to the plant comes from nearby industries while the remaining forty percent is from residential areas.

The Regional Sanitary Sewer System serves the Harbor Gateway, an area approximately five square-miles (LADPW 2017d). Wastewater generated in the service area is processed at the Los Angeles County Sanitation Districts' Joint Water Pollution Control Plant located in the City of Carson.

The wastewater collection system pipelines range in diameter from six inches to 150 inches and consist of approximately 6,700 miles of primary and secondary sewers. The sewer system consists of primary sewers (16-inches and larger in diameter) and secondary sewers (less than 16-inches in diameter). The secondary sewers provide service to property laterals and feed into the primary sewer lines. Primary sewers discharge into trunk, interceptor, and outfall pipes. Tributaries to interceptor sewer systems are called sewer reaches. Sewer reaches are usually named after the street to which their alignment is closest. Primary sewers have pipes with a diameter of 15 inches or more and are found in all sewer reaches. Interceptor sewer systems consist of large sewer pipelines that control the conveyance of wastewater to treatment plants.

To assess and maintain the condition of this expansive system, the City actively conducts an ongoing dry- and wet-weather flow monitoring program. There are 30 automatic "real time" flow monitors and 74 additional "near time" monitors located in the primary sewer system. The monitors use either telephone lines to send data to a central location or staff will download data in the field. Additionally, flow gauging is performed at over 600 strategic locations throughout the City's secondary sewer system on either a quarterly, semi-annual, or annual cycle to monitor flow depth.

New and rehabilitated sewers and pump stations are planned, designed, and constructed to meet the highest performance standards in the industry in accordance with the City's Sewer Design Manual. The Sewer Design Manual is a comprehensive set of criteria for planning and designing of new sewers, pump stations, force mains, and appurtenances, and for the rehabilitation of existing sewers. In conjunction with the Sewer Design Manual, the City also maintains Standard Plans, which are used to provide consistency and quality in design. All system components are designed to meet permit requirements of the various federal, state, and local agencies thereby ensuring that projects benefit from the input of all affected and interested parties, including the communities.

The Sewer Design Manual and Standard Plans are updated, maintained, and administered by LASAN. For all projects, LASAN is responsible for determining the sewer capacity availability for new sewer connections for residential, commercial, and industrial developments. This function is part of an overall sewer connection permitting process that involves a combined effort by LASAN and Bureau of Engineering (BOE) personnel. In issuing a sewer connection permit, the BOE Development Services Division determines if further investigation is needed to evaluate the capacity of an existing sewer line to handle the additional flow from the proposed development or project and take appropriate preemptive action to attenuate potential emergency sewer overflow incidences in the future. In addition to preemptive sewer monitoring and permitting activities, the LASAN Wastewater Collection Systems Division also maintains up-to-date Sanitary Sewer Overflow Response and Reporting Procedures. The procedures outline the necessary actions to provide immediate response to sewage overflows. It is City policy that, "[e]very reported sewage spill affecting public or private property within the City of Los Angeles shall be acted upon by the Division." Crew leaders are immediately notified upon receipt of a reported potential sewer overflow and are instructed to respond immediately.

The effect of stringent monitoring practices and sewer design standards are apparent in that the City has not experienced any wet-weather overflows since major relief sewers were completed in 2006. However, some dry-weather overflows still occur occasionally due to tree roots, grease blockages, landslides, and vandalism. Despite these irregular overflow occurrences, the system currently has sufficient capacity to handle peak dry-weather flows.

Sewer capacity planning is prioritized based on two ratios of sewer flow to sewer capacity (d/D): a Trigger ratio and a Relief ratio. Trigger flow is the quantity of flow, that once reached, would initiate planning for a relief or a replacement sewer. The buffer capacity is defined as the product of the estimated years to complete a new sewer project and the rate of recent flow increases in the sewer being evaluated. The Relief d/D is currently 0.75 across the City (i.e., when a sewer is at 75 percent of capacity) for all existing sewers, the Trigger d/D varies on a project by project basis because each project's tributary area has its own unique

characteristics such as population growth projection, commercial and industrial discharge forecast, and other contributing factors that determine how quickly flows are projected to increase over time. The Sewer Design Manual requires all new sewers to meet a d/D of 0.5 for the projected design year (i.e., that they be at no more than 50 percent of capacity in their design year).

Downtown Plan Area Wastewater Generation and Conveyance

The Downtown Plan Area is served by the Hyperion Sanitary Sewer System and is served by a network of local, interceptor, relief, outfall and trunk sewers that convey flow from residential, business and commercial properties to the HWRP. Underground pipes range from as small as 6 inches in diameter to as large as 14 feet in diameter. The backbone of the system, the North Outfall Sewer (NOS), was built in the 1920s. Due in part to the age of the Downtown Plan Area sewer system, ongoing maintenance and replacement of sewer lines is needed. The Wastewater Capital Improvement Program (WCIP) identifies capital projects developed for the City's wastewater facilities (LA Sanitation & Environment 2018). The WCIP is developed for 10-year periods and was last updated in Fiscal Year 2017/2018 for projects through 2026/2027. The WCIP includes replacement, rehabilitation, and expansion of the City's wastewater treatment and collection system facilities. The WCIP identifies a number of sewer line projects in the Downtown Plan Area (https://www.lacitysan.org/cs/groups/public/documents/document/y250/mdm1/~edisp/cnt035434.pdf).

The estimated wastewater generation of existing land uses in the Downtown Plan Area is shown in **Table 4.17-1**. Existing development in the Downtown Plan Area generates an estimated 21 mgd of wastewater. Wastewater generated by the Downtown Plan Area represents approximately 4.6 percent of the Hyperion Treatment Plant's (HTP's) current wastewater treatment capacity of 450 mgd.

TABLE 4.17-1 CURRENT WASTEWATER GENERATED IN THE DOWNTOWN PLAN AREA

Land Use	Dwelling Units or Jobs in Plan Area	Daily Wastewater Generation Rate (gpd/unit)	Wastewater Generation (gpd)
Single-family[1]	6,733 du	155.1	1,044,288
Multi-family[1]	26,932 du	149.1	4,015,561
Commercial	154,674 jobs	64.4	9,961,006
Industrial	29,126 jobs	132.4	3,856,282
Public Facilities	35,084 jobs	50	1,754,200
Total			**20,631,338**

NOTES:
du = dwelling unit (2017 baseline numbers actually represent households, which is slightly different than dwelling units insofar as households do not include vacant units. For consistency, the unit of measurement for households is denoted as dwelling units).
gpd – gallons per day
Totals may not add up due to rounding.
1. Single-family and multi-family units were estimated by assuming that 20 percent of total household units are single-family and 80 percent are multi-family.

SOURCE: Wastewater is assumed to be 100% of indoor water use. Per Exhibit 2D of the 2015 UWMP, indoor water use constitutes the following percentages of overall water use: Residential single family – 46%; Residential multi-family – 68%; Commercial – 76%; Industrial – 98%; and Government – 59%.

Storm Water and Urban Runoff

The Downtown Plan Area is an urban center that is primarily paved. Consequently, most storm water and urban runoff travels along the area's roadways and is captured by storm drains and catch basins. The City is served by an extensive urban drainage system comprised of more than 30,000 catch basins and 100 miles of open channels (City of Los Angeles 2018a). Even on the driest days, tens of millions of gallons flow through the City's storm water system. On rainy days, flows can increase to as much as 10 billion gallons

(City of Los Angeles 2018b). Storm water captured by the City's drainage system is channeled into Santa Monica and San Pedro Bays, where it is discharged without treatment (City of Los Angeles 2018b). The City's Stormwater Program focuses on flood control and pollution abatement and oversees the City's compliance with federal, state, and local regulations to reduce the amount of stormwater pollution. Regulations to reduce and prevent stormwater pollution are discussed in greater detail in Section 4.9, *Hydrology and Water Quality*.

Water Quality and Flow Monitoring

Los Angeles is constantly monitoring the infrastructure to ensure reliable service. Dischargers are regulated under Waste Discharge Requirements (WDRs) and are required to "self -monitor," that is, to collect regular samples of their effluent and receiving waters according to a prescribed schedule to determine facility performance and compliance with their requirements. In addition to self-monitoring by dischargers, the Los Angeles Regional Water Quality Control Board (LARWQCB) makes unannounced inspections and collects samples to determine compliance with discharge requirements and receiving water objectives and to provide data for enforcement actions. The LARWQCB also responds to a variety of incidents, including accidental and illegal discharges of oil from offshore pipelines, oily waste discharges, and dumping in the storm drains. Each regional board in the state prepares a biennial Water Quality Assessment Report using data collected by regional planning, permitting, surveillance, and enforcement programs. The regional reports contain inventories of the pollutants in the major water bodies of the region.

The Flow Monitoring Expansion Program helps operations and maintenance to manage the conveyance system. Flow data is gathered to support resource allocation. There are 120 permanent monitors and 50 temporary monitors that continually measure flow quantities at major sewers.

REGULATORY FRAMEWORK

LOCAL

Integrated Resources Plan

In 2006, the City approved the Integrated Resources Plan, which incorporates a Wastewater Facilities Plan. The Integrated Resources Program was developed to meet future wastewater needs of more than 4.3 million residents expected to live in the City by 2020 (LADPW 2006). To meet future demands posed by increased wastewater generation, the City has chosen to expand its current overall treatment capacity, while maximizing the potential to reuse recycled water through irrigation, and other approved uses.

City of Los Angeles Municipal Code

The LAMC Chapter V (Public Safety and Protection) describes different categories of wastewater discharge and peak flow (the maximum 5-minute rate of wastewater flow). In addition, the LAMC identifies permitted regulations related to industrial wastewater. LAMC Chapter XII (The Water Conservation Plan of the City of Los Angeles) also defines recycled water as treated wastewater suitable for direct beneficial use, or controlled use, as approved by the California Department of Public Health.

In addition to LAMC requirements, the City establishes design criteria for sewer systems to assure that new infrastructure provides sewer capacity and operating characteristics to meet City Standards (Bureau of Engineering Special Order No. SO06-0691). Per the Special Order, laterals sewers, which are sewers 18 inches or less in diameter, must be designed for a planning period of 100 years. The Special Order also requires that sewers be designed so that the peak dry weather flow depth during their planning period shall not exceed one-half the pipe diameter (City of Los Angeles 2006).

LAMC Sections 64.11 and 64.12 require approval of a sewer permit, also called an "S" Permit, prior to connection to the wastewater system. Each new connection is assessed a Sewerage Facilities Charge, which is deposited in the City's Sewer Construction and Maintenance Fund for wastewater-related purposes, including but not limited to industrial waste control and water reclamation purposes. LAMC Section 64.15 requires that a Sewer Capacity Availability Request (SCAR) be performed by the Department of Building and Safety when a sewer permit is sought for a new connection to the City's wastewater system, or in the event that a proposed increase in discharge to a public wastewater line or proposed future development is anticipated to generate 10,000 gallons or more of wastewater per day. A SCAR evaluates the existing wastewater collection system to determine whether adequate capacity exists to convey project-related wastewater to the appropriate treatment plant. If capacity is available, the Department of Building and Safety accepts project plans and specifications for plan check; otherwise, projects are placed on a waiting list to receive an allocation of forthcoming capacity, or applicants are required to construct a connection to the nearest wastewater line with available capacity. The Department of Building and Safety accepts project plans and specification for plan check if the project is on the waiting list, although the project may not connect to the City's wastewater system until capacity is available and a sewer permit is available.

City of Los Angeles General Plan

The City of Los Angeles General Plan Framework Element (Framework), adopted in December 1996, and readopted in August 2001, sets forth a citywide comprehensive long-range growth strategy and defines citywide policies regarding land use, housing, urban form, neighborhood design, open space and conservation, economic development, transportation, infrastructure, and public services. Framework land use policies are implemented at the community level through community plans and specific plans. The applicable policies that are related to the City utilities and services systems, including wastewater, are listed in **Table 4.17-2**.

Storm Water and Urban Runoff

Regulations related to storm water are discussed in Section 4.9, *Hydrology and Water Quality.*

TABLE 4.17-2 RELEVANT GENERAL PLAN UTILITIES AND SERVICE SYSTEMS GOALS, OBJECTIVES, AND POLICIES

Goal/Objective/Policy	Goal/Objective/Policy Description
FRAMEWORK ELEMENT – CHAPTER 9 INFRASTRUCTURE AND PUBLIC SERVICES	
Goal 9C	Adequate water supply, storage facilities, and delivery system to serve the needs of existing and future residents and businesses.
Objective 9.1	Monitor and forecast demand based upon actual and predicted growth.
Policy 9.1.2	Monitor wastewater generation.
Objective 9.2	Maintain the wastewater collection and treatment system, upgrade it to mitigate current deficiencies, and improve it to keep pace with growth as measured by the City's monitoring and forecasting efforts.
Policy 9.6.1	Pursue funding strategies which link the sources of revenues for stormwater system improvement to relevant factors including sources of runoff and project beneficiaries.
Policy 9.2.1	Collect and treat wastewater as required by law and Federal, State, and regional regulatory agencies.
Policy 9.2.2	Maintain wastewater treatment capacity commensurate with population and industrial needs.
Policy 9.3.1	Reduce the amount of hazardous substances and the total amount of flow entering the wastewater system.
Objective 9.8	Monitor and forecast water demand based upon actual and predicted growth.
Policy 9.8.1	Monitor water usage and population and job forecast to project future water needs.

TABLE 4.17-2 RELEVANT GENERAL PLAN UTILITIES AND SERVICE SYSTEMS GOALS, OBJECTIVES, AND POLICIES

Goal/Objective/Policy	Goal/Objective/Policy Description
Objective 9.9	Manage and expand the City's water resources, storage facilities, and water lines to accommodate projected population increases and new or expanded industries and businesses.
Policy 9.9.1	Pursue all economically efficient water conservation measures at the local and statewide level.
Policy 9.9.7	Incorporate water conservation practices in the design of new projects so as not to impede the City's ability to supply water to its other users or overdraft its groundwater basins.
Objective 9.10	Ensure that water supply, storage, and delivery systems are adequate to support planned development.
Policy 9.10.1	Evaluate the water system's capability to meet water demand resulting from the Framework Element's land use patterns.
Policy 9.10.2	Solicit public involvement, when appropriate, in evaluating options for the construction of new and/or expansion of existing water facilities.
Objective 9.11	Ensure, to the maximum extent possible, the continued provision of water capacity, quality and delivery after an earthquake or other emergency.
Policy 9.11.1	Provide for the prompt resumption of water service with adequate quantity and quality of water after an emergency.
Goal 9D	An integrated solid waste management system that maximizes source reduction and materials recovery and minimizes the amount of waste requiring disposal.
Goal 9E	Adequate Recycling Facility Development - expanded siting of facilities that enhance the City's reduction, recycling and composting efforts using methods and strategies that are economically, socially, and politically acceptable.
Goal 9F	Adequate collection, transfer and disposal of mixed solid waste - the City shall seek to ensure that all mixed solid waste that cannot be reduced, recycled or composted is collected, transferred and disposed of in a manner that minimizes adverse environmental impacts.
Goal 9G	An environmentally sound solid waste management system that protects public health, safety, and natural resources and minimizes adverse environmental impacts.
Goal 9H	A cost-effective solid waste management system that emphasizes source reduction, recycling, reuse, and market development and is adequately financed to meet operational and maintenance needs.

SOURCE: City of Los Angeles, *City of Los Angeles General Plan*, *Safety Element*, adopted 1996; *Conservation Element*, adopted 2001,;and *Framework Element*, re-adopted 2001.

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance were developed in accordance with CEQA Guidelines Appendix G. Impacts would be significant if either the Downtown Plan or the New Zoning Code would:

- Require or result in the relocation or construction of new or expanded wastewater treatment, the construction or relocation of which could cause significant environmental effects (Threshold 4.17-1)
- Result in a determination by the wastewater treatment provider which serves or may serve the project that has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments (Threshold 4.17-2)

- Require or result in the relocation or construction stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects (Threshold 4.17-3)

METHODOLOGY

The analysis of the Proposed Project's impacts with respect to wastewater focuses on whether existing and projected infrastructure capacities or supplies would be sufficient to meet future demands associated with anticipated development, including impacts associated with building new facilities to meet future demand. Project-generated demands were calculated using existing level of development in the Downtown Plan Area, 2040 Reasonably anticipated development in the Downtown Plan Area, and utility rates per development unit (e.g., water use per dwelling unit). The impact is the net change relative to existing conditions (i.e., 2040 with Downtown Plan conditions – baseline conditions).

Water demand rates were obtained from the LADWP's 2015 Urban Water Management Plan (UWMP), Exhibit 2H and Exhibit 2K (LADWP 2016a). Per Exhibit 2D of the 2015 UWMP, indoor water use constitutes the following percentages of overall water use: Residential single family – 46%; Residential multi-family – 68%; Commercial – 76%; Industrial – 98%; and Government – 59%. It was assumed that 20 percent of existing residential development is single-family and 80 percent is multifamily. This provides a conservative estimate as the Downtown Plan Area contains few single-family residential areas and single-family units have higher average utility usage rates than multi-family units. It was also assumed that the number of single-family homes would remain constant under future conditions relative to baseline conditions and all new residential development through 2040 would be multifamily.

State and local policies, plans, initiatives, and projects, such as SBX7-7, SB 1016, Emergency Water Conservation Plan, RENEW LA Plan and Ordinance 181519, as discussed above under Regulatory Setting, are in place or are anticipated to be implemented over the project's time horizon that would reduce utility consumption rates over time. However, baseline rates were used to calculate projected usage in 2040, as it is speculative to assume the decreases that would result from their implementation. The one exception is for water as the 2015 UWMP provides project water use rates for 2040. These projected rates incorporate savings from codes and ordinances currently in place, but do not take into consideration planned projects, future policies, or initiatives (LADWP 2016a), and therefore, also provide a conservative estimate of future consumption. A qualitative discussion of planned capacity-building or supply-enhancing projects is included in the analysis.

Consistent with the Population and Housing analysis, citywide impacts are analyzed assuming growth and demands placed on utilities and service systems based on SCAG projections.

PROJECT IMPACTS

Threshold 4.17-1	Require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects
Threshold 4.17-2	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments

Impact 4.17-1, 4.17-2 **Downtown Plan:** Implementation of the Downtown Plan would increase demand for wastewater collection and treatment. Implementation of the Downtown Plan is anticipated to increase wastewater generation in the Downtown Plan Area by 23 mgd above baseline conditions. The HWRP would be able to adequately treat project-generated sewage and the treatment requirements of the RWQCB would

not be exceeded; therefore, impacts to wastewater facilities would be ***less than significant.***

New Zoning Code: The New Zoning Code does not include any standards that would result in an increased demand for wastewater collection and treatment. Further, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts related to wastewater collection and treatment from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Therefore, the impact would be ***less than significant*** citywide.

Downtown Plan Impact

Table 4.17-3 summarizes projected wastewater generation for the Downtown Plan Area in 2040 with implementation of the Downtown Plan. As indicated in the table, total wastewater generation in 2040 is estimated to be 38 mgd. Reasonably anticipated development under the Downtown Plan through 2040 would generate just under 18 mgd of wastewater, which is an increase of about 81 percent compared to the baseline generation of just under 21 mgd.

The HWRP, which ultimately treats the City's sewage, is operating at 175 mgd below capacity on an average dry weather day (LADPW 2018). The projected net increase of just under 18 mgd generated by growth under the Downtown Plan represents about 10 percent of the plant's available capacity. Therefore, the HTP has sufficient available treatment capacity to serve reasonably foreseeable development in the Downtown Plan Area. The HWRP would be able to adequately treat project-generated sewage in addition to currently generated sewage, and the treatment requirements of the RWQCB would not be exceeded. Therefore, it is not foreseeable that implementation of the Downtown Plan would require construction of a new or expanded wastewater treatment plant.

As discussed above under *Regulatory Setting*, reasonably anticipated growth under the Downtown Plan would occur in compliance with the requirements of LAMC 64.11, 64.12 and 64.15, which establishes City standards related to wastewater discharge, peak flow and sewer capacity. Sewer pipeline upgrades would be necessary as development occurs in the Downton Plan Area. As discussed in the Setting, the identifies a number of sewer line projects in the Downtown Plan Area. Such upgrades would likely occur within existing utility easements and would not result in new areas of disturbance. All upgrades would be subject to subsequent environmental review, wherein potential site- or project-specific impacts, if any, would be addressed. Routine infrastructure projects involving replacing or upgrading wastewater conveyance facilities generally include the preparation of a ND/MND and in some cases may possibly qualify for a Categorical Exemption (e.g., CEQA Guidelines Section 15302). The environmental impacts of the construction and operation of these new or upgraded facilities would be localized in nature and consistent with the impacts that have been evaluated throughout this EIR. To the extent that any significant impacts could result from the unique characteristics of a specific site, those impacts would be speculative at this time.

The City is proactively undertaking capital improvement projects to not only maintain the existing infrastructure but also enhance and expand capacity of treatment plants. Such projects would include rehabilitating old sewer mains and maintenance holes and replacing aging equipment and structures at treatment and pumping plants. As detailed in the Setting, the City maintains the WCIP, which contains the capital projects and estimated costs for the renewal of the City's infrastructure at 10-year intervals.

TABLE 4.17-3 ESTIMATED WASTEWATER GENERATION FOR THE DOWNTOWN PLAN AREA

Land Use	Dwelling Units or Jobs	Wastewater Generation Rate (gpd/unit)	Wastewater Generation (gpd)
Single-family Residential	6,733 du	144.3	972,000
Multi-family Residential	126,540 du	137.9	17,450,000
Commercial	249,279 jobs	59.8	14,907,000
Industrial	33,735 jobs	123	4,150,000
Public Facilities	21,716 jobs	46.4	1,008,000
Total 2040 with Downtown Plan Wastewater Generation			38,485,000
Current Wastewater Generation			20,631,000
Net Change in Wastewater Generation			**17,854,000**

Notes: Wastewater generation numbers are rounded to the nearest thousand. Totals may not add up due to rounding.
gpd – gallons per day
du – dwelling units
sf – square feet
SOURCE: Wastewater is assumed to be 100% of indoor water use. Per Exhibit 2D of the 2015 UWMP, indoor water use constitutes the following percentages of overall water use: Residential single family – 46%; Residential multi-family – 68%; Commercial – 76%; Industrial – 98%; and Government – 59%.Per the UWMP, per unit water demand is forecast to decline over time; the forecast 2040 rates are assumed to apply to new development.

The LASAN Wastewater Engineering Services Division is responsible for determining sewer capacity availability for new sewer connections for residential, commercial, and industrial developments. Thus, all development activities that require sewer connection permits are evaluated under the purview of existing capacity of sewer lines in the development site's vicinity at the time of development. By doing so, each new development must adhere to the most current Sewer Design Manual specifications as well as appropriate Standard Plan requirements. The Sewer Design Manual and Standard Plan are continuously updated to incorporate the most recent industry practices and materials ensuring appropriate measures are taken to accommodate any potential project. The City also has immediate response and reporting procedures in place to attend to any unexpected sewer overflows. The procedures are maintained in the Wastewater Collection Systems Division's up-to-date Sanitary Sewer Overflow Response and Reporting Procedures. Moreover, the City proactively monitors the sewer system to preemptively identify and resolve deficiencies before they become problematic. System deficiencies in need of rehabilitation are then included in the WCIP, which are attended to according to their associated priority ranking. The City would require that localized system deficiencies are adequately addressed by the responsible project. Any future upgrades would be designed in accordance with applicable provisions of the Municipal Code and to the satisfaction of the City Engineer.

Upgrades to sewer lines may cause temporary localized disturbance of roads, which may require re-routing of traffic and localized temporary increases in congestion, as well as temporary increases in air pollutant emissions and noise. However, such impacts would be within what is described in this EIR and upgrades would not result in long-term effects. As discussed above, any upgrades would be subject to subsequent environmental review, wherein potential site- or project-specific impacts, if any, would be addressed accordingly. Therefore, impacts related to construction of wastewater conveyance system upgrades would be ***less than significant***.

New Zoning Code Impact

Future development has the potential to affect wastewater collection and treatment services by adding additional people and structures within the City that would increase wastewater generation, which could in

turn require the construction of new or altered facilities. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update or amendment and associated zone districts would analyze potential community-specific impacts to wastewater collection and treatment services.

The New Zoning Code's landscape provisions would refer to LA Sanitation's Low Impact Development requirements and implementation of the New Zoning Code would not be expected to detrimentally affect wastewater treatment or result in the need for new facilities. The New Zoning Code would also refer to the Model Water Efficient Landscape Ordinance, which requires that new construction projects develop water budgets for landscaping, reduction of erosion and irrigation related runoff, utilization of recycled water if available, irrigation audits, and development of requirements for landscape and irrigation design, and scheduling of irrigation based on localized climate. Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development regulations, such as Special Order No. SO06-0691 and other requirements discussed in Regulatory Setting, intended to avoid wastewater collection and treatment demand effects. As the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area, impacts would be ***less than significant***.

Mitigation Measures

No significant impacts have been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

Threshold 4.17-3	Require or result in the relocation or construction of stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects

Impact 4.17-3

Downtown Plan: Implementation of the Downtown Plan would not require construction of new stormwater drainage facilities or expansion of existing facilities; impacts to water drainage facilities would be ***less than significant.***

New Zoning Code: The New Zoning Code does not include any standards that would require construction of new storm water drainage facilities or expansion of existing facilities. Further, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts regarding water drainage facilities from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Therefore, the impact would be ***less than significant*** citywide.

Downtown Plan Impact

As discussed in Section 4.9, *Hydrology and Water Quality*, of this Draft EIR, implementation of the Downtown Plan would not result in a substantial increase in impervious surfaces. Accordingly, reasonably anticipated growth under the Downtown Plan would not cause a substantial increase in the peak flow rates or volumes that would exceed the drainage capacity of existing stormwater facilities. Compliance with the City's Low Impact Development (LID) Ordinance would further ensure that any future development resulting from the Downtown Plan would not require construction of new stormwater drainage facilities and or expansion of existing facilities beyond specific improvements needed for individual development projects. In the long-term, redevelopment of properties in the Downtown Plan Area would improve surface

water quality by replacing older development with new development that incorporates LID methods. Therefore, impacts related to water drainage facilities would be ***less than significant***.

New Zoning Code Impact

Future development outside the Downtown Plan Area has the potential to affect storm water drainage facilities by adding additional people and structures within the City which could in turn require the construction of new or altered facilities. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Therefore, the construction of new or altered storm water drainage facilities would not be required at this time.

The New Zoning Code would incorporate required water quality and storm water management features into the overall site and landscape design and would not be expected to detrimentally affect storm water drainage facilities. As discussed above, the New Zoning Code would reference the Model Water Efficient Landscape Ordinance. The New Zoning Code also requires all on-site automobile parking areas to be drained to collect, retain, and infiltrate surface water on-site and aims to facilitate the implementation of rainwater catchment devices as they are exempt from rooftop screening requirements, which has the potential to decrease storm water rates and volumes.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific impacts to existing storm water drainage facilities. Any proposed development would undergo project-level environmental review under CEQA, and would be required to comply with state and local requirements related to storm water drainage, such as the City's LID Ordinance. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. As the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area, the impact would be ***less than significant***.

Mitigation Measures

No significant impacts have been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

CUMULATIVE IMPACTS

The geographic area to analyze cumulatively considerable impacts to wastewater and/or storm drains includes the entire City of Los Angeles and immediately adjacent areas served by common infrastructure. Cumulative development throughout Los Angeles would add both dwelling units and non-residential development to the City. Citywide development through 2040 would add approximately 659,000 new residents, 293,000 new households, and 345,000 new employees (SCAG 2016). Cumulative impacts from this development are discussed below by impact area.

Wastewater

Growth anticipated by the Downtown Plan and citywide cumulative growth would generate an increase in wastewater. Total water demand projected by the City's 2015 UWMP accounts for population growth within its jurisdictional boundaries, which is based on SCAG's demographic data and the 2012 RTP. As discussed in Section in 4.12, *Population and Housing*, the Downtown Plan would allow for an additional 176,000 persons, 99,000 housing units, and 86,000 jobs to the Downtown Plan Area. The updates to the

existing Downtown Plan would accommodate a development capacity consistent with long-range SCAG growth projections.

The City of Los Angeles is served by four water reclamation plants, which include the HWRP, the Terminal Island Reclamation Plant, the Donald C. Tillman Water Reclamation and the Glendale Water Reclamation Plant. Combined these reclamation plants have capacity to treat 580 mgd (649,684 afy) of wastewater citywide (LADPW 2018). According to the 2015 UWMP, average dry-weather wastewater influent projections for the City's wastewater treatment plants are expected to increase by approximately 20 percent over the next 25 years. Wastewater treatment projections of average dry-weather flows through 2040 for all four wastewater treatment plants total approximately 478.5 mgd (536,000 afy). Wastewater treatment projections of average dry-weather flows through 2040 for the HWRP are projected to be 366 mgd (410,000 afy), an increase of 91 mgd relative to baseline average dry-weather flows (275 mgd) (LADWP 2016a). Growth anticipated by the Downtown Plan would increase wastewater generation by approximately 18 mgd, which comprises approximately 4 percent of citywide treatment capacity and 5 percent of projected wastewater treatment for the HWRP. Citywide growth would further increase wastewater generation, but such increases would not approach overall treatment capacity. Therefore, the cumulative increase in wastewater generation would not exceed the capacity of the City's wastewater treatment plants. Additionally, the City's 2006 Integrated Resources Plan incorporates a Wastewater Facilities Plan to meet future wastewater needs through the expansion of overall treatment capacity, maximizing the potential to reuse recycled water and implementation of new water conservation and technology programs (LADPW 2006).

Growth anticipated by the Downtown Plan and citywide cumulative growth would contribute to an anticipated citywide increase in wastewater flow and place added demands on the wastewater conveyance system as future development takes place with the implementation of the Downtown Plan. Development under the Downtown Plan could require the construction of new or upgraded wastewater facilities. Such upgrades would likely occur within existing utility easements and would not result in new areas of disturbance. Construction of new or expanded conveyance facilities may be needed as a result of reasonably foreseeable development and, as discussed above, the City's WCIP identifies a number of sewer line projects in the Downtown Plan Area. The City would require that localized system deficiencies are adequately addressed by the responsible project. Any future upgrades would be designed in accordance with applicable provisions of the Municipal Code and to the satisfaction of the City Engineer.

Routine infrastructure projects involving replacement or upgrade of sewer lines generally result in the preparation of a Mitigated Negative Declaration (MND) or, in some cases, a Categorical Exemption. The City's MNDs for sewer line replacements indicate typical less than significant construction-related impacts, including air quality, noise, and transportation impacts. The environmental impacts of the construction and operation of sewer lines would be consistent with the impacts evaluated throughout this EIR. Specifically, the EIR analyzes anticipated effects of citywide growth related to air quality, noise, traffic, and other environmental impact areas. To the extent that any significant impacts could result from the unique characteristics of a specific project or site, those impacts are too speculative to analyze at this time. As necessary based on project and site characteristics, any such upgrades would be subject to subsequent environmental review, wherein potential impacts, if any, would be addressed accordingly. Regardless, impacts associated with construction of new facilities would be limited to the area in which the specific construction activity is occurring and would not contribute to any cumulative or citywide environmental impacts.

As discussed under Impact 4.17-1 and 4.17-2, the New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to other areas of the City only when applicable community plans are updated. Any cumulative impacts related to future updates of other community plans would be speculative. Additionally, future community plan updates would be required to adhere to existing state and local requirements related to wastewater treatment and conveyance. As discussed for the Downtown Plan,

individual infrastructure improvements needed citywide may result in site-specific temporary impacts related to traffic, air quality, and noise, but such impacts would be limited to the area of the construction activity and would not create any cumulative or citywide impacts.

Based on the above information, the incremental effects of the Downtown Plan and New Zoning Code related to wastewater treatment and conveyance would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

Stormwater Drainage

Continued compliance with the City's Low Impact Development (LID) Ordinance for all new development would ensure that any future development in Los Angeles would not increase demands on stormwater drainage facilities and or expansion of existing facilities beyond specific improvements needed for individual development projects. As with the Downtown Plan Area, long-term redevelopment of properties throughout the City would improve surface water quality by replacing older development with new development that incorporates LID methods. The New Zoning Code does not include any provisions that would increase stormwater runoff or otherwise adversely affect stormwater drainage facilities. Therefore, cumulative impacts related to stormwater drainage facilities would be ***less than significant***.

Water Supply

ENVIRONMENTAL SETTING

CITYWIDE SETTING

Los Angeles Department of Water and Power

The Los Angeles Department of Water and Power (LADWP) is responsible for providing water supply to the City while complying with County, State, and Federal regulations. According to the City's 2015 Urban Water Management Plan (UWMP), which is further discussed below under *Regulatory Framework*, the primary LADWP sources of water supplies are water purchased from the Metropolitan Water District (MWD), imported surface water, and local groundwater. Recycled water projects are progressing and expected to be a greater portion of LADWP water supply in the future. Overall, these sources of water provide the necessary water to meet LADWP's water supply needs. In 2015 total water demand totaled 513,540 acre-feet per year (afy). The 2015 UWMP water demand projection for 2040 is approximately 675,700 afy, based on normal weather conditions, and 709,500 afy, based on dry year conditions (LADWP 2016a).

The Los Angeles Aqueduct (LAA) has historically been the primary source of the City's water supply. In recent years, however, the amount of water supplies from the LAA has been limited due to environmental concerns, and the City's water supply relied heavily (average of 57 percent in recent years) on the purchased water from MWD delivered from the Colorado River or the Sacramento-San Joaquin Delta. Local ground water has been a reliable water source, providing an average of 12 percent of the total water supply, but there have been concerns in recent years due to declining groundwater level and contamination issues. The City's recycled water supply is limited to specific projects within the City at this time (LADWP 2016a).

Los Angeles Aqueduct

The LAA system extends approximately 340 miles from the Mono Basin to the City. From 1995 through 2004, the LAA supplied about half of the City's water needs. The City owns approximately 312,000 acres of property in the Owens Valley and appropriates groundwater from its lands in the Owens Valley pursuant to a long-term groundwater management plan with Inyo County (LADWP 2016a).

The LAA conveys snowmelt runoff from the eastern Sierra Nevada Mountains and water supplies are supplemented by groundwater pumping. LAA supplies fluctuate from year to year due to varying annual snowfall and hydrological conditions. In recent years, the LAA supplies have decreased because of environmental obligations to dedicate water resources to mitigate groundwater pumping in the Owens Valley, restore the water level of Mono Lake, and mitigate dust emissions from Owens Lake. The Runoff Forecast Model and the Los Angeles Aqueduct Simulation Model (LAASM) was used jointly to predict water available from the LAA. Absent any system improvements, average long-term LAA delivery over the next 25 years is expected to be 278,000 AFY, with a decline to 267,000 due to climate change impacts. However, by 2024, with the completion of a Master Project, LAA delivery will increase to 286,000 due to conserved water at Owens Lake (LADWP 2016a).

Local Groundwater

In addition to groundwater extraction from nine wellfields throughout the Owens Valley, the LADWP extracts from three local groundwater basins: San Fernando, Sylmar, and Central. The LADWP plans to continue future pumping from the local basins, with limitations based on water quality and overdraft

protection. The LADWP's groundwater pumping strategy is based on a "safe yield" strategy, in which the amount of water removed over a period of time equals the amount of water entering the groundwater basin through native and imported groundwater recharge. Further, protection from potential overdraft conditions is provided by the court-appointed Los Angeles River Area Watermaster for the San Fernando and Sylmar Basins, and a court-appointed Watermaster Panel for the Central Basin (LADWP 2016a). Annually, the Watermaster prepares a Watermaster Service Report indicating groundwater extractions, replenishment operations, imported water use, recycled water use, finances of Watermaster services, administration of the water exchange pool, and significant water-related events in the Central Basin. Additionally, a long-term groundwater management agreement between the City and Inyo County ensures the protection of LADWP's groundwater resources in Owens Valley from overdraft conditions.

Local groundwater provides approximately 11 percent of the total water supply for the City and has provided nearly 30 percent of the supply in drought years. On average, about 80 percent of the LADWP's groundwater supply is extracted from the Upper Los Angeles River Area, while the Central Basin provides 20 percent (LADWP 2013). The Upper Los Angeles River Area has four local groundwater basins:

- San Fernando
- Sylmar
- Verdugo
- Eagle Rock

The average LADWP San Fernando, Sylmar, and Eagle Rock basin entitlements under the judgment are 87,000 acre-feet per year, 7,140 acre-feet per year, and 500 acre-feet per year, respectively (LADWP 2016a). In addition, as of October 2013, LADWP accumulated nearly 537,453 acre-feet of stored water credits in the San Fernando Basin. This stored water credit is water that LADWP can withdraw from the basin during normal and dry years or in an emergency. The Central Basin Judgment entitlement for the LADWP is 15,000 acre-feet per year. The West Coast Basin Judgment entitles LADWP to approximately 1,503 acre-feet per year. LADWP does not currently exercise its water rights in the West Basin (LADWP 2016a).

LADWP plans to continue production from its groundwater basins in the coming years to offset reductions in imported supplies. Extraction from the basins is, however, limited by water quality and overdraft protection. Both LADWP and the California Department of Water Resources have programs in place to monitor wells to prevent overdrafting.

In response to contamination issues and declining groundwater levels, the LADWP is working to clean up the San Fernando Basin's groundwater and is making investments to recharge local groundwater basins through stormwater recharge projects, while collaborating on the rehabilitation of aging stormwater capture and spreading facilities, with the long-range goal of increasing the contribution of groundwater to overall City water supplies.

Recycled Water

LADWP restores wastewater to a level of quality specified by the California Department of Health Services and distributes it for landscaping and industrial uses. The sustainability of the City's water supplies is dependent on the City's ability to maximize water conservation and increase recycled water use. LADWP uses recycled water produced by four wastewater treatment plants: Hyperion Treatment Plant, Terminal Island Water Reclamation Plant, Donald C. Tillman Water Reclamation Plant, and the Los Angeles-Glendale Water Reclamation Plant. Currently recycled water provides approximately two percent to the City's water supply (LADWP 2016a). The City's goal is to increase the use of recycled water to 75,400 acre-feet per year by 2040. Water recycling and reuse is reducing Southern California's demand for potable water.

Purchased Water

The remainder of the City's water demand is supplied by purchases from MWD. The Metropolitan Water District imports its water supplies from Northern California through the State Water Project's California Aqueduct and from the Colorado River by way of the MWD's Colorado River Aqueduct. LADWP is one of 26 member agencies that have preferential rights to purchase water from the MWD. LADWP has a preferential right to purchase water from the MWD pursuant to MWD Act Section 135. As a percentage of the City's total water supply, purchases of MWD water have historically varied from 4 percent in 1983-84 to 71 percent in 2008-09, with a five-year average 52 percent between 2005-06 and 2009-10. The City relies on the MWD even more in dry years and has increased its dependence in recent years as LAA supply has been reduced. Although the City plans to reduce its reliance on MWD supply, it has made significant investments in the MWD anticipating that the City will continue to rely on the wholesaler to meet its current and future supplemental water needs. The 2015 UWMP projects that LADWP's reliance on the MWD water supplies will be reduced significantly, from the five-year average of 57 percent of total demand to 11 percent under average weather conditions by 2040 (LADWP 2016a).

Water Conveyance Facilities

As detailed in the LADWP's 2016 Water Infrastructure Plan, water supply to the City is provided by LADWP's water infrastructure system. LADWP's infrastructure and conveyance system includes 6,730 miles of mainline pipelines less than 20 inches in diameter, 550 miles of trunk lines greater than 20 inches in diameter, 123 tanks and reservoirs, 94 pumping stations, 24 chlorination stations, 328 regulator and relief stations, and 60,115 fire hydrants.

Water Conservation

Los Angeles consistently ranks among the lowest in per person water consumption when compared to California's largest cities (LADWP 2016a). This is accomplished through water metering, water rationing, public awareness and incentives, industrial process water use efficiency, and other policies, programs and ordinances. As a result of water conservation measures, the City has reduced its water usage by 31 percent during FY2014/2015 compared to FY 2006/2007 (LADWP 2016a). Furthermore, state legislation, which postdates several City water conservation ordinances, has strengthened the City's commitment to water conservation and provides added assurance that the City will continue its leadership role in managing demand for water in the near and distant future.

DOWNTOWN PLAN AREA SETTING

Table 4.17-4 shows the estimated daily water demand associated with existing land uses in the Downtown Plan Area. Under existing conditions, Downtown Plan Area development generates demand for an estimated 28 mgd or 31,570-acre feet per year (afy). Of this total, residential uses account for about 29 percent and non-residential uses account for about 71 percent.

TABLE 4.17-4 CURRENT WATER DEMAND IN THE DOWNTOWN PLAN AREA

Land Use	Dwelling Units or Jobs in Plan Area	Daily Water Use Rate (gpd/unit)	Daily Water Demand (gpd)	Annual Water Demand (afy)
Single-family[1]	6,733 du	337.2	2,270,368	2,543
Multi-family[2]	26,932 du	219.3	5,906,188	6,616
Commercial	154,674 jobs	84.7	13,100,888	14,675
Industrial	29,126 jobs	135.1	3,934,923	4,408
Public Facilities	35,084 jobs	84.7	2,971,615	3,329
Total			**28,183,980**	**31,570**

NOTES:
du - dwelling units
gpd – gallons per day
afy – acre feet per year (1 af = 325,850 gallons)
Totals may not add up due to rounding.
1. Single-family and multi-family units were estimated by assuming that 20 percent of total household units are single-family and 80 percent are multi-family.
2. Rates for multi-family residential include 0.3 gal/unit for landscaping, per Exhibits 2H and 2K of the 2015 UWMP

SOURCE: Water demand rates were obtained from the LADWP's 2015 Urban Water Management Plan (UWMP), Exhibit2H (LADWP 2016a)

REGULATORY FRAMEWORK

FEDERAL

Clean Water Act

The primary goals of the Federal Clean Water Act (CWA), 33 USC §§ 1251, et seq. (CWA) are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. The CWA forms the basic national framework for the management of water quality and the control of pollutant discharges. The CWA sets forth a number of objectives in order to achieve the above- mentioned goals. The CWA objectives include regulating pollutant and toxic pollutant discharges; providing for water quality which protects and fosters the propagation of fish, shellfish and wildlife; developing waste treatment management plans; and developing and implementing programs for the control of non-point sources pollution.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA), enacted in 1974, ensures the quality of drinking water. The law requires actions to protect drinking water and its sources (e.g., rivers, lakes, reservoirs, springs and groundwater wells) and applies to public water systems that have at least 15 service connections or serve at least 25 people for at least 60 days a year. It authorizes the United States Environmental Protection Agency (USEPA) to set national standards for drinking water to protect against health effects from exposure to naturally-occurring and man-made contaminants. In addition, the USEPA works with states, localities and water suppliers that implement the standards. USEPA standards are set under the National Primary Drinking Water Regulations (NPDWR), which include legally enforceable primary standards and treatment techniques that apply to public water systems. Primary standards and treatment techniques protect public health by limiting the levels of contaminants, Maximum Contaminant Levels (MCLs), in drinking water. The MCL is the highest level of contaminant that is allowed in drinking water at a level that is not anticipated to produce adverse health effects after a lifetime of exposure, based upon toxicity data and risk assessment principles. Secondary standards are non-enforceable guidelines regulating contaminants that

may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. USEPA does not enforce these "secondary maximum contaminant levels" (SMCLs). They are established only as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor.

STATE

Senate Bills 610 and 221, Water Supply Assessment and Verification

Senate Bills (SB) 610 and 221 amended State law, effective January 1, 2002, to improve the link between the information on water supply availability and certain land use decisions made by cities and counties. Both statutes require detailed information regarding water availability to be provided to city and county decision-makers prior to approval of specified large (greater than 500 dwelling units or 500,000 square feet of commercial space) development projects. Both statutes also require this detailed information to be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects. Under SB 610 water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects as defined in Water Code 10912 subject to the California Environmental Quality Act (CEQA). Under SB 221 approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply.

Senate Bill X7-7, Water Conservation Act

The Water Conservation Act of 2009 (SB X7-7), effective November 9, 2009, requires each urban retail water supplier to develop urban water use targets and agricultural water suppliers to implement efficient water management practices. SB X7-7 aims to achieve a 20 percent reduction in urban per capita water use by December 31, 2020. Certain provisions of the law are implemented through public processes administered by the Department of Water Resources (DWR). AB 1420 (2007) requires DWR to convene an Independent Technical Panel to develop new Demand Management Measures and technologies and approaches. AB 1404 (2007) requires agricultural water suppliers to submit aggregated farm-gate delivery annual reports to DWR.

Porter-Cologne Water Quality Control Act

The State of California is authorized to administer Federal or State laws regulating water pollution within the State. The Porter-Cologne Water Quality Control Act (Water Code §§ 13000, et seq.) includes provisions to address requirements of the CWA. These provisions include National Pollutant Discharge Elimination System (NPDES) permitting, dredge and fill programs, and civil and administrative penalties. The Porter-Cologne Act is broad in scope and addresses issues relating to the conservation, control, and utilization of the water resources of the State. Additionally, the Porter-Cologne Act states that the quality of all the waters of the State (including groundwater and surface water) must be protected for the use and enjoyment by the people of the State.

Governor’s Declaration of a State of Emergency

On January 17, 2014, the governor proclaimed a state of emergency due to drought conditions. This proclamation directs all local urban water suppliers and municipalities immediately implement their local water shortage contingency plans. In response to the proclamation, the City and the LADWP activated the Water Conservation Response Unit to implement the Emergency Water Conservation Plan (EWCP).

On May 9, 2016 the governor signed Executive Order B-37-16 that established a new water use efficiency framework for California. The order bolstered the state’s drought resilience and preparedness by establishing longer-term water conservation measures that include permanent monthly water use reporting,

new urban water use targets, reducing system leaks and eliminating clearly wasteful practices, strengthening urban drought contingency plans and improving agricultural water management and drought plans. Based on monthly water use reporting, the majority of urban water suppliers reported sufficient supplies to meet demand in three additional dry years and are not subject to state conservation mandates. On February 8, 2017 the State Water Resources Control Board (SWRCB) adopted an emergency water conservation regulation to amend and extend the May 2016 regulation. The amended regulation allows certain suppliers the opportunity to submit or resubmit their water supply reliability assessments by March 15, 2017 and does not require mandatory conservation unless water suppliers determine that they have a shortfall. Prohibitions against home owners associations penalizing homeowners for certain outdoor conservation practices during a declared drought remain and similar requirements are extended to cities and counties. The extension maintains urban water supplier monthly reporting and basic water conservation measures. Accordingly, the SWRCB will separately take action to make reporting and wasteful water practices permanent.

On April 7, 2017, Executive Order **B-40-17** ended the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects will continue to help address diminished groundwater supplies. It maintains water reporting requirements and prohibitions on wasteful practices.

Making Water Conservation a California Way of Life.

In May of 2016, Governor Brown signed Executive Order B-37-16 that instructed State agencies to help Californians adopt permanent changes to use water more wisely. This Executive Order laid out a framework for moving the State from temporary, emergency water conservation measures to a more durable approach customized to the unique conditions of each local water agency. This report builds upon the Executive Order and provides recommendations for how to implement long-term improvements to water supply management that support water conservation.

Urban Water Management Planning Act

In 1983, the California Legislature enacted the Urban Water Management Planning Act (Water Code, Section 10610 et seq.), which requires urban water suppliers to develop water management plans to actively pursue the efficient use of available supplies. Every five years, water suppliers are required to develop Urban Water Management Plans (UWMPs) to identify short-term and long-term water demand management measures to meet growing water demands.

Title 20, California Code of Regulations (CCR) Section 1605.1

Mandates water conservation by establishing efficiency standards that give the maximum flow rate of all new shower heads, lavatory, sink faucets, and tub spout diverters.

Water Conservation in Landscaping Act

In 2006, this Act was enacted by the California Legislature to resolve outdoor water waste through improvements in irrigation efficiency and selection of plants requiring less water. This Act required an update to the existing local Model Water Efficiency Landscape Ordinance.

California Green Building Code (California Code of Regulations [CCR], Title 24)

California Code of Regulations Title 24 Part 6: *California's Energy Efficiency Standards for Residential and Nonresidential Buildings* (Title 24), was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. Specifically, new development projects constructed within California after January 1, 2017 are subject to the mandatory planning and design, energy efficiency, water

efficiency and conservation, material conservation and resources efficiency, and environmental quality measures of the California Green Building Standards (CalGreen) Code (California Code of Regulations [CCR], Title 24, Part 11). The outdoor water use standards of the CalGreen Code, which requires a 20 percent reduction in indoor water use, are already addressed by the City's Water Conservation Ordinance.

REGIONAL

Regional Water Quality Control Board

The LARWQCB is one of nine State Regional Water Quality Control Boards (RWQCB) that are under the purview of the State Water Quality Control Board (SWQCB). The SWRCB sets statewide policy and, together with the 9 State RWQCBs, implements State and federal laws and regulations that pertain to water quality. The LARWQCB implements State and federal laws and regulations within its jurisdiction and continuously maintains its Water Quality Control Plan (WQCP).

LOCAL

City of Los Angeles General Plan

Applicable policies related to the City utilities and services systems, including water supply, are listed in **Table 4.17-2**.

Emergency Water Conservation Plan

The EWCP is found in Los Angeles Municipal Code (LAMC) Chapter XII, Article I. The purpose of the EWCP is to provide a mandatory water conservation plan to minimize the effect of a water shortage to City water users. The provisions outlined within the EWCP are intended to significantly reduce the consumption of water over an extended period of time, thereby extending the available water required for the City water users while reducing the hardship of the City and the general public to the greatest extent possible. The EWCP contains five water conservation phases, which correspond with the severity of water shortage. Each increase in phase corresponds with more stringent water conservation measures (LADWP 2010). Phase I of the EWCP requires a number of water-saving measures including prohibiting hose watering of driveway and associated walkways; requiring decorative fountains to use recycled water, and repairing water leaks in a timely manner. The City imposes additional mandatory water use restrictions as a result of drought conditions. As of April 2016, the mayor approved an amendment to the EWCP that would increase fines for water wasters during periods of severe drought and will encourage conservation by the City's largest residential users (LADWP 2016b).

Model Water Efficient Landscape Ordinance

In 2009, the City adopted the Model Water Efficient Landscape Ordinance in compliance with the State Water Conservation in Landscaping Act. This Ordinance requires development of water budgets for landscaping, reduction of erosion and irrigation related runoff, utilization of recycled water if available, irrigation audits, development of requirements for landscape and irrigation design, and scheduling of irrigation based on localized climate for new construction and redevelopment projects. The City requires automatic sprinkler systems to be installed to irrigate landscaping during morning hours or during the evening to reduce water losses from evaporation.

Best Management and Low Impact Development Practices

As discussed further in Section 4.9, *Hydrology and Water Quality*, of this EIR, Chapter VI, *Public Works and Property* of the LAMC requires permits and oversee the implementation of any land use or development involving grading activities, or the construction of new structures or paving. Article 4 *Sewers, Water Courses and Drains* and Article 4.4, *Stormwater and Urban Runoff Pollution Control*, of the LAMC establishes minimum standards, guidelines, and/or criteria for specific discharges, connections, and/or Best Management Practices (BMPs). Additional measures are required by the City, when applicable, to prevent or reduce the discharge of pollutants to achieve water quality standards and receiving water limitations. Article 4.4 includes prohibitions for illicit discharges to enter the MS4 and requires implementation of BMPs and Low Impact Development (LID) practices (City of Los Angeles 2017). In addition, the City requires all construction activities and facility operations to be consistent with the landscape ordinance (Ordinance No. 170,978) as well as other related requirements, outlined in Chapter XII, *The Water Conservation Plan of the City of Los Angeles*, and the *Planning and Land Development Handbook for Low Impact Development (LID)*. The *Handbook* is a tool for developers to comply with the requirements of the City's Stormwater Program. The handbook summarizes the City's project review and permitting process, identifies stormwater mitigation measures, and references source and treatment control BMP information. The latest edition was adopted on May 9, 2016 (Los Angeles 2016).

Water Efficiency Requirements Ordinance

In 2009, the City further increased its water efficiency mandates with the adoption of the Water Efficiency Requirements Ordinance. This Ordinance establishes water efficiency requirements for new developments and renovations of existing buildings by requiring installation of high efficiency plumbing fixtures in all residential and commercial buildings.

Retrofit on Resale Ordinance

In 1988, the City adopted a plumbing retrofit ordinance to mandate the installation of conservation devices in all properties and to require water-efficient landscaping in all new construction. The ordinance was amended in 1998, requiring the installation of ultra-low-flush toilets and water saving showerheads in single- and multi-family residences prior to resale. LADWP has explored the expansion of the City's Retrofit on Resale Ordinance to include non-residential properties.

Supply Ordinance No. 165004 Conservation

Adopted in 1989, this Ordinance effectively reduces citywide water consumption by requiring new buildings to install water conservation fixtures, such as ultra-low-flush toilets, urinals, taps, and showerheads, and plumbing fixtures which reduce water loss from leakage in order to obtain building permits in the City of Los Angeles. In addition, there are provisions requiring xeriscaping – the use of low-maintenance, drought-resistant plants.

2017 Los Angeles Amendment Green Building Code, No. 184691.

The purpose of the Green Building Program is to reduce the use of natural resources, create healthier living environments and minimize the negative impacts of development on local, regional, and global ecosystems. The program consists of a Standard of Sustainability and Standard of Sustainable Excellence. The program addresses five key areas: (1) Site: location, site planning, landscaping, storm water management, construction and demolition recycling; (2) Water Efficiency: efficient fixtures, wastewater reuse, and efficient irrigation; (3) Energy & Atmosphere: energy efficiency, and clean/renewable energy; (4) Materials & Resources: materials reuse, efficient building systems, and use of recycled and rapidly renewable materials; and (5) Indoor Environmental Quality: improved indoor air quality, increased natural lighting,

and improved thermal comfort/control. The Green Building Code also requires incorporation of water conservation measures into the construction and design of new buildings, additions, and alterations valued at over $200,000 (LADWP 2016b).

Los Angeles Department of Water and Power 2015 Urban Water Management Plan

The 2015 UWMP, the water supply planning document for the City prepared by LADWP, presents the basic policy principles that guide LADWP's decision-making process to secure a sustainable water supply for Los Angeles. The 2015 UWMP forecasts future water demands and water supplies under average and dry year conditions; identifies future water supply projects such as recycled water; provides a summary of water conservation BMPs; and provides a single and multi-dry year management strategy. The 2015 UWMP serves as a master plan for water supply and resources management consistent with the City's goals and policy objectives; and provides full compliance with the requirements of the Urban Water Management Planning Act. As shown in **Table 4.17-5**, the forecasted water demand for year 2040 under a single dry year scenario is projected to be 709,500 afy.

TABLE 4.17-5 SERVICE AREA RELIABILITY ASSESSMENT FOR SINGLE DRY YEAR

	Single Dry Year (FY2014-15) Fiscal Year Ending June 30				
Demand and Supply Projections (in acre-feet)	**2020**	**2025**	**2030**	**2035**	**2040**
Total Water Demand[1]	642,400	676,900	685,500	694,900	709,500
pLAn Water Demand Target	485,600	533,000	540,100	551,100	565,600
Existing/Planned Supplies					
Conservation [Additional Active[2] and Passive[3] after FY 14/15]	156,700	143,700	145,100	143,500	143,500
Los Angeles Aqueduct[4]	32,200	51,900	51,400	51,000	50,600
Groundwater[5] [Net]	112,670	110,670	106,670	114,670	114,070
Recycled Water					
● Irrigation and Industrial Use	19,800	29,000	39,000	42,200	45,400
● Groundwater Replenishment	0	30,000	30,000	30,000	30,000
Stormwater Capture					
● Stormwater Reuse [Harvesting]	100	200	300	300	400
● Stormwater Recharge [Increased Pumping]	2,000	4,000	8,000	15,000	15,000
Subtotal	323,470	369,470	380,470	396,670	398,970
MWD Water Purchases					
With Existing/Planned Supplies	318,930	307,430	305,030	298,230	310,530
Total Supplies	**642,400**	**676,900**	**685,500**	**694,900**	**709,500**
Potential Supplies					
Water Transfers[6]	40,000	40,000	40,000	40,000	40,000
Subtotal	40,000	40,000	40,000	40,000	40,000
MWD Water Purchases					
With Existing/Planned/Potential Supplies	278,930	267,430	265,030	258,230	270,530
Total Supplies	**642,400**	**676,900**	**685,500**	**694,900**	**709,500**

NOTES:
1. Total Demand with existing passive conservation.
2. Cumulative hardware savings since late 1980s reached 118,034 afy by 2014-15.
3. Additional non-hardware conservation required to meet water use reduction goals set in the Sustainable City pLAn.
4. LADWP anticipates conserving 20,000 afy of water usage for dust mitigation on Owens Lake after the Master Project is implemented in FY 2023-24. Los Angeles Aqueduct supply is estimated to decrease 0.1652% per year due to climate change impact.
5. Net GW excludes Stormwater Recharge and Groundwater Replenishment supplies that contribute to increased pumping. The LADWP Groundwater Remediation project in the San Fernando Basin is expected in operation in 2021-22. Storage credit of 5,000 AFY will be used to maximize pumping in 2019-20 and thereafter. Sylmar Basin production will increase to 4,170 AFY from 2015-16 to 2038-39 to avoid the expiration of stored water credits, then go back to its entitlement of 3,570 AFY in 2039-40.
6. Potential water transfer occurs in dry years with stored water acquired in average and wet years.

SOURCE: LADWP's 2015 Urban Water Management Plan (UWMP), Exhibit ES-R (LADWP 2016a)

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance were developed in accordance with CEQA Guidelines Appendix G. Impacts would be significant if either the Downtown Plan or the New Zoning Code would:

- Require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects (Threshold 4.17-4); and/or
- Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years (Threshold 4.17-5)

METHODOLOGY

The analysis of the Proposed Project's impacts with respect to water quality and supply focuses on whether existing and projected infrastructure capacities or supplies would be sufficient to meet future demands associated with forecast development, including impacts associated with building new facilities to meet future demand. Project-generated demands were calculated using existing level of development in the Downtown Plan Area, forecast level of development in the Downtown Plan Area in 2040, and utility rates per development unit (e.g., water use per dwelling unit). The impact is the net change relative to existing conditions (i.e., 2040 with Downtown Plan conditions – baseline conditions).

Water demand rates were obtained from the LADWP's 2015 UWMP, Exhibit 2H and Exhibit 2K (LADWP 2016a). Rates for multi-family residential include 0.3 gal/unit for landscaping, per Exhibits 2H and 2K of the 2015 UWMP. It was assumed that 20 percent of existing residential development is single-family and 80 percent is multifamily. This provides a conservative estimate as the Downtown Plan Area contains few single-family residential areas and single-family units have higher average utility usage rates than multi-family units. It was also assumed that the number of single-family homes would remain constant under future conditions relative to baseline conditions and all new residential development through 2040 would be multifamily.

State and local policies, plans, initiatives, and projects, such as SBX7-7, SB 1016, Emergency Water Conservation Plan, RENEW LA Plan and Ordinance 181519, as discussed above under Regulatory Setting, are in place or are anticipated to be implemented over the project's time horizon that would reduce utility consumption rates over time. However, baseline rates were used to calculate projected usage in 2040, as it is speculative to assume the decreases that would result from their implementation. The one exception is for water as the 2015 UWMP provides project water use rates for 2040. These projected rates incorporate savings from codes and ordinances currently in place, but do not take into consideration planned projects, future policies, or initiatives (LADWP 2016a), and therefore, also provide a conservative estimate of future consumption. A qualitative discussion of planned capacity-building or supply-enhancing projects is included in the analysis.

Consistent with the Population and Housing Analysis, citywide impacts are analyzed assuming growth and demands placed on utilities and service systems based on SCAG projections.

PROJECT IMPACTS

Threshold 4.17-4	Require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects
Threshold 4.17-5	Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years

Impact 4.17-4, 4.17-5 **Downtown Plan:** Implementation of the Downtown Plan is forecast to increase water demand in the Downtown Plan Area by approximately 25 mgd (28,000 afy), an increase of 90 percent from existing conditions. Based on the City's 2015 UWMP, adequate water supply exists to meet projected demand through the year 2040; impacts to water supply would be ***less than significant*** Downtown.

New Zoning Code: The New Zoning Code does not include any standards that would result in increased water demand. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts relating to water supply from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Therefore, there would be no new population that would increase water demand. Therefore, the impact would be ***less than significant*** citywide.

Downtown Plan Impact

Water Supplies

Table 4.17-6 summarizes estimated water demand for the Downtown Plan Area in 2040 with implementation of the Downtown Plan. As indicated in the table, total water demand in 2040 is estimated to be 53 mgd, or 60,000 afy. New development forecast under the Downtown Plan through 2040 would generate an estimated demand of 25 mgd, or 28,000 afy, which is an increase of about 90 percent compared to the baseline generation of 28 mgd, or 32,000 afy.

Per the 2015 UWMP, current water supplies, planned future water conservation efforts, and planned future water supplies will enable LADWP to reliably provide water that meets the demands of the City for a 25-year planning horizon (through 2040). The 2015 UWMP indicates that water deliveries to the City totaled 513,540 afy in 2015. Projected total water demand for the City under average year conditions for year 2040 is 675,700 afy. Projected total water demand for the City for 2040 under single/multiple dry years conditions is 709,500 afy. The 2015 UWMP projects an increase of 195,960 afy (38 percent) in water demand between 2015 and 2040, under single/multiple dry year conditions. The projected net increase in water demand of 28,000 afy generated by new development facilitated by the Downtown Plan would represent about 14 percent of the forecasted water demand increase through 2040. The 2015 UWMP water demand projections are based on SCAG demographic data and population projections and the 2012 Regional Transportation Plan (RTP). As discussed in Section 4.12, *Population and Housing*, updates to the existing Downtown Plan would accommodate a development capacity consistent with long-range SCAG growth projections. Because the water demand projections for the Downtown Plan Area have been accounted for in the 2015 UWMP, and adequate supply would be available to meet estimated demand of the Downtown Plan Area during normal and single dry year conditions and multiple dry years up to the year 2040, impacts would be less than significant.

TABLE 4.17-6 ESTIMATED WATER DEMAND IN THE DOWNTOWN PLAN AREA

Land Use	Dwelling Units or Jobs in Plan Area	Daily Water Use Rate (gpd/unit)	Daily Water Demand (gpd)	Annual Water Demand (afy)
Single-family Residential	6,733 du	313.8	2,113,000	2,000
Multi-family Residential	126,540 du	202.8	25,662,000	29,000
Commercial	249,279 jobs	78.7	19,618,000	22,000
Industrial	33,735 jobs	125.5	4,234,000	5,000
Public Facilities	21,716 jobs	78.7	1,709,000	2,000
Total 2040 with Downtown Plan Water Demand			53,336,000	60,000
Current Water Demand			28,184,000	32,000
Net Change in Water Demand			**25,152,000**	**28,000**

NOTES:
Water demand numbers are rounded to the nearest thousand. Totals may not add up due to rounding.
du – dwelling unit
gpd – gallons per day
afy – acre feet per year (1 af = 325,850 gallons)
SOURCE: Water demand rates were obtained from the LADWP's 2015 Urban Water Management Plan (UWMP), Exhibit 2K (LADWP 2016a). Per the UWMP, per unit water demand is forecast to decline over time; the forecast 2040 rates are assumed to apply to new development.

As discussed in the *Regulatory Setting,* new development facilitated by the Downtown Plan would be required to comply with the City's water conservation ordinances, such as the Model Water Efficient Landscape Ordinance, which requires that new construction projects develop water budgets for landscaping, reduction of erosion and irrigation related runoff, utilization of recycled water if available, irrigation audits, development of requirements for landscape and irrigation design, and scheduling of irrigation based on localized climate. Compliance with the Water Efficiency Requirements Ordinance and Supply Ordinance No. 165004 would require new buildings to install water conservation fixtures, such as ultra-low-flush toilets, urinals, taps, and showerheads, and plumbing fixtures in order to obtain building permits in the City of Los Angeles. As a result, impacts related to water supplies under the Downtown Plan would be ***less than significant***.

Impacts from Construction of Facilities

As development occurs incrementally throughout the Downtown Plan Area, upgrades to water conveyance facilities may be required. LADWP installs and maintains the water distribution system. The 2016-2017 LADWP Water Infrastructure Plan establishes goals and targets for replacing and/or upgrading infrastructure. Through infrastructure projects, the LADWP would replace or upgrade major system components that are outdated or malfunctioning. With approximately 7,200 miles of water pipes citywide, LADWP plans to replace approximately 500 miles in the next 10 years giving the highest priority to pipes with high risk of failure.

The precise location and connection would need to be determined at the time development is proposed. Should any new connections or upgrades be required, such upgrades would be subject to subsequent environmental review. Any future line size modifications or connections would be designed in accordance with applicable provisions of the Municipal Code. In coordination with the LADWP, project applicants are required to identify specific on- and off-site improvements needed to ensure that impacts related to water supply and conveyance demand/pressure requirements are addressed prior to issuance of a certificate of occupancy. Water supply and conveyance demand/pressure clearance from LADWP are required at the time that a water connection permit application is submitted. In addition, the City requires applicants to coordinate with the LAFD and Building and Safety Department to ensure that existing and/or planned fire

hydrants are capable of meeting fire flow demand/pressure requirements. The issuance of building permits is dependent upon submission, review, approval, and testing of fire flow demand and pressure requirements, as established by the LAFD and Building Safety Department prior to occupancy.

Development under the Downtown Plan could require the construction of new or upgraded water distribution facilities. However, if new facilities are determined to be necessary at some point in the future, the construction of such infrastructure would not be expected to result in significant environmental impacts since it typically involves replacement of lines in the same locations as existing lines. Routine infrastructure projects involving replacing or upgrading water distribution facilities, such as trunk lines, generally include the preparation of a ND/MND and in some cases may possibly qualify for a Categorical Exemption (e.g., CEQA Guidelines Section 15302). The environmental impacts of the construction and operation of these new or upgraded facilities are consistent with the impacts that have been evaluated throughout this EIR. Specifically, the EIR analyzes anticipated effects of citywide growth related to air quality, noise, traffic, and other environmental impact areas. To the extent that any significant impacts could result from the unique characteristics of a specific site, those impacts would be speculative at this time. Any such upgrades would be subject to subsequent environmental review, wherein potential impacts, if any, would be addressed. Therefore, impacts related to the construction of new water conveyance infrastructure and water treatment facilities or expansion of existing facilities under the Downtown Plan would be ***less than significant.***

New Zoning Code Impact

Future development has the potential to affect existing water supplies by adding additional people and structures within the City which could in turn generate the need for new or expanded entitlements. The New Zoning Code would allow for a variety of new zone districts that could be applied elsewhere in the City through future community plan updates or amendments. The New Zoning Code includes Density Districts ranging from those allowing one dwelling unit per lot to those that limit density indirectly through floor area maximums. If future community plan updates apply Form Districts that allow for intensive development and Density Districts that allow for high density development, it is possible that new population and development could create the need for new or expanded entitlements. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area. Therefore, analyzing direct or indirect water demand impacts based off of the new Zoning Code would be speculative. Further, the New Zoning Code would include landscaping requirements that refer to the City's Low Impact Development requirements with the intent to improve site permeability and reduce storm water runoff.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update or amendment and associated zoning classifications would analyze potential community- and site-specific impacts related to water supplies. Future environmental review of proposed community plan update and amendment would be analyzed for consistency with the UWMP. Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development regulations, such as the Model Waste Efficient Landscape and Water Efficiency Requirements ordinances, intended to avoid increased water demand effects. It is also expected that the development capacity of communities undergoing future community plan updates and amendments would be developed in accordance with SCAG projections which would ensure proper planning to address potential increased water demand. As the Proposed Project does not intent to implement the New Zoning Code outside of the Downtown Plan Area, the impact would **be less than significant**.

Mitigation Measures

No significant impacts have been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

CUMULATIVE IMPACTS

The geographic area to analyze cumulatively considerable impacts to water includes the entire City of Los Angeles. Cumulative development throughout Los Angeles would add both dwelling units and non-residential development to the City. Citywide development through 2040 would add approximately 659,000 new residents, 293,000 new households, and 345,000 new employees (SCAG 2016). Cumulative impacts from this development are discussed below by impact area.

Total water demand projected by the City's 2015 UWMP accounts for population growth within its jurisdictional boundaries, which is based on SCAG's demographic data and the 2012 RTP. Per the 2015 UWMP, demographic projections for the LADWP service area include a population of 4,441,545 persons, 1,713, 651 housing units and 2,000,667 jobs (LADWP 2016a). As shown in **Table 4.17-5**, projected total water demand for the City for 2040 under single/multiple dry year conditions is 709,500 afy. Per the 2015 UWMP, based on current water supplies, planned future water conservation and planned future water supplies, LADWP will be able to reliably provide water to meet the demands of the City for the 25-year planning horizon identified in the 2015 UWMP. Therefore, cumulative development would not result in a cumulatively significant impact with respect to water supply.

Cumulative impacts related to water supply are ***less than significant.***

As discussed in Section 4.12, *Population and Housing*, and under Impact 4.17- and 4.17-2, the update to the existing Downtown Plan would provide for a development capacity consistent with long-range SCAG growth projections; therefore, implementation of the Downtown Plan would result in an increase in water demand consistent within UWMP projections. The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to other areas of the City only when applicable community plans are updated. Any cumulative impacts related to future updates of other community plans as a result of the New Zoning Code would be speculative; however, as discussed above, the 2015 UWMP water demand projections are based on SCAG population projections so since the UWMP forecasts adequate water supplies based on these projections water supply shortages are not anticipated. Additionally, future community plan updates would be required to adhere to existing state and local requirements related to water supply.

The increase in water demand could potentially increase pressure on the City's water infrastructure, including water mainline and trunk lines. In 2016, LADWP prepared a Water Infrastructure Plan, which addresses the City's long-term goals for replacing the City's water infrastructure. The report states that LADWP plans to replace approximately 500 miles of leak-prone and high-risk water mainlines in the next 10 years, and LADWP is increasing the rate at which they replace water distribution mainline to bring the pipe replacement cycle closer to the expected pipe life cycle by year 2020. The upgrading and replacement of the City's water infrastructure generally result in the preparation of an MND or, in some cases, a Categorical Exemption. The City's MNDs for water line replacements typically indicate less-than-significant impacts, including air quality, noise, and traffic impacts. The environmental impacts of the construction and operation of water lines are localized in nature and consistent with the impacts evaluated throughout this EIR. Specifically, the EIR analyzes anticipated effects of citywide growth related to air quality, noise, traffic, and other environmental impact areas. To the extent that any significant impacts could result from the unique characteristics of a specific project site, those impacts are too speculative to analyze at this time. Therefore, the Proposed Plan would not make a cumulatively considerable contribution to impacts related to water conveyance.

Based on the above information, the incremental effect of the Downtown Plan and New Zoning Code related to water supply or conveyance would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

Solid Waste

ENVIRONMENTAL SETTING

CITYWIDE SETTING

Solid waste management, including collection and disposal services and landfill operation in Los Angeles is administered by various public agencies and private companies. Refuse on public streets is collected by the City Department of Public Works Bureau of Sanitation (LASAN) and disposed of at City operated landfills. LASAN provides collection services primarily to single-family residences and some of the smaller multi-family residences, collecting over one million tons of refuse annually from 750,000 customers including single- and small multi-family residences, averaging 6,652 tons per day (LADPW 2017a). The City is also responsible for collecting waste from the City Hall complex, some public buildings, parks, and fire stations. Large multi-family residences, such as apartment complexes and condominiums, and commercial and industrial buildings, contract with a private company to collect and transport their materials for disposal or recycling (LADPW 2013a).

Waste generated by construction and the majority of multi-family residential sources and all commercial and industrial sources is collected by private contractors. Private contractors can dispose of waste at a City-operated landfill or a landfill of their choosing. On April 15, 2014, the Mayor and City Council approved the ordinance that established the Zero Waste LA Franchise System, which allows the City to establish an exclusive franchise system with 11 zones. With a single trash hauler responsible for each zone, the franchise system allows for the efficient collection and sustainable management of solid waste resources and recyclables. The Franchise System serves all users within a zone that are not serviced by LASAN, and became operational in July, 2017.

As of 2012, the City achieved a diversion rate of 76.4 percent (LADPW 2013b). As discussed further under *Regulatory Framework*, per the Solid Waste Integrated Resources Plan (SWIRP), landfill solid waste disposal for the City of Los Angeles totaled 2,849,237 annual tons in 2010. Assuming no additional programs are implemented to reduce waste and that the City maintains its 2010 baseline diversion rate (72 percent), citywide disposal is projected to increase by 10 percent to 3,121,937 annual tons by 2030 (LADPW 2013a).

Landfills

Solid waste generated in Los Angeles is sent to waste disposal sites (i.e., landfills) operated by the City and County as well as by private companies. In addition, transfer stations temporarily store debris until larger haul trucks are available to transport the materials directly to the landfills. **Table 4.17-7** lists the city in which each landfill is located, permitted capacity, remaining capacity, permitted daily intake capacity, and the average daily volume of solid waste received for each of the landfills serving the City of Los Angeles (County of Los Angeles 2017). The Commerce Refuse to Energy Facility and the Southeast Resource Recovery Facility extend the landfill capacity by combusting solid waste and selling energy generated by combustion to local utility companies. While neither facility currently encounters maximum capacity issues, both are restricted in regards to the daily amount and type of solid waste that they can accept and process. Another alternate solid waste disposal method includes recycling businesses, with the most notable location being the Azusa Reclamation facility. The City is primarily served by the Sunshine Canyon Landfill, which accepts residential, commercial, and construction waste (LADWP 2017). As shown in **Table 4.17-7**, the combined daily intake capacity of landfills serving the City of Los Angeles is 45,540 tons per day and the average disposal intake is 19,143 tons per day. Based on the County of Los Angeles CIWMP

2016 Annual Report, available capacity from Nonhazardous Solid Waste Landfills is expected for the next 15 years (CIWMP projections extend to 2031) and no new landfills are expected to be permitted during that time (Los Angeles County 2017).

TABLE 4.17-7 SOLID WASTE FACILITIES SERVING THE CITY OF LOS ANGELES

Facility Name	Landfill Site Location	Remaining Capacity (tons)[1]	Permitted Daily Intake Capacity (tons/day)	2016 Average Disposal (tons/day)
Antelope Valley	Palmdale	12,888,361	1,800	1,582
Calabasas	Agoura	5,951,595	3,500	951
Chiquita Canyon[2]	Castaic	48,114,000	12,000	4,544
Lancaster	Lancaster	10,445,200	3,000	550
Sunshine Canyon	Los Angeles	62,108,650	12,100	7,496
Scholl Canyon[3]	Glendale	4,080,222	3,400	1,122
Commerce Refuse to Energy Facility/b/	Commerce	N/A	1,000	370
Southeast Resource Recovery Facility/b/	Long Beach	N/A	2,240	1,345
Azusa Land Reclamation	Azusa	56,335,860	6,500	1,183
Totals		**199,923,888**	**45,540**	**19,143**

NOTES:
1. Remaining capacity as of December 2016.
2. Chiquita Canyon reached its fill capacity limits in June 2016. However, the landfill is proposed to be expanded. The values provided for remaining capacity and permitted daily capacity are for the proposed Chiquita Canyon Landfill Expansion. /b/Transforms Solid Waste into Energy.
3. Scholl Canyon Landfill is proposed to be expanded. Expansion would provide an additional 5.5 or 8.0 million tons of remaining capacity.

SOURCE: County of Los Angeles 2017.

Recycling Facilities

Waste generated in the City may also be diverted from landfills and recycled. In 2000, the City had a diversion rate of approximately 58.8 percent (LADPW 2001). In 2001, the City adopted a 70 percent diversion rate goal by the year 2020. The City revised the diversion rate goal to 75 percent by 2013, and the City adopted a new goal of Zero Waste by the year 2025. By the end of 2011, the City achieved a diversion rate of 76.4 percent (LADPW 2013b).

DOWNTOWN PLAN AREA SETTING

As shown in **Table 4.17-8**, existing development in the Downtown Plan Area currently generates an estimated 1,071 tons of solid waste per day or 390,771 tons per year. The current solid waste generation calculation for the Downtown Plan Area does not take into account diversion of solid waste from landfills. Assuming the current 72 percent diversion rate, solid waste generated in the Downtown Plan Area that is actually sent to area landfills totals about 109,416 tons.

TABLE 4.17-8 CURRENT SOLID WASTE GENERATION IN THE DOWNTOWN PLAN AREA

Land Use	Dwelling Units (du[1]) or Jobs in Plan Area	Annual Waste Generation Rate	Annual Waste Generation (tons)	Daily Waste Generation (tons)
Single-family Residential	6,733 du	1.17 ton/du[1]	7,878	22
Multi-family Residential	26,932 du	0.46 ton/du	12,389	34
Commercial	105,376,578 sf	3.01 ton/1,000 sf	317,183	869
Industrial	40,101,581 sf	1.24 ton/1,000 sf	49,726	136
Public Facilities	3,865,922 sf	0.93/1,000 sf	3,595	10
Total			**390,771**	**1,071**

NOTES:
du – dwelling units
sf – square feet
lbs – pounds
Totals may not add up due to rounding.
[1] Converted from CalEEMod default data of 0.41 tons/resident, assuming a persons per unit rate of 2.86 for City of Los Angeles (California Department of Finance (DOF). 2018. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2018 with 2010 Census Benchmark. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/ (accessed April 2019))
SOURCE: CalEEMod Land Use SubType

REGULATORY FRAMEWORK

FEDERAL

Federal Agencies and Regulations. Title 40 Code of Federal Regulations, Part 258 Subtitle D of the Resource Conservation and Recovery Act (RCRA) establishes minimum location standards for siting municipal solid waste landfills. Because California laws and regulations governing the approval of solid waste landfills meet the requirements of Subtitle D, the USEPA delegated the enforcement responsibility to the State of California.

STATE

California Integrated Waste Management Act of 1989 (Assembly Bill 939)

The California Integrated Waste Management Act of 1989, which is commonly known as Assembly Bill (AB) 939, was the first recycling legislation in the country to mandate recycling diversion goals. This Act, codified into the PRC, emphasized a reduction of waste disposed in California landfills by requiring cities and counties to reduce the production of, recycle, and reuse solid waste. To achieve a reduction of waste in California landfills, AB 939 required all city and county plans to include a waste diversion schedule with the goals to divert 25 percent of solid waste from landfills by 1995 and divert 50 percent of solid waste from landfills by the year 2000. Recently, a number of changes to the municipal solid waste diversion requirements under this Act were adopted, including a revision to the statutory requirement of 50 percent diversion of solid waste. Under these provisions, local governments are required to continue to divert 50 percent of all solid waste after January 1, 2000.

Assembly Bill 341

The purpose of AB 341 is to reduce GHG emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in California. In addition to Mandatory Commercial Recycling, AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1016

Senate Bill (SB) 1016 requires expressing the 50 percent solid waste diversion requirement established by AB 939 in pounds per person per day. SB 1016 changed the CalRecycle review process for each municipality's integrated waste management plan. After an initial determination of diversion requirements in 2006 and establishing diversion rates for subsequent calendar years, the Board reviews a jurisdiction's diversion rate compliance in accordance with a specified schedule. Beginning January 1, 2018, the Board will be required to review a jurisdiction's source reduction and recycling element and hazardous waste element once every two years.

LOCAL

City of Los Angeles Solid Waste Integrated Resources Plan

The City of Los Angeles Solid Waste Integrated Resources Plan (SWIRP), prepared by the Bureau of Sanitation, is a 20-year master plan to reduce waste, increase recycling, and manage trash in the City. The SWIRP outlines the City's objectives to provide sustainability, resource conservation, source reduction, recycling, renewable energy, maximum material recovery, public health and environmental protection for solid waste management planning through 2030 with a goal of a "zero waste city". Although the City of Los Angeles SWIRP is a long-term overarching plan to manage solid resources, it also encompass all of the solutions and programs currently in place within the City by addressing all solid waste generators within the City, including residential, commercial, industrial, and institutional uses. In addition, the SWIRP process identifies the number, types, and size of new solid waste disposal facilities that the City will need in the future. Per the SWIRP, landfill solid waste disposal for the City of Los Angeles totaled 2,849,237 annual tons in 2010. The SWIRP provides the projected solid waste quantities by generator sector based on projected changes in population and employment provided by SCAG. Assuming no additional programs are implemented to reduce waste and that the City maintains its 2010 baseline diversion rate (72 percent), citywide disposal is projected to increase by 10 percent to 3,121,937 annual tons by 2030 (LADPW 2013a).

Recovering Energy, Natural Resources and Economic Benefit from Waste for Los Angeles (RENEW LA Plan)

A resource management blueprint called RENEW LA was adopted by the City Council in February 2006. This 20-year plan is the blueprint that will guide the City in reducing the use of landfills by maximizing recycling and reuse, and converting much of the solid waste that currently would go to landfills into clean energy and/or valuable raw materials. Many of the plan components have been, and continue to be implemented.

Citywide Construction and Demolition (C&D) Waste Recycling Ordinance (Ordinance 181519)

On March 5, 2010, the City Council adopted the Citywide C&D Waste Recycling Ordinance (Ordinance 181519) that requires all mixed C&D waste generated within City limits be taken to City certified C&D waste processors. All haulers and contractors responsible for handling C&D waste must obtain a Private Solid Waste Hauler Permit prior to collecting, hauling and transporting C&D waste and C&D waste can

only be taken to City certified C&D Processing Facilities. Among the various purposes of this program is the goal of maintaining an open and competitive market for all companies providing solid waste and disposal services in the City, and to mandate the recycling of construction and demolition waste.

City of Los Angeles General Plan

The applicable policies that are related to the City utilities and services systems, including solid waste and recycling, are listed in **Table 4.17-2**.

Citywide Recycling Chute Ordinance (Ordinance 181227)

On July 7, 2010, the City Council approved the Citywide Recycling Chute Ordinance that requires all new development projects, all existing multi-family residential development projects of four or more units where the addition of floor area is 25 percent or more, and all other existing development projects where the addition of floor area is 30 percent or more, to provide an adequate recycling area or room for the collection and loading of recyclable materials. When a new development project provides a trash chute, or an existing development project adds a trash chute, a recycling chute shall also be provided in both cases. Recycling chutes shall be clearly marked "recycling only" at every point of entry.

Zero Waste LA Franchise System

Zero Waste LA Franchise System is a public-private partnership to address three-million tons of waste disposed yearly by City of Los Angeles businesses, consumers, and residents. The Zero Waste LA Franchise System was approved by City Council in April 2014 and expected to go into full effect by July 2017. As part of the program, the City is divided in to 11 zones that are served by a single trash hauler that would allow for the efficient collection and sustainable management of solid waste resources and recyclables. LASAN solid waste collection services will continue to be provided to current City customers, including the collection of bulky items from all residents. Zero Waste LA goals include the following:

- Reduction of landfill disposal by 1,000,000 tons per year by 2025;
- Transparent and predictable solid waste and recycling service rates for the next 10-20 years;
- Quality customer service standards with LASAN monitoring and enforcement;
- Franchise hauler accountability for program outcomes and customer satisfaction through a series of measures implemented by LASAN, up to and including liquidated damages;
- Compliance with environmental regulations, including mandatory commercial and organics recycling;
- Investment of over $200 million in new and improved solid resources infrastructure;
- Clean fuel vehicles; and
- Decrease and recycling of food waste and increase in food rescue.

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance were developed in accordance with CEQA Guidelines Appendix G. Impacts would be significant if either the Downtown Plan or the New Zoning Code would:

- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals (Threshold 4.17-6)
- Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste (Threshold 4.17-7)

METHODOLOGY

The analysis of the Proposed Project's impacts to solid waste focuses on whether the project would impair attainment of solid waste reduction goals by generating solid waste in excess of local standards or in excess of infrastructure capacities, or would not comply with solid waste management and reduction regulations. Project-generated demands were calculated using existing level of development in the Downtown Plan Area, forecast level of development in the Downtown Plan Area in 2040, and utility rates per development unit. The impact is the net change relative to existing conditions (i.e., 2040 with Downtown Plan conditions – baseline conditions).

Waste generation rates were obtained from CalEEMod. It was assumed that 20 percent of existing residential development is single-family and 80 percent is multifamily. This provides a conservative estimate as the Downtown Plan Area contains few single-family residential areas and single-family units have higher average utility usage rates than multi-family units. It was also assumed that the number of single-family homes would remain constant under future conditions relative to baseline conditions and all new residential development through 2040 would be multifamily.

Consistent with the Population and Housing Analysis, citywide impacts are analyzed assuming growth and demands placed on utilities and service systems based on SCAG projections.

PROJECT IMPACTS

Threshold 4.17-6	Would the Proposed Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals

Impact 4.17-6

Downtown Plan: Implementation of the Downtown Plan would generate an increase of approximately 1,133 tons of solid waste per day above existing conditions that would need to be disposed of at local landfills. However, projected future solid waste generation would remain within the capacity of landfills serving the City; therefore, impacts would be ***less than significant*** for the Downtown Plan.

New Zoning Code: The New Zoning Code does not propose new development or include any standards that would generate solid waste. Further, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts related to landfill capacity from the future use of the New Zoning Code outside the Downtown Plan Area

would be speculative. Therefore, the impact would be ***less than significant*** citywide.

Downtown Plan Impact

As shown in **Table 4.17-9**, reasonably foreseeable development under the Downtown Plan would increase the amount of solid waste generated in the Downtown Plan Area by approximately 1,133 tons per day, or 413,534 tons per year, above existing conditions. The calculation for the Downtown Plan does not take into consideration current and planned City programs to divert solid waste from landfills. For example, compliance with LAMC Section 66.32 would ensure that at least 50 percent of the demolition and construction waste generated by development under the Downtown Plan would be diverted from landfills serving the City. In addition, the City will continue to implement waste reduction policies set forth by the RENEW LA Plan and the Framework Element. Based on the City's current 72 percent diversion rate, the amount of additional waste that would be sent to landfills is about 318 tons per day or 116,070 tons per year.

As shown in **Table 4.17-7**, the combined daily intake capacity of landfills serving the Plan Area is 45,540 tons per day and the average disposal intake is 19,143 tons per day. Therefore, available capacity (26,397 tons per day) can accommodate the estimated daily solid waste that would be generated in the Downtown Plan Area. Assuming no diversion, the increase in Downtown Plan Area generated solid waste would represent about 4 percent of the total available daily capacity.

Based on the County of Los Angeles Countywide Integrated Waste Management Plan (CIWMP) 2018 Annual Report (County of Los Angeles 2019), Los Angeles County would be able to meet the disposal needs of all County jurisdictions through the 15-year planning period for six of seven scenarios considered. Although daily capacity at area landfills is currently available (as noted above), the CIWMP Annual Report concludes that reliance on existing permitted County landfill capacity alone is insufficient to meet the County's long-term disposal needs; however, under the "status quo" scenario (i.e., solid waste disposed will continue to be managed by existing permitted in-County disposal infrastructure and available out-of-County landfill capacity and diversion efforts by individual jurisdictions continue, resulting in a countywide diversion rate of 65 percent) and each of the other scenarios contemplated in the CIWMP Annual Report, no shortfall in capacity is expected. The "status quo" scenario is conservative insofar as it assumes no new waste reduction programs or disposal facilities and no increase in waste diversion. Based on these facts, sufficient permitted capacity is anticipated to be available to accommodate the Downtown Plan Area's solid waste disposal needs and impacts related to solid waste would be ***less than significant***.

New Zoning Code Impact

New development has the potential to affect existing solid waste disposal rates by adding additional people and structures in the City, which could in turn generate solid waste disposal over the capacity of local landfills. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. As no quantifiable amount of construction or demolition would occur; no waste would be generated at this time.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update or amendment and associated zone districts would analyze potential community- and site-specific impacts related to solid waste disposal needs. As the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area, impacts would be ***less than significant.***

TABLE 4.17-9 ESTIMATED SOLID WASTE GENERATION IN THE DOWNTOWN PLAN AREA

Land Use	Dwelling Units or Square Feet	Annual Waste Generation Rate	Annual Waste Generation (tons)	Daily Waste Generation (tons)
Single-family Residential	6,733 du	1.17 ton/du	7,878	22
Multi-family Residential	126,540 du	0.46 ton/du	58,208	159
Commercial	199,504,737 sf	3.01 ton/1,000 sf	600,509	1,645
Industrial	76,758,424 sf	1.24 ton/1,000 sf	95,180	261
Public Facilities	45,730,208 sf	0.93 ton/1,000 sf	42,529	117
Total 2040 Downtown Plan Area Solid Waste Generation			804,305	2,204
Current Solid Waste Generation			390,771	1,071
Net Change in Waste Generation			**413,534**	**1,133**

NOTES:
Waste generation (tons) was rounded to the nearest whole number. Totals may not add up due to rounding.
du – dwelling unit
sf – square feet
[1] Converted from CalEEMod default data of 0.41 tons/resident, assuming a persons per unit rate of 2.86 for City of Los Angeles (California Department of Finance (DOF). 2018. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2018 with 2010 Census Benchmark. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/ (accessed April 2019))
SOURCE: CalEEMod Land Use SubType

Mitigation Measures

No significant impacts have been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

Threshold 4.17-7	Would the Proposed Project not comply with federal, state, and local management and reduction statutes and regulations related to solid waste

Impact 4.17-7

Downtown Plan: Development under the Downtown Plan would comply with applicable solid waste policies and objectives from the SWIRP and RENEW LA Plan as well as local ordinances; impacts would be ***less than significant*** Downtown.

New Zoning Code: The New Zoning Code does not include any standards that would affect existing waste disposal. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts regarding solid waste from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Additionally, the content of the New Zoning Code would not repeal, amend, or conflict with existing waste diversion requirements intended to avoid these effects. Therefore, the impact would be ***less than significant*** citywide.

Downtown Plan Impact

Future development in the Downtown Plan Area would be required to comply with LAMC Section 66.32 regarding demolition activities. Compliance with LAMC Section 66.32 would ensure that at least 50 percent of the demolition and construction waste generated by future development would be diverted from landfills serving the City of Los Angeles. Additionally, implementation of the Downtown Plan would be consistent

with all waste reduction goals set forth by SWIRP, RENEW LA Plan, and the Framework Element, which are discussed in the Regulatory Setting. The Downtown Plan would not conflict with any solid waste policies and objectives in the SWIRP or Framework Element.

All solid waste-generating activities in the City of Los Angeles are subject to the requirements set forth in AB 939 and other local ordinances, such as LAMC Section 66.32. As discussed in the Setting, the City already exceeds State goals with respect to reduction of solid waste generation and diversion of solid waste from landfills. Therefore, because future development permitted under the Downtown Plan would comply with applicable solid waste policies and objectives, impacts related to compliance with federal, state, and local statutes and regulations related to solid waste would be ***less than significant***.

New Zoning Code Impact

The New Zoning Code does not include any standards or provisions that would affect existing waste disposal. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts related to waste disposal from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. Further, the content of the New Zoning Code would not repeal, amend, or conflict with existing regulations and uniformly applied development policies, such as AB 939, C&D Waste Recycling Ordinance, and Recycling Chute Ordinance, as discussed in Regulatory Setting, intended to avoid these effects.

The New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update or amendment and associated zone changes would analyze potential community- and site-specific solid waste disposal impacts. The impact would be ***less than significant.***

Mitigation Measures

No significant impacts have been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

CUMULATIVE IMPACTS

The geographic area to analyze cumulatively considerable impacts to solid waste includes the entire City of Los Angeles. Cumulative development throughout Los Angeles would add both dwelling units and non-residential development to the City. Citywide development through 2040 would add approximately 659,000 new residents, 293,000 new households, and 345,000 new employees (SCAG 2016). Cumulative impacts from this development are discussed below by impact area.

Cumulative citywide development would increase solid waste disposal at local landfills. Landfill solid waste disposal for the City of Los Angeles totaled 2,849,237 annual tons in 2010 (10,959 daily tons) (LADPW 2013a). The SWIRP provides the projected solid waste quantities by generator sector based on --projected changes in population and employment provided by SCAG. Assuming that no additional programs are implemented to reduce waste and that the City maintains its 2010 baseline diversion rate (72 percent), citywide disposal is projected to increase by 10 percent to 3,121,937 tons annually by 2030 (12,007 tons daily) (LADPW 2013a). This would not cause existing landfills serving the City of Los Angeles to exceed their combined daily intake capacity of 45,540 tons per day (see **Table 4.17-7**). As noted under Impact 4.17-6, the County's CIWMP 2018 Annual Report concludes that reliance on County landfills alone would not provide adequate capacity through 2033, the status quo scenario (which includes continued export of some waste to out-of-County landfills, but no new waste diversion programs or facility

expansions) provides adequate solid waste disposal capacity to meet future demand. Consequently, waste disposal capacity is adequate to meet cumulative solid waste disposal projections.

The Downtown Plan Area would contribute 10 percent of citywide disposal in 2030, as it would generate 414,000 tons annually in 2040 (approximately 1,133 tons daily). As discussed under Impact 4.17-6 and above, solid waste generated citywide and in the Downtown Plan Area would not exceed the available daily capacity of landfills serving the City and the County's CIWMP 2018 Annual Report forecasts adequate capacity through at least 2033 under the status quo scenario. The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to other areas of the City only when applicable community plans are updated. Any cumulative impacts related to future updates of other community plans would be speculative, however, as discussed above, the SWIRP solid waste generation projections are based on SCAG population projections so since the SWIRP forecasts adequate solid waste disposal capacity based on these projections, solid waste disposal capacity exceedances are not anticipated. Additionally, future community plan updates would be required to adhere to existing state and local requirements related to solid waste disposal.

Based on the above information, the incremental effect of the Downtown Plan and New Zoning Code related to solid waste disposal facilities would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

Electric Power, Natural Gas, and Telecommunications Facilities

ENVIRONMENTAL SETTING

The environmental setting for electrical power and natural gas is described in Section 4.5, Energy. The environmental setting for telecommunications is described below.

CITYWIDE SETTING

There are 42 cellular towers that serve the City of Los Angeles. Cellular towers that serve the City are located in the following cities/communities.

- Catalina Island (4)
- Gorman (3)
- Palos Verdes (3)
- Palmdale (3)
- Glendale (2)
- Los Angeles (2)
- Pearblossom (2)
- San Pedro (2)
- Acton
- Agua Dulce
- Altadena
- Arcadia
- Azusa
- Calabasas
- Chatsworth
- Commerce
- Glendora
- Lancaster
- Long Beach
- Malibu
- Pacific Palisades
- Pomona
- Pasadena
- Rolling Hills
- Santa Clarita
- Santa Monica
- Saugus

Range and service for an individual tower can vary; therefore, the towers described above likely serve cities outside of Los Angeles County. All cellular towers and equipment are managed by private telecommunications service providers under the jurisdiction of the Federal Communications Commission (FCC).

DOWNTOWN PLAN AREA SETTING

The Downtown Plan Area is served by several cellular towers. The cellular towers closest to the Downtown Plan area are located at 5701 S. Eastern Avenue in Commerce, California approximately five miles southeast, 933 S. Raymond Avenue in Pasadena, California approximately five miles northeast, 2061 Pasa Glen Drive in Glendale, California approximately nine miles north, and 11789 Pico Boulevard in Santa

Monica, California approximately 10 miles west (City of Los Angeles 2018c). Service from an individual cellular tower can range and service is not necessarily provided by the closest cellular tower; therefore, other cellular towers in Los Angeles County likely provide service to the Downtown Plan Area.

REGULATORY FRAMEWORK

The regulatory framework for electrical power and natural gas is described in Section 4.5, Energy. The regulatory framework for telecommunications is described below.

FEDERAL

The Federal Communications Commission (FCC) requires all new cellular tower construction to be approved by the state or local authority for the proposed site and comply with FCC rules involving environmental review. Additionally, the Telecommunications Act of 1996 requires construction of new cellular towers to comply with the local zoning authority.

STATE

Senate Bill 649

Senate Bill 649 (SB 649) requires small cellular installations be on vertical infrastructure and on property outside of public rights-of-way. The installation is required to comply with all applicable federal, state, and local health and safety regulations. Additionally, cellular equipment that is no longer in use is required to be removed at no cost to the City.

LOCAL

City of Los Angeles Municipal Code Section 10.5.4

Section 10.5.4 of the City's Municipal Code states that telecommunications providers are required to comply with all city, state, and federal regulations during installation and operation of equipment. Additionally, each lease, sublease, or license facilitated by telecommunications providers are required to seek approval from the City.

ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

The following threshold of significance was developed in accordance with CEQA Guidelines Appendix G. Impacts would be significant if either the Downtown Plan or the New Zoning Code would:

- Require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects (Threshold 4.17-8)

METHODOLOGY

The analysis of the Proposed Project's impacts related to the potential construction and relocation of electric power, natural gas, and telecommunications facilities focuses on whether existing and projected

infrastructure capacities or supplies would be sufficient to meet future demands associated with forecast development and, if not, whether the construction of needed new or expanded facilities would result in significant environmental effects.

Project-generated demands were calculated based on the existing level of development in the Downtown Plan Area and the forecast level of development in the Downtown Plan Area in 2040. However, cellular towers vary in range of service and maximum number of users. Therefore, this analysis qualitatively evaluates need for additional telecommunication facilities.

PROJECT IMPACTS

Threshold 4.17-8	Require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects

Impact 4.17-8

Downtown Plan: Implementation of the Downtown Plan would generate energy and telecommunications demand. Forecast demand may require the construction of new energy or telecommunication facilities or the expansion of such facilities, but the construction of such facilities is not expected to result in significant environmental effects. This impact would be ***less than significant***.

New Zoning Code: The New Zoning Code would not require or result in the construction of new or expanded energy or telecommunication facilities. The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area. Therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. This impact would be ***less than significant.***

Downtown Plan Impact

Electrical Power

As shown in **Table 4.5-6** and **Table 4.5-7** in Section 4.5, *Energy*, implementation of the Downtown Plan would result in an approximately 31 percent decrease in per capita electricity consumption and a 19 percent decrease in per capita natural gas consumption compared to 2017 baseline conditions. Implementation of the Downtown Plan may require construction of new or expanded energy facilities to meet future energy needs in the Downtown Plan Area, including electrical transmission and distribution infrastructure and natural gas facilities (e.g., storage, pipelines).

As discussed in the *Environmental Setting*, the LADWP utilizes a long-term planning process to plan for increased energy demand in the future with its publication of ten-year Transmission Plans. The most recent, LADWP's *2016 Final Power Integrated Resource Plan* (IRP), identifies actions that are central to the continued reliability of the LADWP Power System while meeting all regulatory requirements. The 2016 IRP provides detailed analysis and results of several new IRP resource cases, which investigated the economic and environmental impact of an increased RPS of 55 percent by 2030 and 65 percent by 2036, local solar, energy storage, and various levels of transportation electrification within a 20-year horizon.

In order to achieve 100 percent renewable energy generation, the LADWP is two years ahead of schedule for early coal replacement by 2025, accelerating its RPS to 50 percent by 2025, 55 percent by 2030, and 65 percent by 2036. In addition, the LADWP is implementing a strategy of 15 percent energy efficiency by 2020, repowering coastal in-basin generating units with new, highly efficient units by 2029 to provide grid reliability and critical ramping capability, accelerating electric transportation to absorb GHG emission from

the transportation sector, and investing in a Power System Reliability Program to maintain a robust and reliable Power System. In order to achieve these renewable energy source goals, the LADWP has implemented the following projects and programs that introduce added transmission capacity to meet anticipated future growth, which would be accommodated by the Downtown Plan:

- Barren Ridge Renewable Transmission Project; in service as of 2016.
  - 2,000 Megawatts (MW) of added transmission capacity.
- Moapa Southern Paiute Solar, LLC (Moapa) Solar; in service as of 2016.
  - 250 MW of added solar energy supply.
- Heber-1 Geothermal; in service as of 2016.
  - 35 MW of added geothermal energy supply.
- Springbok 1 and 2 Solar; in service as of 2016.
  - 105 MW and 155 MW of added solar energy supply, respectively.
- RE Cinco Solar; in service as of 2016.
  - 60 MW of added solar energy supply.
- Springbok 3 Solar; expected in-service status in 2017.
  - 90 MW of added solar energy supply.
- Solar Incentive Program; 1999 to present.
  - Funding to support installation of 181 MW of operational net-metered solar at over 24,500 customer locations as of November 2016.

Although the introduction of new renewable energy sources is expected to meet energy demands associated with future population growth, many renewable energy sources reduce a power grid's baseload reliability due to the fluctuating nature of energy captured (i.e., solar energy is only accumulated during optimum sunlight hours and conditions while energy is consumed 24 hours a day). To meet this challenge, the LADWP's 2016 Power Infrastructure Plan states the following long-term goals to diversify energy generation sources, improve energy storage capabilities, and secure energy reliability in the future (LADWP 2015):

- Replace/overhaul four units of thermal generation, one unit of large hydro, and two units of small hydro annually by 2020.
- Replace two generator step-up transformers and two generator station transformers annually by 2020.
- Repower Harbor, Haynes, and Scattergood as determined through the LADWP's once-through cooling (OTC) policy by 2029.
- Complete modernization of all Castaic units by 2017.
- Complete refurbished work to extend life of the three Gorge plants for another 30 years.

The California Independent System Operator Corporation's (Cal-ISO) 2016-2017 Transmission Plan also provides a comprehensive evaluation of the ISO transmission grid to identify upgrades needed to successfully meet California's policy goals, in addition to examining conventional grid reliability and requirements. The Cal-ISO 2016-2017 Transmission Plan is a ten-year planning document that assesses California's energy supply capability and reliability and has identified the need for two supply reliability projects, both of which are located in the Southern California Electric (SCE) service area.

No system improvements have specifically been identified as needed to meet new policy-driven or economic-driven demands. Nevertheless, reasonably anticipated growth in the Downtown Plan Area would contribute to the need for distribution infrastructure improvements and expansions. Such expansions would result in temporary construction-related impacts pertaining to such issues as transportation, air quality, and noise. These impacts are anticipated to be within the parameters of what is described in this EIR and any new or expanded facilities, the construction of which may result in impacts beyond those identified herein, would be subject to further environmental review under CEQA. Impacts would be ***less than significant***.

Natural Gas

As shown in **Table 4.5-7** in Section 4.5, *Energy*, natural gas use in the Downtown Plan Area with the implementation of the Downtown Plan is estimated to account for less than 0.2 percent of statewide demand for natural gas. The Downtown Plan would be within the projected available supply for natural gas and the current trend of energy efficient practices, increased use of renewable power, and a decreased use of natural gas would further reduce future energy demands. Nevertheless, reasonably anticipated development in the Downtown Plan Area may necessitate the construction of new or expanded natural gas distribution facilities. Such expansions would result in temporary construction-related impacts pertaining to such issues as transportation, air quality, and noise. These impacts are anticipated to be within the parameters of what is described in this EIR and any new or expanded facilities, the construction of which may result in impacts beyond those identified herein, would be subject to further environmental review under CEQA. Impacts would be ***less than significant***.

Telecommunications

As discussed in Section in 4.12, *Population and Housing*, reasonably anticipated development in the Downtown Plan Area would allow for an additional 176,000 persons, 97,000 housing units, and 86,000 jobs. The telecommunication requirements for the Downtown Plan Area are expected to evolve as development increases and technologies change. Construction of additional telecommunications facilities or upgrades to existing facilities to meet Downtown Plan Area demands would be undertaken by private telecommunication service providers in accordance with applicable federal, state, and local regulations. No restrictions on the ability to provide adequate telecommunication service are anticipated, but new or expanded facilities may be needed to meet increased demand in the Downtown Plan Area. Such expansions would result in temporary construction-related impacts pertaining to such issues as transportation, air quality, and noise. These impacts are anticipated to be within the parameters of what is described in this EIR and any new or expanded facilities, the construction of which may result in impacts beyond those identified herein, would be subject to further environmental review under CEQA. Impacts would be ***less than significant.***

New Zoning Code Impact

The New Zoning Code would not require or result in the construction of new or expanded electrical, natural gas, or telecommunication facilities and no specific energy facilities are proposed to be constructed as part of the Proposed Project. The New Zoning Code would include a range Density Districts, ranging from those in which density is limited indirectly by floor area maximums to restricting the permitted density to one unit per lot, which has the potential to increase population such that there would be an increase in demand for energy facilities. However, due to the modulatory of the New Zoning Code, it is not known where or to what extent future development may occur and if it would result in the demand for new or expanded energy facilities or the location thereof as application of the New Zoning Code would be driven by the policy intent and vision of future community plan updates and amendments.

The Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts from the future use of the New Zoning Code outside the Downtown

Plan Area would be speculative. Further, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze if the zoning applied would result in impacts related to the construction of new electrical, natural gas, and telecommunication facilities or the expansion of such facilities. The impact would be ***less than significant.***

Mitigation Measures

No significant impacts have been identified; therefore, mitigation is not required for either the Downtown Plan or the New Zoning Code.

CUMULATIVE IMPACTS

The geographic area to analyze cumulatively considerable impacts related to electrical power, natural gas, and telecommunications includes the entire City of Los Angeles. Cumulative development throughout Los Angeles would add both dwelling units and non-residential development to the City. Citywide development through 2040 would add approximately 659,000 new residents, 293,000 new households, and 345,000 new employees (SCAG 2016). Cumulative impacts associated with the construction of new or expanded electrical, natural gas, and telecommunications facilities necessitated by this development are discussed below by impact area.

Electrical Power

Citywide development through 2040 would cumulatively increase demand for electrical power. However, as discussed above, LADWP's 2016 Final Power IRP identifies actions that would achieve the continued reliability of the LADWP Power System throughout the LADWP service area while meeting all regulatory requirements. The Downtown Plan would contribute to the overall citywide demand for electrical power, but would not result in an exceedance of existing or planned system capacity. The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to other areas of the City only when applicable community plans are updated. Future community plan updates would be required to adhere to existing state and local requirements related to electrical power.

New or expanded facilities for the generation, transmission, storage, and distribution of electricity may be needed to meet increased citywide demand. Impacts associated with the construction of new facilities would depend on the location, size, and nature of such facilities, but would primarily consist of temporary construction-related impacts pertaining to such issues as transportation, air quality, and noise. These impacts are anticipated to be within the parameters of what is described in this EIR and any new or expanded facilities, the construction of which may result in impacts beyond those identified herein, would be subject to further environmental review under CEQA.

Based on the above information, the incremental effect of the Downtown Plan and New Zoning Code related to the provision of electrical power infrastructure would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

Natural Gas

Citywide development through 2040 would cumulatively increase demand for natural gas. However, as discussed above, the current trend of energy efficient practices, increased use of renewable power, and a decreased use of natural gas would further reduce future energy demands. Natural gas use in the Downtown Plan Area is estimated to account for less than 0.2 percent of statewide demand for natural gas and would not exceed the projected available supply for natural gas or require the construction of new or expanded

natural gas facilities. The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to other areas of the City only when applicable community plans are updated. Future community plan updates would be required to adhere to existing state and local requirements related to natural gas.

New or expanded facilities for the transmission and distribution of natural gas may be needed to meet increased citywide demand. Impacts associated with the construction of new facilities would depend on the location, size, and nature of such facilities, but would primarily consist of temporary construction-related impacts pertaining to such issues as transportation, air quality, and noise. These impacts are anticipated to be within the parameters of what is described in this EIR and any new or expanded facilities, the construction of which may result in impacts beyond those identified herein, would be subject to further environmental review under CEQA.

Based on the above information, the incremental effect of the Downtown Plan and New Zoning Code related to the provision of natural gas infrastructure would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

Telecommunications

Citywide development through 2040 would cumulatively increase demand for telecommunication service. However, as discussed above, the City is well served by telecommunications facilities and no restrictions on the expansion of service as necessary to meet future demands is anticipated anywhere in the City, including the Downtown Plan Area. The New Zoning Code would only apply to the Downtown Plan Area at this time and would apply to other areas of the City only when applicable community plans are updated. Future community plan updates would be required to adhere to existing state and local requirements related to telecommunication service.

New or expanded telecommunication facilities may be needed to meet increased citywide demand. Impacts associated with the construction of new facilities would depend on the location, size, and nature of such facilities, but would primarily consist of temporary construction-related impacts pertaining to such issues as transportation, air quality, and noise. These impacts are anticipated to be within the parameters of what is described in this EIR and any new or expanded facilities, the construction of which may result in impacts beyond those identified herein, would be subject to further environmental review under CEQA.

Based on the above information, the incremental effect of the Downtown Plan and New Zoning Code related to the provision of telecommunication infrastructure would not be cumulatively considerable and cumulative impacts would be ***less than significant***.

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4.18 EFFECTS FOUND NOT TO BE SIGNIFICANT

This section addresses issues for which the Downtown Plan and New Zoning Code were determined to have no potential for significant effects. The items discussed below are included in the environmental checklist in Appendix G of the CEQA Guidelines. Items not addressed in this section are addressed in Sections 4.1 through 4.17 of this EIR.

AGRICULTURE AND FORESTRY RESOURCES

Thresholds of significance for agricultural and forest resource impacts focus on conflicts with existing zoning for agricultural or forest uses and Williamson Act contracts, and the potential to involve any changes in the existing environment that could result in conversion of farmland or forest land to non-agricultural or non-forest use. Specific questions pertaining to agricultural and forest resources from Appendix G of the CEQA Guidelines are as follows:

- Would the project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?
- Would the project conflict with existing zoning for or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?
- Would the project result in the loss of forest land or conversion of forest land to non-forest use?
- Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

DOWNTOWN PLAN IMPACT

The Downtown Plan Area encompasses Downtown Los Angeles, an area that is urbanized and fully developed. No portion of the Downtown Plan Area is mapped on the Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (FMMP), since the Downtown Plan Area is entirely developed and contains no agricultural land (DOC 2017). Per the Department of Conservation's Los Angeles County Williamson Act Map, the entire Downtown Plan Area is located in Non-Enrolled Land, which is defined as land not enrolled in Williamson Act contract (DOC 2016). Implementation of the Downtown Plan would have no impact on existing agricultural resources, would not result in the conversion of agricultural farmland, and would not be located on Williamson Act contract land.

Per the City of Los Angeles Conservation Element, the only substantial conifer and big tree forests in the vicinity of Los Angeles are located outside the City's boundaries in the Angeles National Forest and on the north slope of the Santa Susana Mountains (2001). As discussed in Section 4.3, *Biological Resources*, the Downtown Plan Area includes street trees and some heritage trees in public parks. However, these individual trees species are planted, nonnative trees that do not constitute forests. Because no forests are located in or adjacent to the Downtown Plan Area, the Downtown Plan would have no impact to forest land or forestry resources.

NEW ZONING CODE IMPACT

No portion of the City is mapped on the DOC FMMP (DOC 2017). Per the DOC Los Angeles County Williamson Act Map, the entire City is located in Non-Enrolled Land, which is defined as land not enrolled in Williamson Act contract (DOC 2016). The City's Conservation Element notes that one parcel in the City is identified as unique farmland. The parcel is located within a portion of Pierce College and is related to the college's educational curriculum (City of Los Angeles 2001). As discussed above, the only substantial conifer and big tree forests in the vicinity of Los Angeles are located outside the City's boundaries in the Angeles National Forest and on the north slope of the Santa Susana Mountains (2001).

Due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative. However, since the Downtown Plan Area does not contain farmland or forest resources, adoption of the New Zoning Code would not impact these resources. Future application of the New Zoning Code could occur in or adjacent to the identified unique farmland area and adjacent to forest boundaries. However, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area.

In addition, the New Zoning Code only applies to properties where a community plan is updated or amended to utilize the new zoning, which would require environmental review pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential community- and site-specific impacts to agricultural and forest resources, if applicable. A less than significant impact to agricultural and forest resources would occur.

MINERAL RESOURCES

Thresholds of significance for mineral resource impacts focus on whether the Proposed Project could result in the loss of availability of known mineral resources. Specific questions from Appendix G of the CEQA Guidelines are as follows:

- Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

DOWNTOWN PLAN IMPACT

The Surface Mining and Reclamation Act of 1975 (SMARA) requires the state geologist (Division of Mines and Geology) to identify and classify all mineral deposits in California. In 1979, the state Board of Mining and Geology adopted guidelines that require local general plans to reference identified mineral deposits and sites that are identified for conservation. In addition, the Board identified urban areas where irreversible land uses (development with structures) preclude mineral extraction.

Although the Downtown Plan Area is urbanized, the Mineral Resources Map from the City of Los Angeles' Conservation Element shows the majority of the Downtown Plan Area as being located in Mineral Resource Zone (MRZ)-2 (City of Los Angeles 2001). An MRZ-2 area is "an area underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present or where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists." Per the most recent Department of Conservation's Active Mine Operations Map, there are no active mine operations in the Downtown Plan Area (Division of Mine Reclamation 2017). The

nearest active mine, Mid City Granite, is located approximately 15 miles away from the Downtown Plan Area.

Mineral Extraction

As stated above, there are no active mines in the Downtown Plan Area and the Downtown Plan would not facilitate any new mining activity. The MRZ-2 areas mapped within the Downtown Plan Area are currently fully developed with residential, commercial, and industrial uses, as well as freeways and streets. According the California Department of Conservation Division of Mines and Geology's *Guidelines for Classification and Designation of Mineral Lands*, the uses listed below fall under the category of Economic Exclusion, which are land uses that are considered generally incompatible with mining and have been excluded from areas containing available aggregate resources:

A. Residential areas, and areas committed to residential development
B. Commercial areas with land improvements (buildings)
C. Industrial areas (buildings and adjacent needed storage and parking facilities)
D. Major public or private engineering project including freeways, railroads, and major power transmission lines
E. Small areas isolated by urbanization (Division of Mines and Geology).

Resource recovery does not currently occur in the Downtown Plan Area, and as a result of the aforementioned development, these areas are economically excluded, and not considered aggregate resource areas by the California Department of Conservation, Division of Mines and Geology.

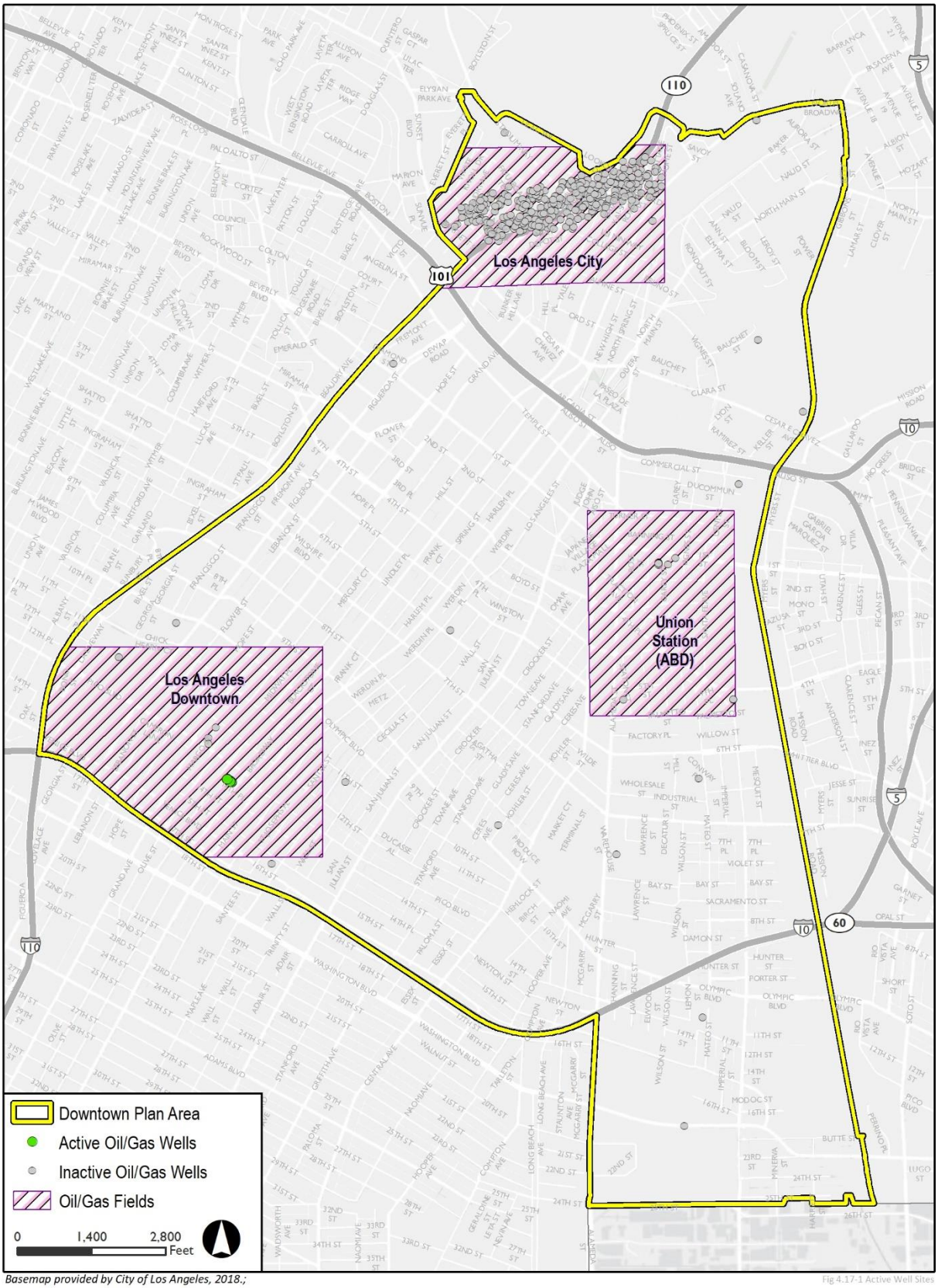
The existing Conservation Element has policies that pertain to the loss of a known and/or locally important mineral resource. These policies include Conservation Element Sand and Gravel Resources Policies 1 and 2, which seek to implement the provisions of the SMARA (Public Resources Code Sections 2710 et seq.) so as to establish extraction operations at appropriate sites; to minimize operation impacts on adjacent uses, ecologically important areas and groundwater; to protect the public health and safety; and require appropriate restoration, reclamation and reuse of closed sites. The Downtown Plan Area does not contain any sand or gravel resources and thus would not hinder extraction of such resources. No conflict with Conservation Element objectives or policies would result from Plan implementation.

Oil Deposits

Los Angeles is located in Oil and Gas District 1, which covers the following counties: Los Angeles, Orange, San Bernardino, Riverside, San Diego, and Imperial. Per the Department of Oil, Gas, and Geothermal Resources, the active wells and field sites in the Downtown Plan Area are shown in **Figure 4.18-1**. The Downtown Plan Area contains State Designated Oil Fields and Oil Drilling Districts, including a portion of the Los Angeles City Oil Field located south of Dodger Field, the Los Angeles Downtown Oil Field, and Union Station Oil Field.

As of May 2017, the Downtown LA Oil Field contains eight scattered wells producing oil and gas, and the City Oil Field contains ten (DOGGR 2017). The most recent Annual Report from the DOGGR, states that the Los Angeles City and Downtown Oil Fields produced over 52,000 bbl of oil and 34,873 Mcf of natural gas in 2015 (DOGGR 2015). Per the DOGGR Well Finder, all Union Station wells are currently plugged and out of production (DOGGR 2014). The current oil and gas extraction in the Downtown Plan Area oil fields represents 0.2 percent of District 1 total annual oil production and about 0.3 percent of District 1 natural gas production. This amount of oil and natural gas produced in the Downtown Plan Area is not vital to the sustainability of the state or region.

Figure 4.18-1 Oil Fields and Active Wells Sites



Basemap provided by City of Los Angeles, 2018.;
Additional data provided by California Department of Conservation DOGGR, 2017.

Conservation Element Oil and Gas policies 1, 2, and 3 intend to conserve petroleum resources and enable appropriate, environmentally sensitive extraction of petroleum deposits so as to protect petroleum resources for the use of future generations, and to reduce the City's dependency on imported petroleum and petroleum products. The Downtown Plan would not preclude continued oil extraction from existing Downtown Plan Area wells, but Plan implementation would likely phase out oil production over time through voluntary action as Downtown Plan Area development occurs. This phase out would not conflict with City policy because continued oil extraction in the urbanized Downtown Plan Area would not be consistent with the objective of conducting environmental sensitive extraction and because, as discussed above, current oil extraction in the Downtown Plan Area is not vital to meeting the state's or region's energy needs. Moreover, as discussed in Section 4.5, *Energy*, Plan implementation would generally reduce energy demand by facilitating energy-efficient infill and mixed-use development that would comply with City green building requirements and minimize per capita vehicle miles traveled (VMT).

Potential hazards associated with development or construction on or adjacent to active oil fields are discussed in Section 4.6, *Hazards and Hazardous Materials*.

NEW ZONING CODE IMPACT

Although the City is urbanized, the Mineral Resources Map from the City of Los Angeles' Conservation Element shows the majority of the eastern area of the City as being located in Mineral Resource Zone (MRZ)-2, which are areas that contain identified mineral deposits or where there is a high likelihood for their presence (City of Los Angeles 2001). Per the Department of Conservation's Mines Online database, there are six mine operations in the City (Division of Mine Reclamation 2016). Five are located in the eastern San Fernando Valley and one is located north of Griffith Park. Of the five located in eastern San Fernando Valley, two are active mines, one has been reclaimed, one has been closed with no intent to resume, and one is exempt. There are also 20 oil fields within the City; however, many have been depleted and extraction from them is complete. The Wilmington field is one of the largest oil fields in the state and produces approximately 54,600 barrels of oil per day (City of Los Angeles 2001).

Due to the modularity of the New Zoning Code, it is not known where or to what extent future development may occur. Projecting the location and type of future growth would be speculative. Use Districts created by the New Zoning Code neither encourage or discourage the extraction of mineral resources.

In addition, the Proposed Project does not intend to implement the New Zoning Code outside of the Downtown Plan Area and therefore any indirect impacts related to mineral resources from the future use of the New Zoning Code outside the Downtown Plan Area would be speculative. While there are mineral resources located in the City, the New Zoning Code could only be applied when a community plan is updated or amended to utilize the new zoning, which would require environmental review, pursuant to CEQA. Future environmental review of a proposed community plan update and associated zone changes would analyze potential impacts to mineral resources. Implementation of the New Zoning Code would have a less than significant impact on existing mineral resources and would not result in the loss of availability of a known mineral resource.

WILDFIRE

Thresholds of significance in Appendix G for wildfire focus on impacts that could occur on lands in very high fire severity zones. There are no high fire severity zones in the Downtown Plan Area. Therefore, there are no impacts from wildfire from Downtown Plan. Additionally, for the New Zoning Code, as discussed throughout the EIR, implementation is through future community plans and any impact related to wildfire impacts from implementation of the new code would be speculative. Impacts are less than significant.

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5.0 ALTERNATIVES

5.1 INTRODUCTION

As required by Section 15126.6 of the CEQA Guidelines, a range of reasonable alternatives to the Proposed Project that would attain most of the basic project objectives, but would avoid or substantially lessen any of its significant environmental effects must be examined. The primary purpose of analyzing alternatives for a project is to identify and disclose ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1). Key provisions of the CEQA Guidelines pertaining to alternatives analysis are summarized below.

- The discussion of alternatives shall focus on alternatives to the project, including alternative locations that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly (CEQA Guidelines Section 15126.6(b)).

- The EIR shall include a brief discussion of the rationale for selecting alternatives to be discussed and should identify any alternatives that were considered but were rejected as infeasible during the scoping process and briefly explain the reason underling the lead agency's decision. Among others, the following factors may be used to eliminate alternatives from detailed consideration in an EIR: (1) failure to meet most of the basic project objectives; (2) infeasibility; or (3) inability to avoid significant environmental impacts (CEQA Guidelines Section 15126.6(c)).

- The No Project Alternative shall be evaluated along with its impacts. The "no project" alternative analysis shall discuss existing conditions at the time the Notice of Preparation is published, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services (CEQA Guidelines Section 15126.6(e)(2)).

- When the project involves an update to an existing land use or regulatory plan, the "no project" alternative will be the continuation of the existing plan, policy or operation into the future (CEQA Guidelines Section 15126.6(e)(3)(A)).

- The range of alternatives required in an EIR is governed by a "rule of reason." Therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the proposed project (CEQA Guidelines Section 15126.6(f)).

- For alternative locations, only locations that are feasible and would avoid or substantially less any of the significant effects of the project need be considered for inclusion in the EIR (CEQA Guidelines Section 15126.6(f)(2)(A)).

- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative (CEQA Guidelines Section 15126.6(f)(3)).

- The evaluation of alternatives would include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant effects of each alternative may be used to summarize the

comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the proposed project (CEQA Guidelines Section 15126.6(d)).

- CEQA Guidelines Section 15126.6(a) states:

  An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasible attain most of the basic project objectives, but would substantially lessen any of the significant effects of the project," and specifies that "An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible."

- CEQA Guidelines Section 15126.6(f)(1) explains that:

  …factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…and whether the proponent can reasonably acquire, control or otherwise have access to the alternative sites…

Based on the above, this section identifies, describes, and evaluates a reasonable range of project alternatives with the same focus as the Proposed Project. It is intended to inform the public and decision-makers about the comparative effects of alternatives that address concerns raised by the public during the outreach process and identified in this EIR. The analysis is particularly focused on alternatives that could achieve most of the basic project objectives while reducing or avoiding the Proposed Project's significant environmental effects.

As noted in Section 4 of this EIR, the unavoidably significant effects of the Proposed Project after implementation of all feasible mitigation measures are:

- **Air Quality**: Criteria Air Pollutant Emissions Exceed Standards related to Construction for NOx, $PM_{2.5}$, PM_{10}; related to Operation for VOC, PM_{10}, and $PM_{2.5;}$; expose Sensitive Receptors to substantial pollutant concentrations related to Operations (Distribution Centers); cumulative impact related to construction emissions of NO_X, PM_{10}, and $PM_{2.5}$ and cumulative impact related to operational emissions for VOCs, PM_{10}, and $PM_{2.5}$; cumulative impacts related to operational emissions of toxic air contaminants

- **Cultural resources**: Historical resources; Cumulative Historical Resources

- **Noise**: Construction-related noise and vibration impacts; Cumulative Construction-related noise and vibration impacts

- **Recreation**: Deterioration of existing parks; cumulative deterioration of parks

- **Transportation**: Safety impacts related to off-ramp queuing; cumulative safety impacts related to off-ramp queuing

The following issues were found to have impacts that would be reduced to a less-than-significant level with implementation of mitigation measures:

- **Air Quality:** Construction-related emissions of toxic air contaminants
- **Biological Resources:** Habitat Modification (nesting birds)
- **Cultural Resources:** Archaeological Resources
- **Geology:** Paleontological Resources
- **Hazards and Hazardous Materials:** Hazardous Materials within ¼-Mile of School, Hazardous Materials Sites
- **Tribal Cultural Resources:** Tribal Cultural Resources

See **Table ES-3** in the Executive Summary (Chapter 2), for the proposed mitigation measures.

5.2 PROJECT OBJECTIVES

CEQA requires an EIR to include a statement of the objectives sought by a project proponent, in this case the City of Los Angeles. The statement of objectives should include the underlying purpose of the project.

UNDERLYING PURPOSE OF THE PROJECT

The underlying purpose of the Downtown Plan is to plan for and accommodate foreseeable growth in the City, including the Downtown Plan Area, consistent with the growth strategies of the City as provided in the Framework Elements, as well as the policies of SB 375 and the Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

The underlying purpose of the New Zoning Code is to create the tools necessary to implement community visions expressed in adopted plans, including the Downtown Plan. The modular zoning tools of the New Zoning Code are designed to be adaptable to future needs throughout the City.

The Primary Objectives of the Proposed Project are to:

- **Primary Objective 1:** Accommodate employment, housing, and population growth projections forecasted through the planning horizon year of 2040 to ensure that Downtown Plan Area continues to grow in a sustainable, equitable, healthy, and inclusive manner, consistent with the City of Los Angeles General Plan Framework Element, by focusing new job-generating uses and residential development around transit stations.
- **Primary Objective 2:** Provide for economic diversification and reinforce the Downtown Plan Area as a primary center of employment for the City and the Southern California region.
- **Primary Objective 3:** Build upon Downtown's role as a regional transportation center by allowing for intensive development throughout the Plan Area, and concentrating development opportunity immediately surrounding the transit stations with an appropriate range of building sizes and mix of uses.
- **Primary Objective 4:** Promote a mode-shift from private automobile usage and foster a transit, bicycle, and pedestrian supportive environment.

- **Primary Objective 5:** Reduce vehicle miles traveled to meet the goals of the Senate Bill 375, Senate Bill 743, and California Assembly Bill 32 to reduce carbon emissions.
- **Primary Objective 6:** Support a growing residential population by expanding the areas where housing is permitted and allowing for a full range of housing options.
- **Primary Objective 7:** Celebrate and reinforce the character of each of the neighborhoods in the Plan Area.
- **Primary Objective 8:** Provide a set of implementation tools that are responsive to the range of physical and functional needs across the Plan Area, and enable the creation of similar tools across the City.

The Secondary Objectives of the Proposed Project are to:

- **Secondary Objective 1:** Refine and expand a system that links development with public benefits to deliver community amenities in the Downtown Plan Area, and is adaptable to the policy needs across the City.
- **Secondary Objective 2:** Maintain a meaningful amount of the Plan Area that is dedicated to production and high-intensity traditional industry.
- **Secondary Objective 3:** Promote a mix of land uses that fosters sustainability, equity, community, neighborhood density, and healthy living.
- **Secondary Objective 4:** Identify appropriate locations for housing and establish zoning tools that encourage a range of unit typologies.
- **Secondary Objective 5:** Ensure new development provides the appropriate range of outdoor amenity space and other recreational options to tenants and property owners.
- **Secondary Objective 6:** Support and sustain Downtown's ongoing revitalization.

5.3 SELECTION OF ALTERNATIVES FOR ANALYSIS

The following analysis considers four alternatives, including the CEQA-required "no project" alternative. As required by CEQA, this section also includes a discussion of the "environmentally superior alternative" among those studied. The alternatives are listed below:

- Alternative 1: Reduced Development Potential
- Alternative 2: Housing Redistribution
- Alternative 3: Increased Development Potential
- Alternative 4: No Project

EIR alternatives analyses is required to focus on alternatives that reduce or avoid the unavoidably significant environmental impacts of the Proposed Project and feasibly attain obtain most of the Proposed Projects basic objectives. Because no significant and unavoidable impacts were identified for the New Zoning Code, consideration of alternatives to that component of the Proposed Project is not warranted. The Downtown Plan's unavoidably significant impacts are to those associated with temporary (construction-related) and long-term air pollutant emissions, exposing sensitive receptors to the operation related

pollutants from distribution centers, the possible loss of historical resources, safety issues related to off ramp queuing, temporary construction-related noise and vibration, and deterioration of existing parks. Impacts identified as significant, but that can be reduced to a less than significant level with proposed mitigation measures include those related to exposure of sensitive receptors to construction-related substantial pollutant concentrations, biological resources (nesting birds), archaeological resources, paleontological resources, hazardous sites, and tribal cultural resources. All these potential impacts could be reduced to some degree by limiting the amount of development in the Downtown Plan Area; however, outside of a moratorium on new development, none of the impacts could be reduced to below a level of significance. Moreover, limiting development in the Downtown Plan Area may simply divert more growth and development to other areas of the City, thus increasing the potential for similar impacts in other areas of the City. Diverting growth and development to other areas that have few transit options may increase overall regional air pollutant emissions and vehicle miles traveled (VMT) compared to focusing more development in the Downtown Plan Area.

Table 5-1 shows the housing, population and employment projections under each alternative and the percentage of growth projected from 2017 through 2040, over existing baseline conditions, for each alternative.

TABLE 5-1 HOUSING, POPULATION AND EMPLOYMENT GROWTH PROJECTIONS

	Total Summary for 2040 [1]			Percent Growth 2017-2040		
Scenario	**Housing (du)**	**Population (person)**	**Employment (job)**	**Housing**	**Population**	**Employment**
Existing 2017 Conditions	34,000*	76,000	219,000	--	--	--
SCAG 2016 RTP/SCS	96,000*	189,000	257,000	182%	149%	17%
Downtown Plan	133,000	252,000	305,000	291%	232%	39%
Alternative 1	97,000	183,000	290,000	185%	141%	32%
Alternative 2	127,000	241,000	297,000	274%	217%	36%
Alternative 3	139,000	263,000	364,000	309%	246%	66%
Alternative 4	59,000	112,000	278,000	74%	47%	27%

Notes:
du = dwelling unit; * For conservative purposes, this number represents households and do not include vacant units [1] Numbers are rounded to thousand.
Source: SCAG 2016-2040 RTP/SCS; Los Angeles Department of City Planning, 2018

5.4 ANALYSIS METHODOLOGY

Feasible alternatives that address the City's need to accommodate foreseeable growth in the City and Downtown Plan Area are evaluated herein. The analysis compares the impacts of the Proposed Project to those of each alternative, concluding whether the alternative's impact would be less than, similar to, or greater than that of the Proposed Project. The analysis also concludes whether the alternative would either create or avoid a significant impact and discusses what, if any, mitigation would be required for the alternative.

5.5 COMPARATIVE IMPACT ANALYSIS

ALTERNATIVE 1: REDUCED DEVELOPMENT POTENTIAL

Alternative Description

The "Reduced Development Potential" Alternative involves reducing the maximum FAR in subareas in the Traditional Core, Community Center, Markets, and Hybrid Industrial General Plan Designations to a maximum of 3.0:1 FAR and 6.0:1 FAR but retains the story limitations associated with these designations. Alternative 1 would also reduce base FAR in the transit Core to 6:1. **Figure 5-1** shows the changes in FAR under the Reduced Development Potential Alternative compared to the Downtown Plan. Alternative 1 assumes that the reasonable anticipated development capacity of the Downtown Plan Area would be reduced compared to the Downtown Plan. As shown in **Table 5-1**, under Alternative 1 the Downtown Plan Area is projected to reach a population of 183,000 residents, 97,000 housing units, and 290,000 jobs by 2040. SCAG projects growth of the Downtown Plan Area to reach 189,000 residents, 96,000 housing units, and 257,000 jobs by 2040. Under Alternative 1, population growth in the Downtown Plan Area would fall below SCAG's forecasts by approximately 6,000 residents, while housing and employment projections would exceed projections by approximately 1,000 housing units and 33,000 jobs, respectively.

Alternative 1 was selected because it was expected to incrementally reduce or avoid the significant unavoidable impacts of the Downtown Plan with regard to historical resources, construction noise, construction vibration and deterioration of existing parks as well as the Downtown Plan's significant, but mitigable impacts related to biological, archaeological and paleontological resources, and hazardous materials while still meeting most of the basic project objectives, including: providing for economic diversification and reinforcement of the Downtown Plan Area as a primary center of employment (Primary Objective 2); building upon Downtown's role as a regional transportation center by allowing for intensive development throughout the Plan Area and concentrating development opportunity immediately surrounding the transit stations (Primary Objective 3); promoting a mode-shift from private automobile usage while fostering a transit, bicycle, and pedestrian supportive environment (Primary Objective 4); reducing vehicle miles traveled to meet the goals of the Senate Bill 375, Senate Bill 743, and California Assembly Bill 32 to reduce carbon emissions (Primary Objective 5; supporting a growing residential population by expanding the areas where housing is permitted and allowing for a full range of housing options (Primary Objective 6); celebrating and reinforcing the character of each of the neighborhoods in the Plan Area (Primary Objective 7); providing a set of implementation tools that are responsive to the range of physical and functional needs across the Plan Area (Primary Objective 8); refining and expanding a system that links development with public benefits to deliver community amenities in the Downtown Plan Area, and is adaptable to the policy needs across the City (Secondary Objective 1); maintaining a meaningful amount of the Plan Area for production and high-intensity traditional industry (Secondary Objective 2); promoting a mix of land uses that fosters sustainability, equity, community, neighborhood density, and healthy living (Secondary Objective 3); identifying appropriate locations for housing and establishing zoning tools that encourage a range of unit typologies (Secondary Objective 4); ensuring that new development provides the appropriate range of outdoor amenity space and other recreational options to tenants and property owners (Secondary Objective 5); and supporting and sustaining Downtown's ongoing revitalization (Secondary Objective 6).

As identified above, Alternative 1 would meet all of the objectives of the Downtown Plan. However, it would meet Primary Objective 2 to reinforce the Downtown Plan Area as a primary center of employment for the City and the Southern California region to a lesser degree than the Downtown plan due to the reduced development potential in comparison to the Downtown Plan. Because capacity for development around transit under Alternative 1 would be less than that of the Downtown plan, it would not allow for the same

high intensity of development as the Downtown Plan. Therefore, Alternative 1 would only partially meet Primary Objective 3, of concentrating growth near transit. For these same reasons, Alternative 1 would not meet Primary Objective 4 of reducing VMT to the same degree as the Downtown Plan. Opportunities for public benefits would also be less than that of the Plan, and therefore, this Alternative would meet Secondary Objective 1 to a lesser degree than that of the Downtown Plan. As discussed below, Alternative 1 would result in incrementally greater impacts than the Downtown Plan with respect to transportation/traffic.

Impact Analysis

Aesthetics

Compared to existing conditions, either Alternative 1 or the Downtown Plan would generally allow buildings of greater height, scale and intensity. However, both Alternative 1 and the Downtown Plan include height limits in certain areas to promote context-sensitive development. Compared to the Downtown Plan, Alternative 1 would reduce the maximum FAR in Traditional Core, Community Center, Markets, and Hybrid Industrial General Plan Designations to a maximum FAR of 3.0:1 FAR and 6.0:1 and reduce the base FAR in the transit Core to 6:1. Compared to the Downtown Plan, Alternative 1 would result in less intense development in these areas, though it would still involve substantial visual changes to existing neighborhoods and the potential alteration of historical resources. Because building heights would be similar to those allowed under the Downtown Plan, impacts to scenic vistas would be similar and less than significant. In addition, as with the Downtown Plan, increased building heights compared to existing conditions near residential and other sensitive uses may increase shading in portions of the Downtown Plan Area. Any new development would be implemented in accordance with applicable state and local plans, policies and guidelines, including but not limited to the City's General Plan Framework, Conservation Element, Mobility Plan 2035, the Downtown Design Guide and provisions of the LAMC as it relates to development standards, visual character and historical resources. As with the Downtown Plan, development accommodated by Alternative 1 could introduce new sources of light and glare in the Downtown Plan Area. However, most of the Downtown Plan Area already experiences high levels of nighttime lighting and glare so any additional lighting would be incremental. Future development would also comply with applicable regulations regarding permitted lighting and glare. Similarly, development in the Downtown Plan Area accommodated by Alternative 1 may increase shading and shadows in specific locations; however, shadows would be limited to the immediate area of each new development and would be typical of highly urbanized neighborhoods. Overall, development accommodated by Alternative 1 may benefit, and would generally enhance, the visual character of the Downtown Plan Area. Therefore, as with the Downtown Plan, impacts related to aesthetics would be less than significant.

Air Quality

Alternative 1 would accommodate less development and associated growth than the Downtown Plan. Alternative 1 would result in 36,000 fewer housing units (-27%), 69,000 fewer residents (-27%), and 15,000 fewer jobs (-5%) through 2040 than the Downtown Plan. Like the Downtown Plan, Alternative 1 would not increase reasonably anticipated development in the Downtown Plan Area in a way that would be inconsistent with SCAG's growth forecasts for the City; therefore, Alternative 1 would not conflict with the AQMP. It would, however accommodate less overall growth in the Downtown Plan Area than would the Downtown Plan; as such, it would attain to a lesser degree the policy goals of the RTP/SCS, AQMP, and City General Plan Framework Element and Air Quality Element as well as the Downtown Plan, specifically, the policies and goals related to concentrating development in areas with access to transit and reducing VMT and associated emissions than would the Downtown Plan. Therefore, as with the Downtown Plan, impacts related to conflicting with or obstructing implementation of an applicable air quality plan would be less than significant.

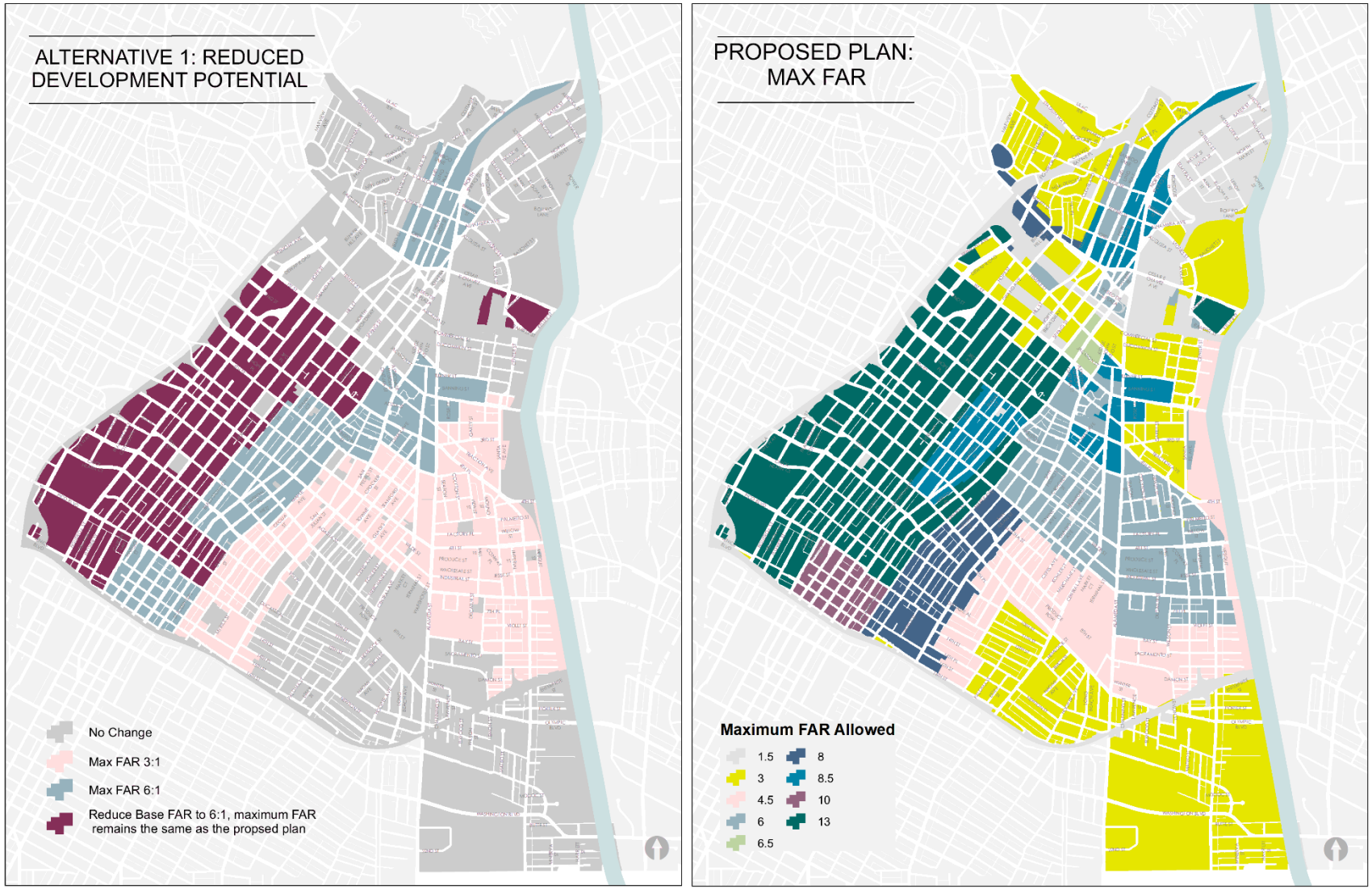
Less construction may occur overall under Alternative 1, as compared to the Downtown Plan. Alternative 1 would result in fewer overall emissions of NO_X and PM_{10} and $PM_{2.5,}$ but maximum daily emissions would be about the same because the nature and magnitude of individual construction projects would be similar and would still exceed regional and local significance thresholds. Similarly, because less development would occur under Alternative 1 it is reasonable to assume that operational emissions would be less as compared to the Downtown Plan. Nonetheless, as discussed in Section 4.2, *Air Quality*, and shown in **Table 4.2-11**, future daily regional emissions from mobile sources under implementation of the Downtown Plan is generally expected to decrease relative to existing emissions. This is largely a result of improvements in vehicular engine efficiency technologies and fuel pollutant concentrations resulting from more stringent statewide regulations that are projected to occur between existing conditions and 2040. Because increasingly stringent state regulations related to energy efficiency and emissions control will continue to apply regardless of whether the Downtown Plan is adopted, it is reasonable to assume that under Alternative 1 future daily regional emissions from mobile sources would similarly decrease relative to existing emissions due to improvements in vehicular engine efficiency technologies and fuel pollutant concentrations. As with the Downtown Plan, impacts related to construction emissions would be significant and unavoidable.

Alternative 1 would accommodate 27% less housing and 5% fewer jobs than the Downtown Plan. Nevertheless, because a 99 percent reduction from Downtown Plan VOC emissions would be needed to reduce emissions to below the SCAQMD daily threshold, the increase in development in the Downtown Plan Area accommodated by Alternative 1 would result in daily emissions of VOC that would exceed the SCAQMD regional significance thresholds due to increased use of consumer products and increased energy demand, similar to the Downtown Plan. In addition, future development in the Downtown Plan Area accommodated by Alternative 1 would foreseeably result in daily emissions of PM_{10} and $PM_{2.5}$ from area sources and mobile sources (brake and tire wear) that would exceed SCAQMD regional significance thresholds since emissions under Alternative 1 is not anticipated to drop by 61 percent (PM_{10}) and 68 percent ($PM_{2.5}$) that is needed to stay under SCAQMD thresholds. Mitigation Measure 4.2-2 would be applied to the Alternative but similarly would not be expected to reduce impacts to less than significant since emissions would remain above SCAQMD thresholds. As with the Downtown Plan, impacts related to operational emissions would be significant and unavoidable.

Impacts to sensitive receptors from construction would be potentially significant, but application of **Mitigation Measures 4.2-2**, would reduce impacts to less than significant. As with the Downtown Plan, impacts associated with Alternative 1, including impacts related to toxic air contaminants (TACs) from distribution center truck activity, would be significant as the Alternative would still allow distribution centers in parts of the Plan Area intended for industrial uses. **Mitigation Measure 4.2-3** would apply to the Alternative 1, but without specific project details impacts to sensitive receptors would be significant and unavoidable. As with the Downtown Plan, impacts related to odors would be less than significant.

Alternative 1 may result in less development in the Downtown Plan Area and thus, lower construction and operational emissions in the Plan Area, as compared to the Downtown Plan; however, emissions would still exceed significance thresholds. It should again be noted that although Alternative 1 would accommodate less development than the Downtown Plan in the Downtown Plan Area, limiting growth Downtown may cause more growth to occur elsewhere in the City or region in locations that have less access to transit and less of a mix of jobs and housing. As a result, overall citywide and regional VMT and associated emissions may incrementally increase under this scenario.

Figure 5-1 Alternative 1 Reduced Development Potential



Biological Resources

The Downtown Plan Area is urbanized and generally lacks riparian habitat, wetlands, wildlife corridors and habitat that would support special status plant or animal species. The Los Angeles River, as well as small portions of parks and open space, trees and minor urban landscaping are the only sources of biological habitat in and around the Downtown Plan Area. Both the Downtown Plan and Alternative 1 prioritize infill development in already urbanized area of the City, thus minimizing development in areas of potential native biological habitat or wildlife corridors. Similar to the Downtown Plan, Alternative 1 would not foreseeably result in modification of the Los Angeles River because neither scenario includes components that would directly affect the Los Angeles River. Although implementation of Alternative 1 would accommodate less development capacity and associated growth than the Downtown Plan, development would occur within the same footprint as Downtown Plan Area and would not interfere with natural resources, degrade the sustainability of natural resources in the region, disrupt existing open space or encroach upon any natural settings. Alternative 1 would not conflict with goals, policies, and programs of the General Plan Framework or the City Conservation Element. Any new development has the potential to disturb nesting birds and or protected trees in the Downtown Plan Area. Therefore, future development would require adherence to the federal Migratory Bird Treaty Act (MBTA) and/or California Fish and Game Code (CFGC) regulations, and the LAMC Tree Preservation Ordinance (177,404). Alternative 1's impacts related to biological resources would be about the same as those of the Downtown Plan and less than significant with implementation of **Mitigation Measures 4.3-1(a)** and **(b)**.

Cultural Resources

The Downtown Plan Area, which is expected to experience substantial new development, includes a high concentration of historical resources. Compared to the Downtown Plan, Alternative 1 would accommodate less overall development, including in areas where historical resources are present. Therefore, the number of future projects affecting historical resources would likely be smaller and impacts to historical resources from Alternative 1 would be less than that of the Downtown Plan. Future development in the Downtown Plan Area would continue to be subject to existing federal, state, and local requirements regarding cultural resources and human remains and discretionary projects may be subject to project-specific mitigation requirements under CEQA. However, although these regulations would provide certain protections for significant historical resources, individual developments allowed by either Alternative 1 or the Downtown Plan could potentially cause a substantial adverse change in or disturbance of historical resources as defined in CEQA Guidelines Section 15064.5. As with the Downtown Plan, impacts to historical resources would be significant and unavoidable under Alternative 1.

Similar to the Downtown Plan, Alternative 1 may result in disturbance of areas that potentially contain archaeological resources and/or human remains. As with the Downtown Plan, **Mitigation Measures 4.4-2(a), (b), (c)** and **(d)**, in combination with existing regulatory requirements, would reduce Alternative 1 impacts to archaeological resources to a less than significant level. Similar to the Downtown Plan, Alternative 1 impacts to human remains would be less than significant based on anticipated compliance with existing regulations.

Energy

Alternative 1 would accommodate 36,000 fewer housing units (-27%), 69,000 fewer persons (-27%), and 15,000 fewer jobs (-5%) through 2040 than the Downtown Plan. Therefore, it is reasonable to assume that implementation of Alternative 1 would result in less overall energy consumption than the Downtown Plan. As discussed under **Impact 4.5-1**, in Section 4.5, *Energy*, (**Table 4.5-5** through **Table 4.5-7**) implementation of the Downtown Plan would increase energy consumption in the Downtown Plan Area above 2017 baseline conditions. However, per capita electricity and natural gas consumption would be lower in 2040 as compared to 2017 baseline conditions. The lower energy use per capita can be attributed

to the fact that implementation of the Downtown Plan would lower per capita VMT due to the location of jobs and housing in close proximity to each other and creation of substantial opportunities to use such transportation modes as transit, bicycling, and walking. Although Alternative 1 would result in less energy consumption in the Downtown Plan Area, the lower concentration of growth/development in the Downtown Plan Area may result in higher levels of growth in other areas of the City where transit availability is lower and per capita VMT is higher. In this way, Alternative 1 may contribute to greater overall regional energy use than would the Downtown Plan. Like the Downtown Plan, however, Alternative 1 would not result in inefficient, wasteful, or unnecessary consumption of energy resources. In addition, neither Alternative 1 nor the Downtown Plan would conflict with applicable federal, state, and local energy conservation policies aimed at decreasing reliance on fossil fuels and increasing reliance on renewable energy sources. Overall, impacts would be less than significant under either Alternative 1 or the Downtown Plan.

Geology and Soils

Alternative 1 would generally accommodate development within the same footprints as the Downtown Plan. Any new development in the Downtown Plan Area would be exposed to existing geologic and soil hazards, but would not increase the potential for such hazards or create new hazards. Compliance with existing regulatory requirements and policies, including the LAMC and California Building Code (CBC) would reduce impacts from adverse effects related to seismic activity and ground shaking, liquefaction, on or off-site landslides, ground failure; or adverse effects related to expansive soil, or to a geologic unit or soil that is unstable or would become unstable as a result of the project and result in landslide, lateral spreading, liquefaction or collapse. In some cases, future development in the Downtown Plan Area may reduce the potential for property damage and/or safety concerns by replacing older structures with new structures built to current seismic standards. Erosion would be addressed through adherence to Best Management Practices (BMPs), as required by the NPDES Construction General Permit and the Los Angeles Municipal Code (LAMC). Similar to the Downtown Plan, Alternative 1 would have the potential to disturb paleontological resources. As with the Downtown Plan, geology and soils impacts would be less than significant under Alternative 1 with adherence to regulatory code requirements and **Mitigation Measures 4.6-6 (a), (b)** and **(c)** related to paleontological resources.

Greenhouse Gas Emissions

Alternative 1 would result in 36,000 fewer housing units (-27%), 69,000 fewer persons (-27%), and 15,000 fewer jobs (-5%) through 2040 than the Downtown Plan. Development under either Alternative 1 or the Downtown Plan would generate GHG emissions through individual project construction and operation. GHG emissions would be generated by direct sources such as motor vehicles, natural gas consumption, solid waste handling/treatment, and indirect sources such as electricity generation. As shown in **Table 4.7-4** in Section 4.7, *Greenhouse Gas Emissions*, implementation of the Downtown Plan would result in a 24 percent increase in total GHG emissions in the Downtown Plan Area by 2040 as compared to baseline conditions, but a 62 percent reduction in per capita GHG emissions. The reduction in per capita GHG emissions can be attributed to a combination of state-mandated GHG emission reduction strategies and the fact that implementation of the Downtown Plan would lower per capita VMT due to the location of jobs and housing in close proximity to each other and creation of substantial opportunities to use such transportation modes as transit, bicycling, and walking. It is reasonable to assume that under Alternative 1 future overall Downtown Plan Area emissions would be higher than baseline emissions and that per capita emissions would also be lower. Compared to what would occur under the Downtown Plan, overall Downtown Plan Area emissions would be slightly lower due to the overall reduction in development potential, but per capacity emissions would be slightly higher.

It should be noted that because Alternative 1 would accommodate less overall growth in the Downtown Plan Area than the Downtown Plan would, it may push more population growth to other areas of the City or region where fewer transit options are available and distances between housing, jobs, and services are

greater. As a result, accommodating less development Downtown under Alternative 1 may incrementally increase overall citywide or regional GHG emissions related to VMT and Alternative 1 would not be as consistent with AB 32, SB 32, SB 375 (through demonstration of conformance with the 2016–2040 RTP/SCS), the Sustainable City pLAn and GreenLA as the Downtown Plan.

Nevertheless, neither Alternative 1 nor the Downtown Plan would conflict with state, regional, or local plans or policies related to GHG emissions or climate change. To the contrary, either Alternative 1 or the Downtown Plan would generally implement plans and policies aimed at GHG emissions reduction by accommodating relatively high density, mixed-use development in an area that is well served by transit, thus reducing per capita VMT. Alternative 1's impact would be greater than that of the Downtown Plan, though less than significant.

Hazards and Hazardous Materials

General Plan designations under either Alternative 1 or the Downtown Plan would maintain existing light and heavy industrial uses in the southeastern portion of the Downtown Plan Area, but would expand the mix of uses in the Markets and Hybrid Industrial designation areas to include commercial and residential uses. Although certain heavy industrial facilities would remain and hazardous materials would continue to be transported through the Downtown Plan Area, neither Alternative 1 nor the Downtown Plan would substantially increase hazardous material risks from transport, use or disposal based on the extensive existing regulations of hazardous materials. Consequently, as with the Downtown Plan, impacts related to the routine transport, use, or disposal of hazardous materials or upset or accident conditions involving hazardous materials would be less than significant.

Similar to the Downtown Plan, there would be no or less than significant impacts related to airports, wildfires or emergency management plans because there are no airports, private airstrips, or wildlands in or near the Downtown Plan Area and development under Alternative 1 would not interfere with circulation plans or emergency management plans.

As with the Downtown Plan, redevelopment, renovation, and demolition of structures built before 1979 under Alternative 1 could potentially involve asbestos or lead but asbestos and lead would not be released into the atmosphere with compliance of existing regulations. In addition, future development could potentially occur in Methane Zones and Methane Buffer Zones and near oil wells. Compliance with applicable regulations would reduce such impacts to a less than significant level. Like the Downtown Plan, grading and construction activity could potentially result in the release of soil and/or groundwater contamination, which could potentially affect schools or involve a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment. However, with imposition of **Mitigation Measures 4.8-4(a)** and **4.8-4(b)** to Alternative 1 impacts would be less than significant. Overall impacts associated with Alternative 1 would be similar to, but slightly less than, those of the Downtown Plan since the overall level of development would be lower.

Hydrology and Water Quality

The Downtown Plan Area is urbanized and almost entirely paved and developed, with the exception of parks, green spaces, and the Los Angeles River, which is located on the eastern boundary of the Downtown Plan Area. Alternative 1 would generally accommodate development in the same footprints as the Downtown Plan. Alternative 1 would accommodate slightly less overall development than the Downtown Plan and, like the Downtown Plan, would not substantially alter drainage patterns or result in substantial erosion, siltation, or flooding on- or off-site. All new development would be subject to federal, state, and local requirements that prevent violations of water quality standards or waste discharge requirements and support the preservation and expansion of pervious surfaces. In addition, any new development projects

would be required to incorporate BMPs to manage stormwater and reduce runoff during construction and operation, and industrial sources would be subject to additional stormwater management and discharge requirements under the National Pollutant Discharge Elimination System (NPDES) program for industrial uses. Compliance with the City's Low Impact Development (LID) Ordinance would further ensure that any future development under Alternative 1 would not require construction of new stormwater drainage facilities and or expansion of existing facilities beyond specific improvements needed for individual development projects. In the long-term, redevelopment of properties in the Downtown Plan Area would improve surface water quality by replacing older development with new development that incorporates LID methods. Overall impacts associated with Alternative 1 would be similar to those of the Downtown Plan and less than significant.

Land Use and Planning

Similar to the Downtown Plan, Alternative 1 would generally allow greater building heights, scale and intensity than currently exists in portions of the Downtown Plan Area, Alternative 1 involves reducing the maximum FAR in subareas in the Transit Community, Traditional Core, Markets, and Hybrid Industrial General Plan designations to a maximum of 3.0:1 FAR and 6.0:1 FAR. Either Alternative 1 or the Downtown Plan would accommodate high-intensity transit-oriented infill development. Like the Downtown Plan, Alternative 1 would be generally consistent with 2016-2040 RTP/SCS policies related to the provision of high intensity and transit-oriented development as well as with the City's General Plan and Framework Element, Mobility Plan 2035, and Housing Element 2013-2021. However, as discussed under *Air Quality*, Alternative 1 may implement 2016-2040 RTP/SCS, AQMP, and Air Quality Element policies related to concentrating development near transit and reducing regional VMT to a lesser degree than the Downtown Plan since the lower overall development totals may result in increased development elsewhere in the City and incrementally higher regional VMT. Like the Downtown Plan, Alternative 1 would not physically divide an established community or conflict with an applicable habitat conservation plan or natural community conservation plan. Overall, Alternative 1's impacts would be similar to those of the Downtown Plan and less than significant.

Noise

New sensitive uses accommodated under either Alternative 1 or the Downtown Plan could be exposed to ambient noise that is in the "normally unacceptable" to "clearly unacceptable" range based on noise level/land use compatibility standards in the Noise Element of the City's General Plan. However, new development would be required to take measures to reduce interior noise levels to below 45 dBA CNEL.

Future development Downtown would include mechanical equipment, loading, trash pick-up, and other noise-generating activities. However, such activities would be typical of the urban environment in the Downtown Plan Area. In addition, on-site activities would be required to comply with applicable provisions of the LAMC. As with the Downtown Plan, traffic-related noise may increase by more than 3 dBA in some locations, but resulting noise levels would not be in the "normally unacceptable" range. Thus, permanent noise increases due to operational activities accommodated by Alternative 1 would be less than significant.

Future construction activity would be required to comply with appropriate Regulatory Compliance Measures as well as LAMC Chapter 41.40, Section 112.05 and **Mitigation Measure 4.11-1.** Compared to the Downtown Plan, duration of construction and use of heavy duty equipment in the Alternative 1 scenario would be less than the Downtown Plan due to reduced overall development potential. Therefore, construction noise impacts from Alternative 1 is likely to be less than that of the Downtown Plan. Nevertheless, maximum noise levels generated by construction equipment under Alternative 1 could potentially involve two subterranean levels or more, construction durations of 18 months or more, use of large, heavy-duty equipment rated 300 horsepower or greater, or the potential for impact pile driving. Therefore, although the overall impact generated by temporary construction noise resulting from

implementation of Alternative 1 would be less than that of the Downtown Plan, the impact would remain significant and unavoidable.

Any future construction activity, specifically pile driving, could potentially generate vibration exceeding the 90 VdB threshold for buildings extremely susceptible to building damage (e.g., historical structures). Although mitigation is available to minimize the potential effects of vibration, it cannot be assured that construction-related vibration would not result in building damage. Thus, although Mitigation Measures 4.11-2(a) and 4.11-2(b) would reduce impacts to the degree feasible, Alternative 1 would result in a significant and unavoidable impact related to construction vibration. Overall impacts from Alternative 1 would, however, be incrementally less than those of the Downtown Plan.

It is not anticipated that new development in the Downtown Plan Area would involve activities that would result in substantial operational vibration (e.g., blasting operations). As with the Downtown Plan, operational groundborne vibration in the vicinity of new development under Alternative 1 would be primarily generated by vehicular travel on the local roadways. According to the FTA *Transit Noise and Vibration Impact Assessment* guidance document, rubber tires and suspension systems dampen vibration levels from trucks to a level that is rarely perceptible (2006). Accounting for additional vehicle trips that would be accommodated by the Alternative 1, traffic vibration levels would be similar to existing conditions and not perceptible by sensitive receptors. Therefore, similar to the Downtown Plan, impacts related to operational vibration under Alternative 1 would be less than significant.

Similar to the Proposed Project, Alternative 1 would have no impacts related to airport noise.

Population and Housing

Projected growth under Alternative 1 would fall below SCAG's 2040 population forecast by approximately 6,000 persons (-3%) but would exceed housing and employment forecasts by 1,000 dwelling units (1%), and 33,000 jobs (13%), respectively. Projected growth under the Downtown Plan would exceed SCAG's 2040 growth projections by 63,000 persons (33%), 37,000 dwelling units (39%), and 48,000 jobs (19%). Although the population forecast for this alternative is slightly less than under the RTP/SCS, Alternative 1 would increase the development capacity of the Downtown Plan Area in a manner generally consistent with SCAG's housing and job projections for the Downtown Plan Area. Like the Downtown Plan, Alternative 1 would also concentrate forecast growth in an area with a mix of jobs and housing and with good transit access. Like the Downtown Plan, Alternative 1 would not induce substantial population growth inconsistent with regional growth plans.

Alternative 1 would accommodate new development and redevelopment projects in the Downtown Plan Area that would likely result in displacement of existing housing units and residents. However, like the Downtown Plan, it would substantially increase the housing stock of the Downtown Plan Area overall. Therefore, implementation of Alternative 1 would allow for additional construction of housing in an urban center, which would help to offset housing displacement that may occur.

Similar to the Downtown Plan, Alternative 1 would accommodate growth generally in line with regional projections and would accommodate housing that more than offsets any displaced housing. Therefore, as with the Downtown Plan, population and housing impacts would be less than significant under Alternative 1.

Public Services

Alternative 1 would result in 36,000 fewer housing units (-27%), 69,000 fewer persons (-27%), and 15,000 fewer jobs (-5%) by 2040 than the Downtown Plan. With respect to fire and police services, either scenario would increase demand for fire and police protection service in the Downtown Plan Area. This may result in the need for new or expanded fire and police facilities. Based on the urbanized character of the Downtown

Plan Area, it is anticipated that new or expanded facilities could be built without creating significant environmental impacts. Depending on the location or nature of new facilities, the construction of needed new facilities could potentially result in impacts. However, like the Downtown Plan, those impacts would be consistent with those already identified in this EIR for construction or operations. Project-specific environmental analysis under CEQA would be required to address any site-specific environmental concerns. With respect to schools, as summarized in **Table 5-2**, residential and non-residential development accommodated by Alternative 1 would result in approximately 35,821 new students by 2040. This is about 31 percent fewer students than would be added under the Downtown Plan. Both Alternative 1 and the Downtown Plan would create the need for new or expanded school facilities. However, under either scenario developers would be required to pay school impact fees. As with the Downtown Plan, any impacts associated with new school construction would be similar to those analyzed and identified in the EIR for other types of development, any site-specific impacts would be speculative and would be addressed by LAUSD as part of a project-level CEQA review.

TABLE 5-2 ALTERNATIVE 1 ANTICIPATED STUDENT GENERATION IN THE DOWNTOWN PLAN AREA

		Student Generation				
	Units	Elementary School (TK-5)	Middle School (6-8)	High School (9-12)	SDC	Total Students Generated
Residential[1]	63,030 du	14,302	3,851	8,169	1,223	27,544
Non-Residential[2]	171,004,047 sf	3,899	1,949	2,428	--	8,277
Total Students Generated by Alternative 1		**18,200**	**5,801**	**10,597**	**1,223**	**35,821**

Note: du = dwelling units; sf = square feet; TK = Transitional Kindergarten; SDC = Specialized Day Care

Totals may not add up due to rounding.

[1] Student generation rates for residential use is based on Level 1 – Developer Fee Justification Study for Los Angeles Unified School District (LAUSD 2017d). Residential Generation Rates: Elementary: 0.2269/du, Middle School: 0.0611/du, High School: 0.1296 /du, SDC: 0.0194/du

[2] Student generation rates for non-residential use is based on the average of office and retail/service student generation rates for a conservative estimate, taken from the LAUSD Commercial/Industrial Development School Fee Justification Study, September 2010 (LAUSD 2010). Non-residential Generation Rates: Elementary: 0.0228/1,000 sf, Middle School: 0.0114/1,000 sf, High School: 0.0142/1,000 sf. Non-residential uses include commercial, industrial, and public facilities.

With respect to libraries, either scenario would increase demand for library facilities. The Downtown Plan Area is well served by library facilities and would not require the construction of new or expanded facilities.

Overall impacts related to public services would be similar to, but slightly lower than, those of the Downtown Plan and would be less than significant. The lower overall amount of development in the Downtown Plan Area may result in more growth/development elsewhere in the City with unknown impacts related to public services.

Recreation

Implementation of Alternative 1 would involve less overall development and associated population increases than would occur under the Downtown Plan; nevertheless, as with the Downtown Plan, new development would increase the use of existing park and recreational facilities throughout the City, including in and around adjacent to the Downtown Plan Area. Total, pocket, community, and neighborhood parks (i.e., non-regional parks) currently provide 244.35 acres of land in the Downtown Plan Area. Under Alternative 1, the Downtown Plan Area population is projected to increase to approximately 183,000 residents by 2040, thereby decreasing the ratio of parks to residents to approximately 1.4 acre per 1,000 residents. Approximately 490 acres of new parkland would be needed in the Downtown Plan Area by 2040 to meet the City's park acreage standards under Alternative 1. Future development accommodated by the Downtown Plan would increase the population of the Downtown Plan Area to an estimated 252,000

residents, thereby decreasing the ratio of parks to residents to approximately 1.0 acre per 1,000 residents. Approximately 764 acres of new parkland would be needed in the Downtown Plan Area by 2040 to meet the City's park acreage standards under the Downtown Plan. Alternative 1 would require approximately 36 percent less parkland than the Downtown Plan. Because opportunities for new parks are limited, neither Alternative 1 nor the Downtown Plan would result in significant impacts related to the development and construction of new parks. However, either scenario would have potentially significant impacts related to the deterioration of existing parks due to the increase in population in the Downtown Plan Area.

Developers of residential projects would be required to pay park impact fees, dedicate land, include outdoor amenity spaces, or pay in-lieu Quimby fees to fund new park and recreational facilities. This would partially mitigate deterioration of facilities by providing funds for new facilities. However, due to the substantial population growth that would result from future development, and lack of development capacity for new parks in the Downtown Plan Area, implementation of either Alternative 1 or the Downtown Plan could accelerate the deterioration of existing parks in and around the Downtown Plan Area. Although Alternative 1's impact would be less than the Downtown Plan's impacts related to the deterioration of existing parks, impacts to existing recreational facilities would remain significant and unavoidable under either Alternative 1 or the Downtown Plan. Impacts related the construction of new parks would remain less than significant.

Transportation/Traffic

With respect to transportation, a significant impact would occur if the total daily VMT per service population under the Downtown Plan, or a proposed alternative, were to increase above the 2017 Baseline Condition or if there is inconsistency with the SCAG 2016 RTP/SCS. As shown in **Table 5-3,** VMT per service population under Alternative 1 would be 17.0, while the 2017 Baseline per service population VMT in the Downtown Plan Area is 19.6. Thus, per capita VMT under Alternative 1 would not exceed the 2017 Plan Baseline Condition threshold. Compared to the 2016 SCAG Region Conditions, Alternative 1 has lower vehicle trips per service population (2.6 versus 3.1) and lower VMT per service population (17.0 versus 35.4). Therefore, as with the Downtown Plan, impacts would be less than significant. However, the beneficial impacts to VMT would not be as great with Alternative 1 compared to the Downtown Plan.

Similar to the Downtown Plan, Alternative 1 would not result in significant impacts related to increased hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), or result in inadequate emergency access. However, as with the Downtown Plan, freeway off ramp queuing-related safety issues could potentially arise as additional development occurs in the Downtown Plan Area, which could make a significant and unavoidable impact to freeway safety.

Alternative 1 includes the network enhancements identified in MP 2035 and incorporated into the Downtown Plan.

TABLE 5-3 COMPARISON BETWEEN EXISTING TRAFFIC CONDITIONS, THE DOWNTOWN PLAN AND ALTERNATIVE 1

Transportation Metric	Threshold		Downtown Plan (2040)	Alternative 1
	2016 SCAG Region Conditions	2017 Downtown Plan Area Baseline Conditions		
Total Daily VT	82,283,000	758,000	1,375,000	1,212,000
Total Daily VT per Service Population	3.1	2.6	2.5	2.6
Total Daily VMT	948,656,000	5,767,000	8,842,000	8,031,000
Total Daily VMT per Service Population	**35.4**	**19.6**	**15.9**	**17.0**

SOURCE: Fehr & Peers, February 2019.

Tribal Cultural Resources

Development activities that include ground disturbance have the potential to significantly impact tribal cultural resources. The Sacred Lands File search conducted for the Downtown Plan Area was positive and the Tongva ethnographic village site of Yangna is thought to be located near Union Station. Effects on tribal cultural resources are only known once a specific development has been proposed because the effects are highly dependent on both the individual development site conditions and the characteristics of the proposed activity. Alternative 1 would generally accommodate development in the same areas that could be developed under the Downtown Plan. Although less development is expected under this Alternative which could result in incrementally fewer impacts. Although neither Alternative 1 nor the Downtown Plan includes specific development projects, new development accommodated by either scenario may disturb areas that potentially contain tribal resources. Similar to the Downtown Plan, all future development projects would continue to be subject to existing federal, state, and local requirements and discretionary projects, subject to CEQA review would be required to comply with AB 52, which for projects relying on a [mitigated] negative declaration or an EIR, includes consultation with California Native American tribes. Overall, like the Downtown Plan, impacts under Alternative 1 would be potentially significant. However, implementation of **Mitigation Measures 4.4-2(a)** through **4.4-2(d)** in Section 4.4, *Cultural Resources* and **4.16-1 (a)** and **(b)** in Section 4.16, *Tribal Cultural Resources*, would reduce Alternative 1 impacts to a less than significant level. Therefore, similar to the Downtown Plan, Alternative 1's impact would be less than significant with mitigation incorporated.

Utilities and Service Systems

Alternative 1 would result in 36,000 fewer housing units (-27%), 69,000 fewer persons (-27%), and 15,000 fewer jobs (-5%) through 2040 than the Downtown Plan. **Table 5-4** indicates that implementation of Alternative 1 would increase wastewater generation in the Downtown Plan Area by approximately 12 million gallons per day (mgd) above baseline conditions, which represents about 7 percent of the HWRP's excess capacity. As shown in **Table 4.17-3** in Section 4.17, *Utilities and Service Systems*, projected development in the Downtown Plan Area with implementation of the Downtown Plan would generate an estimated 18 mgd of wastewater, which would represent about 10 percent of the Hyperion Water Reclamation Plant's (HWRP) excess capacity of 175 mgd. As such, Alternative 1 would generate approximately 33 percent less additional wastewater as compared to the Downtown Plan. Therefore, the HWRP would have sufficient available treatment capacity to serve the Downtown Plan Area under Alternative 1. In addition, the HWRP would be able to adequately treat future project-generated sewage under Alternative 1 and the treatment requirements of the RWQCB would not be exceeded so new or expanded treatment facilities would not be needed. Expansion/replacement of Downtown Plan Area

conveyance infrastructure may be needed and various facility improvements are already planned. Temporary traffic, air quality, and noise impacts associated with construction of such improvements would be within the parameters described for the Downtown Plan. Continued compliance with the City's Low Impact Development (LID) Ordinance for all new development would ensure that any future development under Alternative 1 would not increase demands on stormwater drainage facilities or create the need for expansion of existing facilities beyond specific improvements needed for individual development projects. As with the Downtown Plan, impacts associated with Alternative 1 would be less than significant.

TABLE 5-4 ALTERNATIVE 1 PROJECTED WASTEWATER GENERATION

Land Use	Dwelling Units or Jobs	Wastewater Generation Rate (gpd/unit)	Wastewater Generation (gpd)
Single-family Residential	6,733 du	144.3	972,000
Multi-family Residential	89,962 du	137.9	12,406,000
Commercial	229,638 jobs	59.8	13,732,000
Industrial	33,163 jobs	123	4,079,000
Public Facilities	26,633 jobs	46.4	1,236,000
Total 2040 with Alternative 1 Wastewater Generation			32,425,000
Current Wastewater Generation			20,631,000
Net Change in Wastewater Generation			**11,793,000**

Notes: Wastewater generation numbers are rounded to the nearest thousand. Totals may not add up due to rounding.
gpd – gallons per day
du – dwelling units
sf – square feet
SOURCE: Wastewater is assumed to be 100% of indoor water use. Per Exhibit 2D of the 2015 UWMP, indoor water use constitutes the following percentages of overall water use: Residential single family – 46%; Residential multi-family – 68%; Commercial – 76%; Industrial – 98%; and Government – 59%.Per the UWMP, per unit water demand is forecast to decline over time; the forecast 2040 rates are assumed to apply to new development.

With respect to water demand, per the 2015 Urban Water Management Plan (UWMP), current water supplies, planned future water conservation efforts, and planned future water supplies will enable Los Angeles Department of Water and Power (LADWP) to reliably provide water that meets the demands of the City for a 25-year planning horizon (through 2040), based on SCAG's population projections. The 2015 UWMP projects an increase of 195,960 acre feet per year (afy) (38 percent) in water demand between 2015 and 2040, under single/multiple dry year conditions. As shown in **Table 5-5**, the projected net increase in water demand of 17 mgd, or 18,486 afy, generated by new development accommodated by Alternative 1 would represent about 9 percent of the forecasted citywide water demand increase through 2040. As shown in **Table 4.17-6,** in Section 4.17, *Utilities and Service Systems*, projected growth in the Downtown Plan Area with implementation of the Downtown Plan would generate an estimated demand of 25 mgd, or 28,000 afy, which would represent about 14 percent of the forecasted citywide water demand increase through 2040. As such, Alternative 1 would demand approximately 34 percent less water as compared to the Downtown Plan. As with the Downtown Plan, water supplies would be adequate to meet projected demand through 2040 for Alternative 1 and development of new water supplies would not be necessary. Expansion/replacement of water distribution infrastructure may be needed, but temporary traffic, air quality, and noise impacts associated with construction of such improvements would be within the parameters described for the Downtown Plan. As with the Downtown Plan, impacts associated with Alternative 1 would be less than significant.

TABLE 5-5 ALTERNATIVE 1 PROJECTED WATER DEMAND

Land Use	Dwelling Units or Jobs	Daily Water Use Rate (gpd/unit)	Daily Water Demand (gpd)	Annual Water Demand (afy)
Single-family Residential	6,733 du	313.8	2,113,000	2,367
Multi-family Residential	89,962 du	202.8	18,244,000	20,436
Commercial	229,638 jobs	78.7	18,072,000	20,244
Industrial	33,163 jobs	125.5	4,162,000	4,662
Public Facilities	26,633 jobs	78.7	2,096,000	2,348
Total 2040 with Alternative 1 Demand			44,688,000	50,057
Current Water Demand			28,184,000	31,570
Net Change in Water Demand			**16,504,000**	**18,486**

Notes: Numbers are rounded to the nearest thousand. Totals may not add up due to rounding.
du – dwelling unit
gpd – gallons per day
afy – acre feet per year (1 af = 325,850 gallons)
SOURCE: Water demand rates were obtained from the LADWP's 2015 Urban Water Management Plan (UWMP), Exhibit2K (LADWP 2016). Per the UWMP, per unit water demand is forecast to decline over time; the forecast 2040 rates are assumed to apply to new development.

As shown in **Table 4.17-7** in Section 4.17, *Utilities and Service Systems*, the combined daily intake capacity of landfills serving the Plan Area is 45,540 tons per day and the average disposal intake is 19,143 tons per day, resulting in an available capacity of 26,397 tons per day. As shown in **Table 5-6**, implementation of Alternative 1 would generate an increase of approximately 1,073 tons of solid waste per day above existing conditions, which would represent about 4 percent of the total available daily capacity (26,397 ton per day) at local landfills. As shown in **Table 4.17-9**, of Section 4.17, *Utilities and Service Systems*, development accommodated by the Downtown Plan would increase the amount of solid waste generated in the Downtown Plan Area by approximately 1,133 tons per day, or 413,534 tons per year, above existing conditions. The estimated daily solid waste that would be generated in the Downtown Plan Area would represent approximately 4 percent of the available intake capacity of landfills serving the Downtown Plan Area. Alternative 1 would generate approximately 5 percent less waste as compared to the Downtown Plan. Based on the County of Los Angeles Countywide Integrated Waste Management Plan (CIWMP) 2018 Annual Report, sufficient permitted capacity is available to accommodate the County's long-term disposal needs under the status quo. Therefore, similar to the Downtown Plan, new or expanded facilities would not be needed and impacts would be less than significant.

Electrical and natural gas supplies are not expected to be adversely affected by development under Alternative 1, but improvements to Downtown Plan Area distribution and telecommunication facilities may be needed. Temporary traffic, air quality, and noise impacts associated with construction of such improvements would be within the parameters described for the Downtown Plan. As with the Downtown Plan, impacts associated with Alternative 1 would be less than significant.

TABLE 5-6 ALTERNATIVE 1 PROJECTED SOLID WASTE GENERATION

Land Use	Dwelling Units or Square Feet	Annual Waste Generation Rate	Annual Waste Generation (tons)	Daily Waste Generation (tons)
Single-family Residential	6,733 du	1.17 ton/du	7,878	22
Multi-family Residential	26,932 du	0.46 ton/du	41,383	113
Commercial	105,376,578 sf	3.01 ton/1,000 sf	595,515	1,632
Industrial	40,101,581 sf	1.24 ton/1,000 sf	95,198	261
Public Facilities	3,865,922 sf	0.93/1,000 sf	42,529	117
Total 2040 Alternative 1 Solid Waste Generation			782,502	2,144
Current Solid Waste Generation			390,771	1,071
Net Change in Waste Generation			**391,731**	**1,073**

Notes: Waste generation (tons) was rounded to the nearest whole number. Totals may not add up due to rounding.

du – dwelling unit

sf – square feet

[1] Converted from CalEEMod default data of 0.41 tons/resident, assuming a persons per unit rate of 2.86 for City of Los Angeles (California Department of Finance (DOF). 2018. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2018 with 2010 Census Benchmark. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/ (accessed April 2019))

SOURCE: CalEEMod Land Use SubType.

Conclusion

The Reduced Development Potential Alternative would accommodate less development overall and thus accommodate less growth in the Downtown Plan Area, as compared to the Downtown Plan. Due to reduced FARs and lower development potential under Alternative 1 in comparison to the Downtown Plan, fewer historical resources are likely to be disturbed, and impacts related to historical resources would be less than that of the Downtown Plan. Similarly, reduced development potential under Alternative 1 compared to the Downtown Plan, would result is lesser impacts related to construction noise, construction vibration, and deterioration of existing parks under Alternative 1 than that of the Downtown Plan. Nevertheless, despite accommodating less development capacity as compared to the Downtown Plan, Alternative 1 would result in the same impact conclusions as the Downtown Plan in all impact categories. Therefore, while significant impacts would be less under Alternative 1, impacts related to historical resources, air quality, construction noise and vibration, transportation safety impacts related to freeway off-ramp queuing, and recreational facilities would remain significant and unavoidable.

ALTERNATIVE 2: HOUSING REDISTRIBUTION

Alternative Description

Alternative 2 would modify the Downtown Plan land use mix by expanding the areas where housing is permitted within the Markets and Production General Plan designations on the south-central portion of the Downtown Plan Area. This Alternative was included to meet the request of community groups and to consider an option with a different mix of housing types and locations where more housing is provided in the immediate vicinity of Downtown Plan Area jobs. Under this alternative, the Industrial-Mixed Hybrid 1 (IH1) Use District would be applied to areas that are proposed as Industrial-Mixed Use 2 (IX2), in which the only type of housing allowed is through conversion of existing buildings to Joint Living and Work Quarters, and Restricted Light Industrial (MR1), which does not permit any type of housing. HI1 allows

for adaptive reuse to housing, joint living and work quarters, and construction of new live/work units, in addition to a range of commercial and light industrial uses. Under this Alternative, the area with 8.0:1 maximum FAR in the Downtown Plan would be reduced to 4.5:1 and the area with 3:1 maximum FAR would be increased to 4.5:1, to promote a more compatible scale of development between residential, and hybrid industrial uses. Alternative 2 reduces the total number of housing units, as compared to the Downtown Plan, based on anticipated mix of units and allocation of housing and commercial uses in the areas where housing would be allowed. **Figure 5-2** shows the changes under Alternative 2 compared to the Downtown Plan.

As shown in **Table 5-1**, under Alternative 2 the Downtown Plan Area is projected to reach a population of 241,000 residents, 127,000 housing units, and 297,000 jobs by 2040. SCAG projects growth of the Downtown Plan Area to reach 189,000 residents, 96,000 housing units, and 257,000 jobs by 2040. Therefore, Alternative 2 would accommodate SCAG's population, housing and job growth forecasts in the Downtown Plan Area. Alternative 2 would accommodate less overall development and associated growth than the Downtown Plan. Alternative 2 would result in 6,000 fewer housing units (-5%), 11,000 fewer persons (-4%), and 8,000 fewer jobs (-3%) through 2040 than the Downtown Plan.

Under Alternative 2, the Downtown Plan Area would have reduced development capacity, as compared to the Downtown Plan. Therefore, Alternative 2 was selected because it was expected to incrementally reduce the significant unavoidable impacts of the Downtown Plan with regard to historical resources, construction noise, construction vibration, and deterioration of existing parks as well as the Downtown Plan's significant, but mitigable impacts related to biological, archaeological and paleontological resources, and hazardous materials while still meeting all of the basic project objectives, including: accommodating employment, housing, and population growth projections (Primary Objective 1); providing for economic diversification and reinforcement of the Downtown Plan Area as a primary center of employment (Primary Objective 2); building upon Downtown's role as a regional transportation center by allowing for intensive development throughout the Downtown Plan Area and concentrating development opportunity immediately surrounding the transit stations (Primary Objective 3); promoting a mode-shift from private automobile usage while fostering a transit, bicycle, and pedestrian supportive environment (Primary Objective 4); reducing vehicle miles traveled to meet the goals of the Senate Bill 375, Senate Bill 743, and California Assembly Bill 32 to reduce carbon emissions (Primary Objective 5; supporting a growing residential population by expanding the areas where housing is permitted and allowing for a full range of housing options (Primary Objective 6); celebrating and reinforcing the character of each of the neighborhoods in the Downtown Plan Area (Primary Objective 7); providing a set of implementation tools that are responsive to the range of physical and functional needs across the Downtown Plan Area (Primary Objective 8); refining and expanding a system that links development with public benefits to deliver community amenities in the Downtown Plan Area, and is adaptable to the policy needs across the City (Secondary Objective 1); maintaining a meaningful amount of the Downtown Plan Area for production and high-intensity traditional industry (Secondary Objective 2); promoting a mix of land uses that fosters sustainability, equity, community, neighborhood density, and healthy living (Secondary Objective 3); identifying appropriate locations for housing and establishing zoning tools that encourage a range of unit typologies (Secondary Objective 4); ensuring that new development provides the appropriate range of outdoor amenity space and other recreational options to tenants and property owners (Secondary Objective 5); and supporting and sustaining Downtown's ongoing revitalization (Secondary Objective 6). Alternative 2 would not meet certain project objectives regarding accommodating jobs and includes housing in areas with lower levels of transit service.

Although Alternative 2 would meet all objectives, it would meet certain objectives to a lesser degree than would the Downtown Plan due to the overall reduced development potential in comparison to the Downtown plan and introduction of residential uses in a portion of the plan area reserved for employment uses under the Downtown Plan. These include Primary Objective 1, which aims to focus new job-generating uses and residential development around transit stations; Primary Objective 3, which aims to allow for

intensive development throughout the Plan Area, and concentrating development opportunity immediately surrounding the transit stations with an appropriate range of building sizes and mix of uses; Primary Objective 4, which aims to Promote a mode-shift from private automobile usage and foster a transit, bicycle, and pedestrian supportive environment; and Primary Objective 5, which aims to Reduce vehicle miles traveled. Similar to Alternative 1, because of the reduced development potential under Alternative 2, generation of public benefits would be less than that of the Plan, and therefore, would also meet Secondary Objective 1 to a lesser degree than that of the Downtown Plan.

As discussed below, Alternative 2 would result in incrementally greater impacts than the Downtown Plan with respect to transportation/traffic.

Impact Analysis

Aesthetics

Compared to existing conditions, either Alternative 2 or the Downtown Plan would allow greater overall scale and intensity. However, unlike the Downtown Plan, Alternative 2 would modify the Downtown Plan land use mix by expanding the areas where housing is permitted in the Markets and Production General Plan designations on the south-central portion of the Downtown Plan Area. Under this alternative, the Industrial-Mixed Hybrid 1 (IH1) Use District would be applied to areas that are proposed as Industrial-Mixed Use 2 (IX2), which would allow for conversion to Joint Living and Work Quarters only, and Restricted Light Industrial (MR1), which does not permit any type of housing. IH1 allows for adaptive reuse to housing, joint living and work quarters, and construction of new live/work units, in addition to a range of commercial and light industrial uses. This alternative would also apply a maximum 4.5:1 FAR capacity to areas that are proposed as 3.0:1, 4.5;1, and 8.0:1 FAR under the Downtown Plan. Overall, Alternative 2 would accommodate less intense development and associated growth than would occur under the Downtown Plan. Because building heights would be similar to those allowed under the Downtown Plan, impacts to scenic vistas would be similar and less than significant. Although the proposed changes to General Plan designations and development intensity have the potential to change the visual character of existing neighborhoods and historical settings, impacts may occur to a lesser extent, as compared to the Downtown Plan. Nevertheless, new development would be implemented in accordance with applicable state and local plans, policies and guidelines, including but not limited to the City's General Plan Framework, Conservation Element, Mobility Plan 2035, relevant specific plans, the Downtown Design Guide and provisions of the LAMC as they relate to development standards, visual character, and historical resources.

As with the Downtown Plan, development accommodated by Alternative 2 could introduce new sources of light and glare in the Downtown Plan Area. However, development in a majority of the Downtown Plan Area already experiences high levels of nighttime lighting and glare, such that any additional lighting would be incremental. In addition, future development would comply with applicable regulations regarding permitted lighting and glare. Similarly, development in the Downtown Plan Area accommodated by Alternative 2 may increase shading and shadows in specific locations; however, shadows would be limited to the immediate area of each new development and would be typical of highly urbanized neighborhoods.

Overall, development accommodated by Alternative 2 may benefit, and would generally enhance, the visual character of the Downtown Plan Area. Therefore, as with the Downtown Plan, impacts related to aesthetics would be less than significant.

Air Quality

Alternative 2 would accommodate less overall development and associated growth than would the Downtown Plan. Alternative 2 would result in 6,000 fewer housing units (-5%), 11,000 fewer persons (-

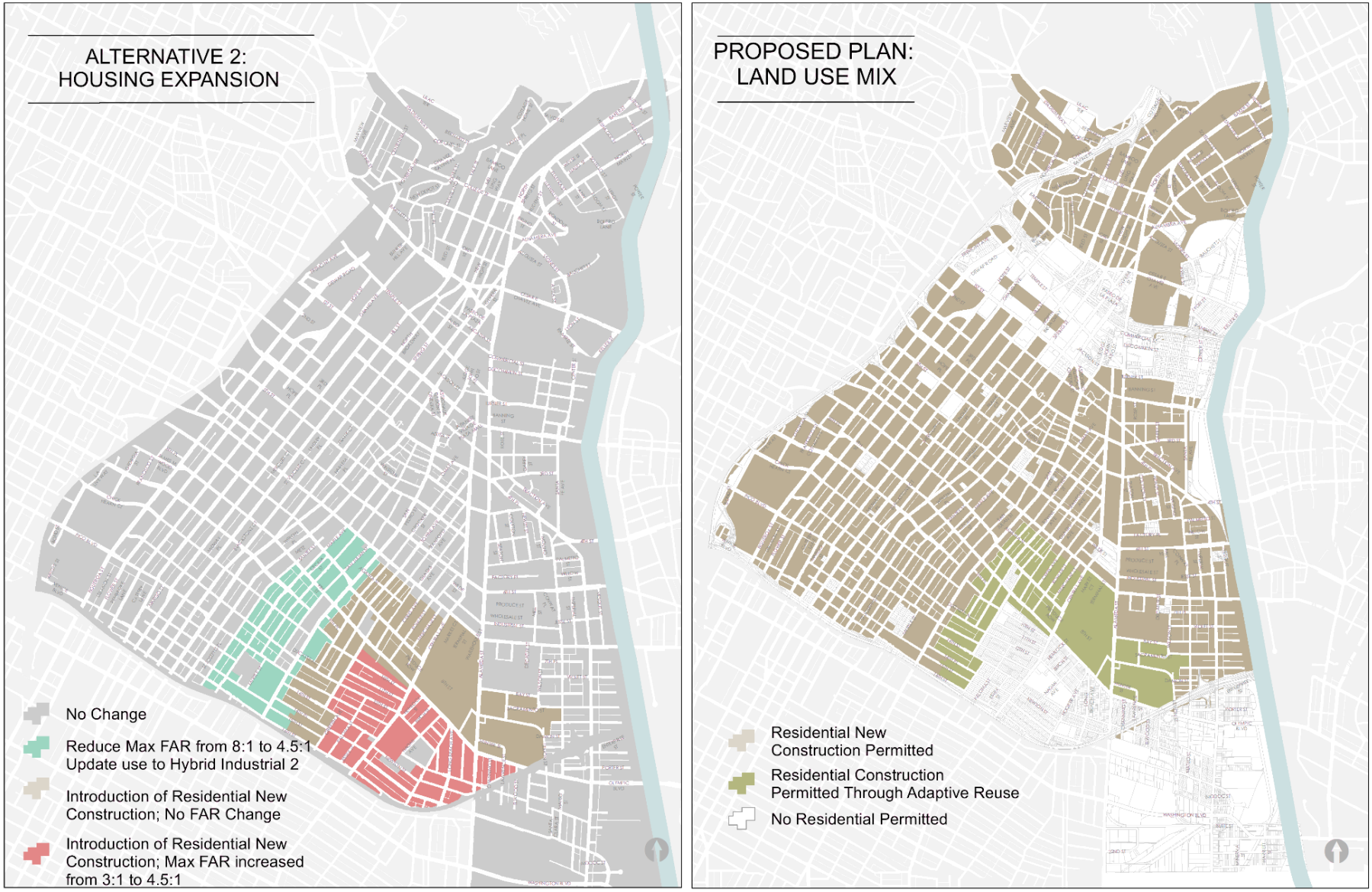
4%), and 8,000 fewer jobs (-3%) than would otherwise occur under development accommodated by the Downtown Plan for year 2040. Like the Downtown Plan, Alternative 2 would not increase reasonably anticipated development in the Downtown Plan Area in a way that would be inconsistent with SCAG's growth forecasts for the City; therefore, Alternative 2 would not conflict with the AQMP. Alternative 2 would, however, accommodate less overall growth in the Downtown Plan Area than would the Downtown Plan. As such, it would attain to a lesser degree the policy goals of the RTP/SCS, AQMP, and City General Plan Framework Element and Air Quality Element goals related to concentrating development in areas with access to transit and reducing vehicle miles traveled and associated emissions than would the Downtown Plan. Therefore, as with the Downtown Plan, impacts related to conflicting with or obstructing implementation of an applicable air quality plan would be less than significant.

Although slightly less construction may occur under Alternative 2 as compared to the Downtown Plan, maximum daily emissions would be the same because the nature and magnitude of individual construction projects would be similar. Because reasonably foreseeable development under the Downtown Plan would generate construction emissions of NO_X that exceed SCAQMD regional and local significance thresholds, and emissions of PM_{10} and $PM_{2.5}$ that exceed SCAQMD LSTs, it is reasonable to assume that this development under this alternative would do the same. Because Alternative 2 includes less overall development capacity than the Downtown Plan, it is reasonable to assume that operational emissions would be less than what would occur under the Downtown Plan. As discussed in Section 4.2, *Air Quality*, and shown in **Table 4.2-11**, future daily regional emissions from mobile sources under implementation of the Downtown Plan are generally expected to decrease relative to existing emissions. This is largely a result of improvements in vehicular engine efficiency technologies and fuel pollutant concentrations that are projected to occur between existing conditions and 2040 resulting from more stringent statewide regulations. Because increasingly stringent state regulations related to energy efficiency and emissions control will continue to apply under this alternative or the Downtown Plan, it is reasonable to assume that, under Alternative 2, future daily regional transportation-related emissions would also generally decrease relative to existing conditions due to improvements in vehicular engine efficiency technologies and fuel pollutant concentrations. As with the Downtown Plan, impacts related to construction emissions would be significant and unavoidable.

Alternative 2 would accommodate 5% less housing and 3% fewer jobs than the Downtown Plan. Thus, emissions would be slightly lower than under the Downtown Plan. Nevertheless, because a 99 percent reduction in VOC emissions compared to the Downtown Plan would be needed to bring emissions under the SCAQMD threshold, the increase in development in the Downtown Plan Area accommodated by Alternative 2 would result in daily emissions of VOC that would exceed the SCAQMD regional significance thresholds due to expanded use of consumer products and increased energy demand, similar to the Downtown Plan. In addition, future development in the Downtown Plan Area accommodated by Alternative 2 would foreseeably result in daily emissions of PM_{10} and $PM_{2.5}$ from area sources and mobile sources (brake and tire wear) that would exceed the SCAQMD regional significance thresholds since Alternative 2 is not anticipated to result in 61 percent reduction in PM_{10} emissions and a 68 percent reduction in $PM_{2.5}$ emissions that would be needed to bring emissions under SCAQMD thresholds. Mitigation Measure 4.2-2 would be applied to the Alternative 2 but similarly would not be expected to reduce impacts to a less than significant level. As with the Downtown Plan, impacts related to operational emissions would be significant and unavoidable.

Impacts to sensitive receptors from construction would be potentially significant, but application of **Mitigation Measures 4.2-2**, would reduce impacts to less than significant. As with the Downtown Plan, impacts associated with Alternative 1, including impacts related to toxic air contaminants (TACs) from distribution center truck activity, would be significant as the Alternative would still allow distribution centers in parts of the Downtown Plan Area intended for industrial uses. **Mitigation Measure 4.2-3** would apply to the Alternative 2, but without specific project details impacts to sensitive receptors would be

Figure 5-2 Alternative 2: Housing Redistribution



significant and unavoidable. As with the Downtown Plan, impacts related to odors would be less than significant.

It should be noted that limiting growth Downtown as would occur under Alternative 2 may cause more growth to occur elsewhere in the City or region in locations that have less access to transit and less of a mix of jobs and housing. As a result, overall citywide and regional VMT and associated emissions may incrementally increase under this scenario.

Biological Resources

The Downtown Plan Area is urbanized and generally lacks riparian habitat, wetlands, wildlife corridors and habitat that would support special status plant or animal species. The Los Angeles River, as well as small portions of parks and open space, trees and minor urban landscaping are the only sources of biological habitat in and around the Downtown Plan Area. Both the Downtown Plan and Alternative 2 prioritize infill development in already urbanized area of the City, thus minimizing development in areas of potential native biological habitat or wildlife corridors. Similar to the Downtown Plan, Alternative 2 would not foreseeably result in modification of the portions of the Los Angeles River because neither plan includes components that would affect the existing use, zoning, or land use designation of the Los Angeles River. Although implementation of Alternative 2 would involve less development capacity and associated growth than would occur under the Downtown Plan, any new development has the potential to disturb sensitive plant or animal species such as nesting birds and heritage or protected trees in the Downtown Plan Area. Therefore, any future development would require adherence with the federal MBTA and/or CFGC regulations, and the LAMC Tree Preservation Ordinance (177,404). In addition, Alternative 2 would not interfere with natural resources, degrade the sustainability of natural resources in the region, disrupt existing open space or encroach upon any natural settings. Therefore, Alternative 2 would not conflict with goals, policies, and programs of the General Plan Framework or the City Conservation Element. As with to the Downtown Plan, Alternative 2's impacts related to biological resources would be less than significant with implementation of **Mitigation Measures 4.3-1(a)** and **(b)**.

Cultural Resources

The Downtown Plan Area, which is expected to experience substantial new development, includes a high concentration of historical resources. Similar to the Downtown Plan, Alternative 2 may result in demolition or alteration of a historical resource or its setting or disturb areas that may potentially contain archaeological resources and/or human remains. Although Alternative 2 would accommodate less development and associated growth than the Downtown Plan, it would expand the areas where housing is permitted in the Markets and Production General Plan designations on the south-central portion of the Downtown Plan Area. All future development projects would continue to be subject to existing federal, state, and local requirements regarding cultural resources and human remains and discretionary projects may be subject to project-specific mitigation requirements under CEQA. As with the Downtown Plan, existing requirements and **Mitigation Measures 4.4-2(a)**, **(b)**, **(c)**, and **(d)** would reduce impacts to archaeological resource impacts to a less than significant level. Although existing regulations provide certain protections for significant historical resources, individual developments allowed under either Alternative 2 or the Downtown Plan could potentially cause a substantial adverse change in or disturbance of historical resources as defined in CEQA Guidelines Section 15064.5. Therefore, as with the Downtown Plan, impacts to historical resources would be significant and unavoidable under Alternative 2.

Similar to Downtown Plan, Alternative 2 impacts to human remains would be less than significant based on anticipated compliance with existing regulations.

Energy

Alternative 2 would accommodate less overall development and associated growth than would the Downtown Plan. Alternative 2 would result in 6,000 fewer housing units (-5%), 11,000 fewer persons (-4%), and 8,000 fewer jobs (-3%) than would otherwise occur under development accommodated by the Downtown Plan for year 2040. Therefore, it is reasonable to assume that implementation of Alternative 2 would result in less energy consumption than implementation of the Downtown Plan. As discussed under **Impact 4.5-1**, in Section 4.5, *Energy*, (**Table 4.5-5** through **Table 4.5-7**) implementation of the Downtown Plan would result in increased energy consumption in the Downtown Plan Area above 2017 baseline conditions. However, the Downtown Plan would result in lower per capita electricity and natural gas consumption for year 2040, as compared to year 2017 baseline conditions. The lower energy use per capita that would occur under the Downtown Plan can be attributed to the fact that implementation of the Downtown Plan would lower per capita VMT due to the location of jobs and housing in close proximity to each other and creation of substantial opportunities to use such transportation modes as transit, bicycling, and walking. Although Alternative 2 may result in less overall energy consumption in the Downtown Plan Area than would the Downtown Plan, it would accommodate less intense development and would increase per capita VMT as compared to the Downtown Plan, thereby incrementally increasing energy consumption on a per capita basis. Nevertheless, like the Downtown Plan, Alternative 2 would not result in inefficient, wasteful, or unnecessary consumption of energy resources. In addition, neither Alternative 2 nor the Downtown Plan would conflict with applicable federal, state, and local energy conservation policies aimed at decreasing reliance on fossil fuels and increasing reliance on renewable energy sources. Overall, impacts would be less than significant under Alternative 2, similar to those of the Downtown Plan.

Geology and Soils

Like the Downtown Plan, Alternative 2 would generally accommodate development in the same footprints as existing structures in the Downtown Plan Area. New development in the Downtown Plan Area would be exposed to existing geologic and soil hazards; however, it would not increase the potential for such hazards or create new hazards. Compliance with existing regulatory requirements and policies, including the LAMC and the CBC would reduce adverse effects related to seismic activity and ground shaking, liquefaction, on or off-site landslides, ground failure; or adverse effects related to expansive soil or to a geologic unit or soil that is unstable or would become unstable as a result of the project and result in landslide, lateral spreading, liquefaction or collapse. In some cases, future development in the Downtown Plan Area may reduce the potential for property damage and/or safety concerns by replacing older structures with new structures built to current seismic standards. Similar to the Downtown Plan, Alternative 2 would have the potential to disturb paleontological resources. As with the Downtown Plan, geology and soils impacts would be less than significant under Alternative 2 with adherence to regulatory code requirements and **Mitigation Measures 4.6-6(a), (b)** and **(c)** related to paleontological resources.

Greenhouse Gas Emissions

Alternative 2 would accommodate less overall development and associated growth than would the Downtown Plan. Alternative 2 would result in 6,000 fewer housing units (-5%), 11,000 fewer persons (-4%), and 8,000 fewer jobs (-3%) through 2040 than the Downtown Plan. Development accommodated by either Alternative 2 or the Downtown Plan would generate GHG emissions through individual project construction and operation. GHG emissions would specifically arise from direct sources such as motor vehicles, natural gas consumption, solid waste handling/treatment, and indirect sources such as electricity generation. Section 4.7, *Greenhouse Gas Emissions*, **Table 4.7-4** compares current annual GHG emissions for the Downtown Plan Area to 2040 emissions. Implementation of the Downtown Plan would result in a 24 percent increase in total GHG emissions in the Downtown Plan Area by 2040 and a 62 percent decrease in per capita GHG emissions, above 2017 baseline conditions. The reduction in per capita GHG emissions below baseline conditions can be attributed to a combination of state-mandated GHG emission reduction

strategies and the fact that implementation of the Downtown Plan would lower per capita VMT due to the location of jobs and housing in close proximity to each other and creation of substantial opportunities to use such transportation modes as transit, bicycling, and walking. It is reasonable to assume that under Alternative 2 future per capita emissions would also be lower than existing 2017 baseline emissions due to improved energy efficiency and reduced per capita VMT, but may be slightly higher than per capita GHG emissions under the Downtown Plan. Thus, the per capita and net reduction in GHG emissions under Alternative 2 would be consistent with regional, state, and federal efforts to reduce climate impacts from development and transportation. As with the Downtown Plan, impacts would be less than significant under Alternative 2.

It should be noted that because Alternative 2 would accommodate less overall growth in the Downtown Plan Area than the Downtown Plan would, it may push more population growth to other areas of the City or region where fewer transit options are available and distances between jobs, housing, and services are greater. As a result, accommodating less development Downtown under Alternative 2 may incrementally increase overall citywide or regional GHG emissions related to VMT and Alternative 2 would not be as consistent with AB 32, SB 32, SB 375 (through demonstration of conformance with the 2016–2040 RTP/SCS), the Sustainable City pLAn and GreenLA as the Downtown Plan. Impacts would be greater than those of the Downtown Plan, though still less than significant.

Hazards and Hazardous Materials

General Plan designations proposed by the Downtown Plan and Alternative 2 would maintain existing light and heavy industrial uses in the southeastern portion of the Downtown Plan Area but would expand the mix of uses in the Markets and Hybrid Industrial designation areas to include commercial and residential uses. Under this alternative, the Industrial-Mixed Hybrid 1 (IH1) Use District would be applied to areas that are proposed as Industrial-Mixed Use 2 (IX2) which would allow for conversion to Joint Living and Work Quarters only, and Restricted Light Industrial (MR1), which does not permit any type of housing. IH1 allows for adaptive reuse to housing, joint living and work quarters, and construction of new residential units as long a base amount of floor area is set aside for employment-generating uses, in addition to a range of commercial and light industrial uses. Although certain heavy industrial facilities would remain and hazardous materials would continue to be transported through the Downtown Plan Area, neither Alternative 2 nor the Downtown Plan would substantially increase hazardous material risks from transport, use or disposal based on the extensive existing regulations of hazardous materials. Consequently, as with the Downtown Plan, impacts related to the routine transport, use, or disposal of hazardous materials or upset or accident conditions involving hazardous materials would be less than significant.

Similar to the Downtown Plan, there would be no or less than significant impacts related to airports, or emergency management plans because there are no airports, private air strips, or wildlands in or near the Plan Area and development under Alternative 2 would not interfere with circulation plans or emergency management plans.

Operational activities associated with development accommodated by Alternative 2 would not create increased potential for upset or accident conditions involving hazardous materials release; however, redevelopment, renovation, and demolition of structures built before 1979 could potentially involve asbestos or lead but asbestos and lead would not be released into the atmosphere with compliance of existing regulations. In addition, future development would potentially occur in Methane Zones and Methane Buffer Zones and near oil wells. Compliance with applicable regulations would reduce such impacts to a less than significant level. As with the Downtown Plan, grading and construction activity could potentially result in the release of soil and/or groundwater contamination, which could potentially affect schools or involve a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment. However, with imposition of **Mitigation Measures 4.8-4(a)** and **4.8-4(b)** to Alternative 2 impacts would be less than

significant. Overall impacts associated with Alternative 2 would be similar to, but slightly less than, those of the Downtown Plan since the overall level of development would be lower.

Hydrology and Water Quality

The Downtown Plan Area is urbanized and almost entirely paved and developed except for parks, green spaces, and the Los Angeles River, which is located on the eastern boundary of the Downtown Plan Area. Similar to the Downtown Plan, Alternative 2 would generally accommodate development within the same footprints as existing structures in the Downtown Plan Area. Therefore, implementation of Alternative 2 would not substantially alter drainage patterns that would result in substantial erosion, siltation, or flooding on- or off-site. Any new development would be subject to federal, state, and local requirements that prevent violations of water quality standards or waste discharge requirements and support the preservation and expansion of pervious surfaces. In addition, any new development projects would be required to incorporate Best Management Practices to manage stormwater and reduce runoff during construction and operation, and industrial sources would be subject to additional stormwater management and discharge requirements under the NPDES program for industrial uses. Compliance with the City's LID Ordinance would further ensure that any future development would not require construction of new stormwater drainage facilities and or expansion of existing facilities beyond specific improvements needed for individual development projects. In the long-term, redevelopment of properties in the Downtown Plan Area would improve surface water quality by replacing older development with new development that incorporates LID methods. Therefore, Alternative 2 would result in less than significant impacts with respect to hydrology and water quality, similar to the Downtown Plan.

Land Use and Planning

Similar to the Downtown Plan, Alternative 2 would allow greater scale and intensity than currently exists in portions of the Downtown Plan Area. However, Alternative 2 would modify the Downtown Plan land use mix by expanding the areas where housing is permitted in the Markets and Production General Plan Designations on the south-central portion of the Downtown Plan Area. Under this alternative, the Industrial-Mixed Hybrid 1 (IH1) Use District would be applied to areas that are proposed as Industrial-Mixed Use 2 (IX2), which would allow for conversion to Joint Living and Work Quarters only, and Restricted Light Industrial (MR1), which does not permit any type of housing. IH1 allows for adaptive reuse to housing, joint living and work quarters, and construction of new residential units as long a base amount of floor area is set aside for employment-generating uses, in addition to a range of commercial and light industrial uses. This alternative would also apply a maximum 4.5:1 FAR to areas that are proposed as 3.0:1, 4.5:1, and 8.0:1 under the Downtown Plan.

Like the Downtown Plan, Alternative 2 would be generally consistent with 2016-2040 RTP/SCS policies related to the provision of high intensity and transit-oriented development as well as with the City's General Plan and Framework Element, Mobility Plan 2035, and Housing Element 2013-2021. However, as discussed under *Air Quality*, Alternative 2 may implement to a lesser degree the 2016-2040 RTP/SCS, AQMP, and Air Quality Element policies related to concentrating development near transit and reducing regional VMT than the Downtown Plan because of the slight de-emphasis on concentrating housing near transit and because the lower overall development totals may result in increased development elsewhere in the City and incrementally higher regional VMT. Like the Downtown Plan, Alternative 2 would not physically divide an established community. Overall, Alternative 2's impacts would be similar to those of the Downtown Plan and less than significant.

Noise

New sensitive uses accommodated by either Alternative 2 or the Downtown Plan would be exposed to ambient noise that is in the "normally unacceptable" to "clearly unacceptable" range based on noise

level/land use compatibility standards in the Noise Element of the City's General Plan. However, exposure of new development to ambient noise would not increase noise and all new development would be required to take measures to reduce interior noise levels to below 45 dBA.

Any future development Downtown would include mechanical equipment, loading, trash pick-up, and other noise-generating activities. However, such activities would be typical of the urban environment in the Downtown Plan Area. In addition, any on-site activities would be required to comply with applicable provisions of the LAMC. As with the Downtown Plan, traffic-related noise may increase by more than 3 dBA in some locations, but resulting noise levels would not be in the "normally unacceptable" range. Thus, permanent noise increases due to operational activities accommodated by Alternative 2 would be less than significant.

Future construction activity would be required to comply with appropriate Regulatory Compliance Measures as well as LAMC Chapter 41.40, Section 112.05 and **Mitigation Measure 4.11-1.** Compared to the Downtown Plan, duration of construction and use of heavy duty equipment in the Alternative 2 scenario would be less than the Downtown Plan due to reduced overall development potential. Therefore, construction noise impacts from Alternative 2 is likely to be less than that of the Downtown Plan. Nevertheless, maximum noise levels generated by construction equipment under Alternative 2 could potentially involve two subterranean levels or more, construction durations of 18 months or more, use of large, heavy-duty equipment rated 300 horsepower or greater, or the potential for impact pile driving. Therefore, although the overall impact generated by temporary construction noise resulting from implementation of Alternative 2 would be less than that of the Downtown Plan, the impact would remain significant and unavoidable.

Any future construction activity, specifically pile driving, could potentially generate vibration exceeding the 90 VdB threshold for buildings extremely susceptible to building damage (e.g., historical and fragile structures). Although mitigation is available to minimize the potential effects of vibration, it cannot be assured that construction-related vibration would not result in building damage. Thus, both Alternative 2 and Downtown Plan would result in a significant and unavoidable impact related to construction vibration.

It is not anticipated that the operation of new development in the Downtown Plan Area would involve activities that would result in substantial vibration levels (e.g., blasting operations). Like the Downtown Plan, operational groundborne vibration in the vicinity of new development associated with Alternative 2 would be primarily generated by vehicular travel on the local roadways. According to the FTA *Transit Noise and Vibration Impact Assessment* guidance document, rubber tires and suspension systems dampen vibration levels from trucks to a level that is rarely perceptible (2006). Traffic-related vibration levels would be similar to existing conditions and not perceptible by sensitive receptors. Therefore, impacts related to operational vibration under the Downtown Plan would be less than significant.

Similar to the Proposed Project, Alternative 2 would have no impacts related to airport noise.

Similar to the Proposed Project, the impact generated by temporary construction noise and vibration resulting from implementation of Alternative 2 would be significant and unavoidable.

Population and Housing

Projected growth under Alternative 2 would exceed SCAG's 2040 population forecast by approximately 52,000 persons (28%) 31,000 dwelling units (32%), and 40,000 jobs (16%). Therefore, Alternative 2 would increase the development capacity of the Downtown Plan Area in a manner this is consistent with SCAG's growth projections for the Downtown Plan Area and, like the Downtown Plan, would concentrate forecast growth in an area with a mix of jobs and housing and with good transit access. Alternative 2 would accommodate less overall development capacity and associated growth than would the Downtown Plan.

Alternative 2 would result in 6,000 fewer housing units (-5%), 11,000 fewer persons (-4%), and 8,000 fewer jobs (-3%) through 2040 than the Downtown Plan. Like the Downtown Plan, Alternative 2 would not induce substantial population growth inconsistent with the regional growth plans.

Alternative 2 would modify the Downtown Plan land use mix by expanding the areas where housing is permitted in the Markets and Production General Plan Designations on the south-central portion of the Downtown Plan Area. Under this alternative, the Industrial-Mixed Hybrid 1 (IH1) Use District would be applied to areas that are proposed as Industrial-Mixed Use 2 (IX2) which would allow for conversion to Joint Living and Work Quarters only, and Restricted Light Industrial (MR1), which does not permit any type of housing. IH1 allows for adaptive reuse to housing, joint living and work quarters, and construction of new residential units as long a base amount of floor area is set aside for employment-generating uses, in addition to a range of commercial and light industrial uses. Although Alternative 2 would accommodate new development and redevelopment projects in the Downtown Plan Area that would likely result in some displacement of existing housing units and residents, it would substantially increase the housing stock of the Downtown Plan Area overall. Therefore, similar to the Downtown Plan Alternative 2 would allow for additional construction of housing in an urban center. As with the Downtown Plan, population and housing impacts would be less than significant under Alternative 2.

Public Services

Alternative 2 would result in 6,000 fewer housing units (-5%), 11,000 fewer persons (-4%), and 8,000 fewer jobs (-3%) through 2040 than the Downtown Plan. However, the increased growth under either scenario may require additional public facilities to service residents as a result of an increased density from infill development. With respect to fire and police services, either scenario would accommodate new development that would increase demand for fire and police protection service in the Downtown Plan Area and may create the need for new or expanded fire and police facilities. Based on the urbanized character of the Downtown Plan Area, it is anticipated that new or expanded facilities could be built without creating significant environmental impacts. However, depending on the location or nature of new facilities, the construction of needed new facilities could potentially result in impacts already identified in this EIR for construction or operations. However, project-specific environmental analysis under CEQA would be required to address any site-specific environmental concerns.

With respect to schools, as summarized in **Table 5-7**, residential and non-residential development accommodated by Alternative 2 would result in an estimated 49,134 new students. Of this total, an estimated 25,109 would enroll in elementary school, 7,670 would enroll in middle school, 14,545 would enroll in high school, and 1,804 would enroll in special day classes. Overall Alternative 2 would result in approximately 5 percent fewer students than would the Downtown Plan. As such, Alternative 2 would create the need for new or expanded school facilities, but to a lesser extent than the Downtown Plan. Developers would be required to pay school impact fees. As with the Downtown Plan, any impacts associated with new school construction would be similar to those analyzed and identified in the EIR for other types of development, any site-specific impacts would be speculative and would be addressed by LAUSD as part of a project-level CEQA review.

With respect to libraries, either Alternative 2 or the Downtown would increase demand for library facilities. However, the Downtown Plan Area is well-served by library facilities and would not require the construction of new or expanded facilities. Compared to the Downtown Plan, Alternative 2 would accommodate less intense development and associated growth in the Downtown Plan Area, thus requiring fewer public services. This may, however, divert growth to other areas of the City, resulting in the need for expansion of public services in other areas of the City as development would continue elsewhere to accommodate SCAG's housing and population projections.

Overall, impacts under Alternative 2 would be less than significant, similar to those of the Downtown Plan.

TABLE 5-7 ALTERNATIVE 2 ANTICIPATED STUDENT GENERATION IN THE DOWNTOWN PLAN AREA

	Units	Student Generation				
		Elementary School (TK-5)	Middle School (6-8)	High School (9-12)	SDC	Total Students Generated
Residential[1]	93,314	21,173	5,701	12,093	1,810	40,778
Non-Residential[2]	172,649,288	3,936	1,968	2,452	--	8,356
Total Students Generated by Alternative 2		**25,109**	**7,670**	**14,545**	**1,810**	**49,134**

Note: du = dwelling units; sf = square feet; TK = Transitional Kindergarten; SDC = Specialized Day Care

Totals may not add up due to rounding.

[1] Student generation rates for residential use is based on Level 1 – Developer Fee Justification Study for Los Angeles Unified School District (LAUSD 2017d). Residential Generation Rates: Elementary: 0.2269/du, Middle School: 0.0611/du, High School: 0.1296 /du, SDC: 0.0194/du

[2] Student generation rates for non-residential use is based on the average of office and retail/service student generation rates for a conservative estimate, taken from the LAUSD Commercial/Industrial Development School Fee Justification Study, September 2010 (LAUSD 2010). Non-residential Generation Rates: Elementary: 0.0228/1,000 sf, Middle School: 0.0114/1,000 sf, High School: 0.0142/1,000 sf. Non-residential uses include commercial, industrial, and public facilities.

Recreation

Alternative 2 would accommodate less development and associated growth than would the Downtown Plan. Nevertheless, any new development would increase the use of existing park and recreational facilities throughout the City, including in and around adjacent to the Downtown Plan Area. The City of Los Angeles Public Recreation Plan states that in order to meet long-range local recreational standards, the City should maintain a minimum of two acres of neighborhood facilities and two acres of community recreational facilities for every 1,000 persons, or a combination of neighborhood and community facilities adding up to four acres. Under Alternative 2, the population of the Downtown Plan Area is projected to increase to approximately 241,000 residents by 2040, thereby decreasing the ratio of parks to residents to approximately 1.1 acre per 1,000 residents. Approximately 720 acres of new parkland would be needed in the Downtown Plan Area under Alternative 2 to meet the City's park acreage standards. Future development accommodated by the Downtown Plan would increase the population of the Downtown Plan Area to an estimated 252,000 residents, thereby reducing the ratio of parks to residents to approximately 1.0 acre per 1,000 residents. Approximately 764 acres of new parkland would be needed in the Downtown Plan Area by 2040 to meet the City's park acreage standards under the Downtown Plan. Therefore, Alternative 2 would require approximately five percent less parkland than the Downtown Plan and would have incrementally less impacts related to the deterioration of existing park to recreation facilities. Because opportunities for new parks are limited, neither Alternative 2 nor the Downtown Plan would result in significant impacts related to the development and construction of new parks.

Developers of residential projects would be required to pay park impact fees, dedicate land, include outdoor amenity spaces, or pay in-lieu Quimby fees to fund new park and recreational facilities. Nevertheless, due to the substantial population growth that would result from future development and lack of development capacity for new parks in the Downtown Plan Area, implementation of either Alternative 2 or the Downtown Plan could accelerate the deterioration of existing parks in and around the Downtown Plan Area. Such impacts to existing recreational facilities would be significant and unavoidable under either Alternative 2 or the Downtown Plan. Impacts related the construction of new parks would remain less than significant.

Transportation/Traffic

With respect to transportation, a significant impact would occur if the total daily VMT per service population under the Downtown Plan, or a proposed alternative, were to increase above the 2017 Baseline

Condition or if there is inconsistency with the SCAG 2016 RTP/SCS. As shown in Error! Reference source not found., VMT per service population under Alternative 2 would be 16.1, while the 2017 Baseline per service population VMT in the Downtown Plan Area is 19.6. Thus, per capita VMT under Alternative 2 would not exceed the 2017 Plan Baseline Condition threshold. Compared to the 2016 SCAG Region Conditions, Alternative 2 has lower vehicle trips per service population (2.5 versus 3.1) and lower VMT per service population (16.1 versus 35.4). Therefore, as with the Downtown Plan, impacts would be less than significant. However, the beneficial impacts to VMT would not be as great with Alternative 2 compared to the Downtown Plan.

TABLE 5-8 COMPARISON BETWEEN EXISTING TRAFFIC CONDITIONS, THE DOWNTOWN PLAN AND ALTERNATIVE 2

Transportation Metric	Threshold		Downtown Plan (2040)	Alternative 2
	2016 SCAG Region Conditions	2017 Plan Baseline Conditions		
Total Daily VT	82,283,000	758,000	1,375,000	1,337,000
Total Daily VT per Service Population	3.1	2.6	2.5	2.5
Total Daily VMT	948,656,000	5,767,000	8,842,000	8,670,000
Total Daily VMT per Service Population	**35.4**	**19.6**	**15.9**	**16.1**

SOURCE: Fehr & Peers, February 2019.

Similar to the Downtown Plan, Alternative 2 would not result in significant impacts related to plan consistency, increased hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), or result in inadequate emergency access. However, as with the Downtown Plan, freeway off-ramp queuing-related safety issues could potentially arise as additional development occurs in the Downtown Plan Area, which could have a significant and unavoidable impact to freeway safety impacts.

Alternative 2 includes the network enhancements identified in MP 2035 and incorporated into the Downtown Plan.

Tribal Cultural Resources

Development activities that include ground disturbance activities have the potential to significantly affect tribal cultural resources. The Sacred Lands File search conducted for the Downtown Plan Area was positive and the Tongva ethnographic village site of Yangna is thought to be located near Union Station. Effects on tribal cultural resources are only known once a specific development has been proposed because the effects are highly dependent on both the individual development site conditions and the characteristics of the proposed activity. Similar to the Downtown Plan, Alternative 2 would generally accommodate development in the same footprints as existing structures in the Downtown Plan Area. Although neither the Downtown Plan nor Alternative 2 includes specific development projects, new development accommodated under either scenario may disturb areas that potentially contain tribal resources. Similar to the Downtown Plan, all future development projects would continue to be subject to existing federal, state, and local requirements and discretionary projects, subject to CEQA review would be required to comply with AB 52, which for projects relying on a [mitigated] negative declaration or an EIR, includes consultation with California Native American tribes. Overall, as with the Downtown Plan, impacts under Alternative 2 would be potentially significant. However, implementation of **Mitigation Measures 4.4-2 (a)**, **(b)**, **(c)**, and **(d)** in Section 4.4, *Cultural Resources* and **4.16-1 (a) and (b)** in Section 4.16, *Tribal Cultural Resources*, would

reduce Alternative 2's impacts to a less than significant level. Therefore, as with the Downtown Plan, Alternative 2 would have a less than significant impact with mitigation incorporated.

Utilities and Service Systems

Alternative 2 would accommodate less overall development and associated growth than the Downtown Plan. Alternative 2 would result in 6,000 fewer housing units (-5%), 11,000 fewer persons (-4%), and 8,000 fewer jobs (-3%) through 2040 than the Downtown Plan. **Table 5-9** indicates that implementation of Alternative 2 would increase wastewater generation in the Downtown Plan Area by approximately 16 mgd above baseline conditions, which represents about 9 percent of the HWRP excess capacity of 175 mgd. As shown in **Table 4.17-3,** in Section 4.17, *Utilities and Service Systems***,** projected wastewater generation for the Downtown Plan Area in 2040 with implementation of the Downtown Plan would generate an estimated 18 mgd of wastewater, which would represent about 10 percent of the HWRP's excess capacity of 175 mgd. Alternative 2 would therefore generate approximately 11 percent less wastewater as compared to the Downtown Plan. The HWRP would have sufficient available treatment capacity to serve Downtown Plan Area development under Alternative 2. In addition, the HWRP would be able to adequately treat future project-generated sewage under Alternative 2 and the treatment requirements of the RWQCB would not be exceeded so new or expanded treatment facilities would not be needed. Expansion/replacement of Downtown Plan Area conveyance infrastructure may be needed and various facility improvements are already planned. Temporary traffic, air quality, and noise impacts associated with construction of such improvements would be within the parameters described for the Downtown Plan. Continued compliance with the City's Low Impact Development (LID) Ordinance for all new development would ensure that any future development under Alternative 2 would not increase demands on stormwater drainage facilities and or expansion of existing facilities beyond specific improvements needed for individual development projects. As with the Downtown Plan, impacts associated with Alternative 2 would be less than significant.

TABLE 5-9 ALTERNATIVE 2 PROJECTED WASTEWATER GENERATION

Land Use	Dwelling Units or Jobs	Wastewater Generation Rate (gpd/unit)	Wastewater Generation (gpd)
Single-family Residential	6,733 du	144.3	972,000
Multi-family Residential	120,246 du	137.9	16,582,000
Commercial	237,249 jobs	59.8	14,187,000
Industrial	33,373 jobs	123	4,105,000
Public Facilities	26,464 jobs	46.4	1,228,000
Total 2040 with Alternative 2 Wastewater Generation			37,074,000
Current Wastewater Generation			20,631,000
Net Change in Wastewater Generation			**16,442,000**

Notes: Wastewater generation numbers are rounded to the nearest thousand. Totals may not add up due to rounding.
gpd – gallons per day
du – dwelling units
sf – square feet
SOURCE: Wastewater is assumed to be 100% of indoor water use. Per Exhibit 2D of the 2015 UWMP, indoor water use constitutes the following percentages of overall water use: Residential single family – 46%; Residential multi-family – 68%; Commercial – 76%; Industrial – 98%; and Government – 59%.Per the UWMP, per unit water demand is forecast to decline over time; the forecast 2040 rates are assumed to apply to new development.

With respect to water demand, per the 2015 Urban Water Management Plan, current water supplies, planned future water conservation efforts, and planned future water supplies will enable Los Angeles Department

of Water and Power (LADWP) to reliably provide water that meets the demands of the City for a 25-year planning horizon (through 2040), based on SCAG's population projections. The 2015 UWMP projects an increase of 195,960 afy (38 percent) in citywide water demand between 2015 and 2040, under single/multiple dry year conditions. **Table 5-10** indicates that the projected net increase in water demand of 23 mgd, or 26,051 afy, generated by new development under Alternative 2 would represent about 13 percent of the forecasted citywide water demand increase through 2040. As shown in **Table 4.17-6,** in Section 4.17, *Utilities and Service Systems*, estimated water demand for the Downtown Plan Area with implementation of the Downtown Plan would be 25 mgd, or 28,000 afy. This would represent about 14 percent of the forecasted citywide water demand increase through 2040. Alternative 2 would demand approximately 8 percent less water as compared to the Downtown Plan. Therefore, water supplies are adequate to meet projected demand through 2040 for Alternative 2 and development of new water supplies would not be necessary. Expansion/replacement of water distribution infrastructure may be needed, but temporary traffic, air quality, and noise impacts associated with construction of such improvements would be within the parameters described for the Downtown Plan. As with the Downtown Plan, impacts associated with Alternative 2 would be less than significant.

TABLE 5-10 ALTERNATIVE 2 PROJECTED WATER DEMAND

Land Use	Dwelling Units or Jobs in Plan Area	Daily Water Use Rate (gpd/unit)	Daily Water Demand (gpd)	Annual Water Demand (afy)
Single-family Residential	6,733	313.8	2,113,000	2,367
Multi-family Residential	120,246 du	202.8	24,386,000	27,316
Commercial	237,249 jobs	78.7	18,671,000	20,915
Industrial	33,373 jobs	125.5	4,188,000	4,691
Public Facilities	26,464 jobs	78.7	2,083,000	2,333
Total 2040 with Alternative 2 Demand			51,441,000	57,622
Current Water Demand			28,184,000	31,570
Net Change in Water Demand			**23,257,000**	**26,051**

Notes: Water demand numbers are rounded to the nearest thousand. Totals may not add up due to rounding.
du – dwelling unit
gpd – gallons per day
afy – acre feet per year (1 af = 325,850 gallons)
SOURCE: Water demand rates were obtained from the LADWP's 2015 Urban Water Management Plan (UWMP), Exhibit2K (LADWP 2016). Per the UWMP, per unit water demand is forecast to decline over time; the forecast 2040 rates are assumed to apply to new development.

As shown in **Table 4.17-7** in Section 4.17, *Utilities and Service Systems*, the combined daily intake capacity of landfills serving the Plan Area is 45,540 tons per day and the average disposal intake is 19,143 tons per day, resulting in an available capacity of 26,397 tons per day. As shown in **Table 5-11**, implementation of Alternative 2 would generate an increase of approximately 1,139 tons of solid waste per day above existing conditions, which would represent about 4 percent of the total available daily capacity (26,397 ton per day) at local landfills. As shown in **Table 4.17-9** in Section 4.17, *Utilities and Service Systems*, development accommodated by the Downtown Plan would increase the amount of solid waste generated in the Downtown Plan Area by approximately 1,133 tons per day, or 413,534 tons per year, above existing conditions. This would also represent approximately 4 percent of the available intake capacity of landfills serving the Downtown Plan Area. Based on the County of Los Angeles Countywide Integrated Waste Management Plan (CIWMP) 2018 Annual Report, sufficient permitted capacity is available to accommodate the County's long-term disposal needs under the status quo. Therefore, similar to the Downtown Plan, new or expanded facilities would not be needed and impacts would be less than significant.

Electrical and natural gas supplies are not expected to be adversely affected by development under Alternative 2, but improvements to Downtown Plan Area distribution and telecommunication facilities may be needed. Temporary traffic, air quality, and noise impacts associated with construction of such

improvements would be within the parameters described for the Downtown Plan. As with the Downtown Plan, impacts associated with Alternative 2 would be less than significant.

TABLE 5-11 ALTERNATIVE 2 PROJECTED SOLID WASTE GENERATION

Land Use	Dwelling Units or Square Feet	Annual Waste Generation Rate	Annual Waste Generation (tons)	Daily Waste Generation (tons)
Single-family Residential	6,733 du	1.17 ton/du	7,878	22
Multi-family Residential	120,246 du	0.46 ton/du	55,313	152
Commercial	202,938,587 sf	3.01 ton/1,000 sf	610,845	1,674
Industrial	72,516,161 sf	1.24 ton/1,000 sf	89,920	246
Public Facilities	45,730,208 sf	0.93/1,000 sf	42,529	117
Total 2040 Alternative 2 Solid Waste Generation			806,485	2,210
Current Solid Waste Generation			390,771	1,071
Net Change in Waste Generation			**415,714**	**1,139**

Notes: Waste generation (tons) was rounded to the nearest whole number. Totals may not add up due to rounding.

du – dwelling unit

sf – square feet

[1] Converted from CalEEMod default data of 0.41 tons/resident, assuming a persons per unit rate of 2.86 for City of Los Angeles (California Department of Finance (DOF). 2018. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2018 with 2010 Census Benchmark. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/ (accessed April 2019))

SOURCE: CalEEMod Land Use SubType.

Conclusion

The Housing Redistribution Alternative would result in slightly less development and growth in the Downtown Plan Area, as compared to the Downtown Plan. Nevertheless, Alternative 2 would result in the same impact conclusions as the Downtown Plan in all impact categories. Although significant impacts would be less under Alternative 2, unavoidable significant impacts under this Alternative would still occur with respect to historical resources, air quality, construction noise and vibration, transportation safety impacts related to freeway off-ramp queuing and recreational facilities, and transportation, as with the Downtown Plan.

ALTERNATIVE 3: INCREASED DEVELOPMENT POTENTIAL

Alternative Description

The "Increased Development Potential" Alternative would permit greater development capacity in the Markets and Community Center area, in exchange for a higher requirement for the provision of public benefits. Under this alternative, the Industrial-Mixed Use 2 (IX2), in which the only type of housing allowed is through conversion of existing buildings to Joint Living and Work Quarters, would be applied to areas that are proposed as Restricted Light Industrial (MR1), where no housing is allowed under the Downtown Plan. This alternative would raise the maximum FAR to 10.0:1 in areas that are proposed as 3:1, 4.5:1, 6.0:1 and 8.5:1. The FAR would also be raised to a maximum of 13.0:1 in areas that are proposed as 8.0:1 and 10.0:1. **Figure 5-3** shows the changes under the Increased Development Potential Alternative compared to the Downtown Plan. Alternative 3 was included to inform decision makers and foster public participation

on an alternative that could result in higher community benefits by allowing for greater development capacity in the Downtown Plan Area.

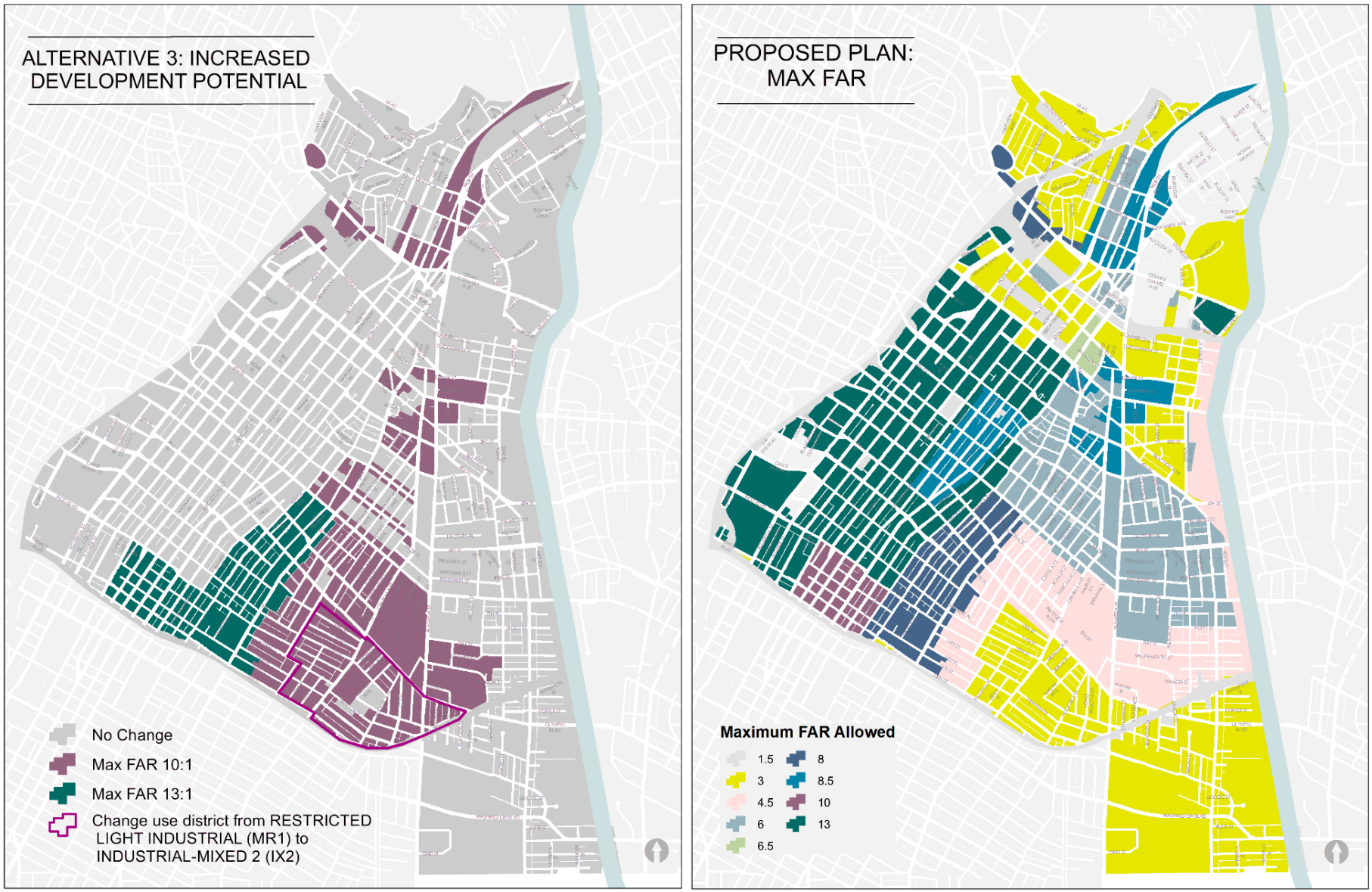
As shown in **Table 5-1**, under Alternative 3 the Downtown Plan Area is projected to have a population of 263,000 residents, with 139,000 housing units and 364,000 jobs in 2040. SCAG projects a Downtown Plan Area population of 189,000 residents in 2040 along with 96,000 housing units and 257,000 jobs. Therefore, Alternative 3 would exceed SCAG's population, housing and job growth forecasts in the Downtown Plan Area. Alternative 3 would result in 6,000 more housing units (5%), 11,000 more persons (4%), and 59,000 more jobs (19%) by 2040 as compared to the Downtown Plan. Because Alternative 3 would increase the development capacity and associated growth in the Downtown Plan Area, as compared to the Downtown Plan, it may also result in greater environmental impacts related to aesthetics, cultural resources, air quality and greenhouse gas emissions, energy, public services and utilities in the Downtown Plan Area. In addition, air quality and greenhouse gas emissions, and energy consumption may decrease elsewhere in the City as a function of reduced VMT as population, housing, and job growth is further concentrated in the Downtown Plan Area.

Alternative 3 would be subject to the escalating bonus system, which dictates that as the FAR capacity increases, greater benefits must be provided. The Increased Development Potential Alternative meets the project objectives to support the delivery of public benefits in the form of affordable housing, open space, preservation, community facilities, and public realm improvements, but does not meet objectives to concentrate development in the most transit served areas.

Under Alternative 3, the Downtown Plan Area would have increased development capacity, as compared to the Downtown Plan. Therefore, it may result in incrementally greater impacts in the Downtown Plan Area, including the significant unavoidable impacts of the Downtown Plan with regard to historical resources, construction noise, construction vibration, deterioration of existing parks, and traffic safety to highway off-ramps as well as the Downtown Plan's significant, but mitigable impacts related to air quality, biological, archaeological and paleontological resources, and hazardous materials. On the other hand, further concentrating development in the Downtown Plan Area may limit development elsewhere in the City, with reductions in environmental impacts regionally. Specifically, this alternative may help reduce overall regional VMT and associated air pollutant and GHG emissions compared to the Downtown Plan by further increasing future development in areas with good transit access and where housing, jobs, and amenities are in close proximity to one another.

Alternative 3 was selected to consider its potential regional benefits and because it would meet all of the basic project objectives, including: accommodating employment, housing, and population growth projections (Primary Objective 1); providing for economic diversification and reinforcement of the Downtown Plan Area as a primary center of employment (Primary Objective 2); building upon Downtown's role as a regional transportation center by allowing for intensive development throughout the Plan Area and concentrating development opportunity immediately surrounding the transit stations (Primary Objective 3); promoting a mode-shift from private automobile usage while fostering a transit, bicycle, and pedestrian supportive environment (Primary Objective 4); reducing vehicle miles traveled to meet the goals of the Senate Bill 375, Senate Bill 743, and California Assembly Bill 32 to reduce carbon emissions (Primary Objective 5; supporting a growing residential population by expanding the areas where housing is permitted and allowing for a full range of housing options (Primary Objective 6); Celebrate and reinforce the character of each of the neighborhoods in the Plan Area (Primary Objective 7); providing a set of implementation tools that are responsive to the range of physical and functional needs across the Plan Area (Primary Objective 8); refining and expanding a system that links development with public benefits to deliver community amenities in the Downtown Plan Area, and is adaptable to the policy needs across the City (Secondary Objective 1); maintaining a meaningful amount of the Plan Area for production and high-intensity traditional industry (Secondary Objective 2); promoting a mix of land uses that fosters sustainability, equity, community, neighborhood density, and healthy living (Secondary Objective 3;

Figure 5-3 Alternative 3: Increased Development Potential



identifying appropriate locations for housing and establishing zoning tools that encourage a range of unit typologies (Secondary Objective 4); ensuring that new development provides the appropriate range of outdoor amenity space and other recreational options to tenants and property owners (Secondary Objective 5); and supporting and sustaining Downtown's ongoing revitalization (Secondary Objective 6).

Although Alternative 3 would generally meet all objectives, it may meet certain objectives to a lesser or greater degree than the Downtown Plan would. It would meet Primary Objective 2 to reinforce the Downtown Plan Area as a primary center of employment for the City and the Southern California region to a greater degree than the Downtown Plan, due to the overall increase in development potential compared to the Downtown Plan. For the same reasons, public benefits would be more than that of the Plan and would meet Secondary Objective 1 to a greater degree than the Downtown Plan. Although Alternative 3 would allow for more development capacity around transit, it would also increase capacity elsewhere in the Plan Area, and growth would likely be spread out. Therefore, Alternative 3 would only partially meet Primary Objective 3, of concentrating growth near transit with an appropriate range of building sizes and mix of uses.

As discussed below, Alternative 3 would result in incremental greater impacts than the Downtown Plan with respect to aesthetics, air quality, cultural resources, hazards/hazardous materials, noise, public services, recreation, transportation/traffic, and utilities/service systems.

Impact Analysis

Aesthetics

Compared to existing conditions, either Alternative 3 or the Downtown Plan would generally allow greater scale and intensity, Alternative 3 would permit greater development than the Downtown Plan in Markets, Community Center and some portion of the Production area, in exchange for a higher requirement for the provision of public benefits. Under this alternative, the maximum FAR would be raised to 10.0:1 in areas that are proposed as3:1, 4.5:1, 6.0:1 and 8.5:1. The FAR would also be raised to a maximum of 13.0:1 in areas that are proposed as 8.0:1 and 10.0:1 under the Downtown Plan. Compared to the Downtown Plan, Alternative 3 may result in incrementally greater impacts to visual character, obstruction of scenic views, alterations of historical resource and shading effects, due to increased development intensity and changes to land use designations. Nevertheless, future development would be implemented in accordance with applicable state and local plans, policies and guidelines including but not limited to the City's General Plan Framework, Conservation Element, Mobility Plan 2035, relevant specific plans, the Downtown Design Guide and provisions of the LAMC as it relates to development standards, visual character and historical resources. As with the Downtown Plan, Alternative 3 could introduce new sources of light and glare in the Downtown Plan Area. However, development in most of the Downtown Plan Area already experiences high levels of nighttime lighting and glare, such that any additional effects would be incremental. In addition, future development would comply with applicable regulations regarding permitted lighting and glare. Similarly, development in the Downtown Plan Area accommodated by Alternative 3 may increase shading and shadows in specific locations; however, shadows would be limited to the immediate area of each new development and would be typical of highly urbanized neighborhoods. Overall, development accommodated by Alternative 3 would result in less than significant aesthetic impacts similar to those of the Downtown Plan.

Air Quality

Alternative 3 would accommodate greater overall development and associated growth than the Downtown Plan. Alternative 3 would result in an increase of 6,000 housing units (5%), 11,000 persons (4%), and 59,000 jobs (19%) through 2040 than the Downtown Plan. Like the Downtown Plan, Alternative 3 would not increase reasonably anticipated development in the Downtown Plan Area in a way that would be

inconsistent with SCAG's growth forecasts for the City; therefore, Alternative 3 would not conflict with the AQMP. Because Alternative 2 would accommodate more overall growth in the Downtown Plan Area than would the Downtown Plan, and would attain to a greater degree the policy goals of the RTP/SCS, AQMP, and City General Plan Framework Element and Air Quality Element goals related to concentrating development in areas with access to transit and reducing vehicle miles traveled and associated emissions than would the Downtown Plan. Therefore, as with the Downtown Plan, impacts related to conflicting with or obstructing implementation of an applicable air quality plan would be less than significant.

Maximum daily construction emissions would be similar to what would occur under the Downtown Plan since the types and magnitudes of individual construction projects would be similar. As with the Downtown Plan, it is reasonable to assume that development would result in construction emissions of NO_X that exceed SCAQMD regional and local significance thresholds, and emissions of PM_{10} and $PM_{2.5}$ that exceed SCAQMD LSTs. Because development capacity would increase under Alternative 3, it is reasonable to assume that operational emissions would also increase compared to the Downtown Plan. Nonetheless, as discussed in Section 4.2, *Air Quality*, and shown in **Table 4.2-11**, future daily regional emissions from mobile sources under implementation of the Downtown Plan is generally expected to decrease relative to existing emissions due primarily to more stringent statewide regulations. It is reasonable to assume that under Alternative 3 future daily regional emissions would generally decrease relative to existing emissions due to improvements in vehicular engine efficiency technologies and fuel pollutant concentrations. As with the Downtown Plan, impacts related to construction emissions would be significant and unavoidable.

The increase in development in the Downtown Plan Area accommodated by Alternative 3 would result in daily emissions of VOC that would exceed the SCAQMD regional significance thresholds due to heavily expanded use of consumer products and increased energy demand, similar to the Downtown Plan. In addition, future development in the Downtown Plan Area accommodated by Alternative 3 would result in daily emissions of PM_{10} and $PM_{2.5}$ from area sources and mobile sources (brake and tire wear) that would exceed the SCAQMD regional significance thresholds. **Mitigation Measure 4.2-2** would be applied to this alternative but, similar to the Downtown Plan, would not be expected to reduce impacts to a less than significant level. As with the Downtown Plan, impacts related to construction emissions would be significant and unavoidable.

As with the Downtown Plan, impacts associated with Alternative 1, including impacts related to toxic air contaminants (TACs) from distribution center truck activity, would be significant as the alternative would still allow distribution centers in portions of the Downtown Plan Area intended for industrial uses. Mitigation Measure 4.2-3 would apply to the Alternative, but without specific project details impacts to sensitive receptors would be significant and unavoidable. As with the Downtown Plan, impacts related to odors would be less than significant.

It should be noted that because Alternative 3 would accommodate more development than the Downtown Plan in the Downtown Plan Area, it may limit growth that would occur elsewhere in the City or region in locations that have less access to transit and less of a mix of jobs and housing. As a result, overall citywide and regional VMT and associated emissions may incrementally lessen under this scenario.

Biological Resources

The Downtown Plan Area is urbanized and generally lacks riparian habitat, wetlands, wildlife corridors and habitat that would support special status plant or animal species. The Los Angeles River, as well as small portions of parks and open space, trees and minor urban landscaping are the only sources of biological habitat in and around the Downtown Plan Area. Both the Downtown Plan and Alternative 3 prioritize infill development in already urbanized area of the City, thus, minimizing development in areas of potential native biological habitat or wildlife corridors. As with the Downtown Plan, Alternative 3 would not foreseeably result in modification of the portions of the Los Angeles River because neither plan includes

components that would affect the existing use, zoning, or land use designation of the Los Angeles River. As with the Downtown Plan, any new development has the potential to disturb sensitive plant or animal species such as nesting birds and heritage or protected trees in the Downtown Plan Area. Therefore, future development would require adherence with federal MBTA and/or the CFGC regulations, and the LAMC Tree Preservation Ordinance (177,404). In addition, Alternative 3 would not interfere with natural resources, degrade the sustainability of natural resources in the region, disrupt existing open space or encroach upon any natural settings. Therefore, Alternative 3 would not conflict with goals, policies, or programs of the General Plan Framework or the City Conservation Element. As with the Downtown Plan, Alternative 3, impacts related to biological resources would be less than significant with implementation of **Mitigation Measures 4.3-1(a)** and **(b)**.

Cultural Resources

The Downtown Plan Area, which is expected to experience substantial new development, includes a high concentration of historical resources. Alternative 3 would permit greater scale and intensity in these areas than would the Downtown Plan and, therefore, may result in greater impacts to cultural resources, including demolition or alteration of a historical resource or its setting, or disturb areas that may potentially contain archaeological resources and/or human remains. Future developments in the Downtown Plan Area would continue to be subject to existing federal, state, and local requirements regarding cultural resources and human remains and may be subject to project-specific mitigation requirements under CEQA. As with the Downtown Plan, existing requirements and **Mitigation Measures 4.4-2(a)**, **(b)**, **(c)** and **d** would reduce impacts to archaeological resource associated with Alternative 3 to a less than significant level. Similar to Downtown Plan, Alternative 1 impacts to human remains would be less than significant based on anticipated compliance with existing regulations.

Although existing regulations provide certain protections for significant historical resources, individual developments allowed by either Alternative 3 or the Downtown Plan could potentially cause a substantial adverse change in or disturbance of historical resources as defined in CEQA Guidelines Section 15064.5. Therefore, as with the Downtown Plan, impacts to historical resources would be significant and unavoidable under Alternative 3, and incrementally greater with Alternative 3.

Energy

Alternative 3 would accommodate greater overall development and associated growth than the Downtown Plan. Alternative 3 would result in an increase of 6,000 housing units (5%), 11,000 persons (4%), and 59,000 jobs (19%) than would otherwise occur under development accommodated by the Downtown Plan for year 2040. Therefore, it is reasonable to assume that overall, implementation of Alternative 3 would result in greater overall energy consumption as compared to the Downtown Plan. As discussed under **Impact 4.5-1** in Section 4.5, *Energy*, (**Table 4.5-5** through **Table 4.5-7**) implementation of the Downtown Plan would result in increased energy consumption in the Downtown Plan Area above 2017 baseline conditions. However, the Downtown Plan would result in lower per capita electricity and natural gas consumption for year 2040, as compared to 2017 baseline conditions. The lower per capita energy use that would occur can be attributed to the fact that implementation of the Downtown Plan would lower per capita VMT due to the location of jobs and housing in close proximity to each other and creation of substantial opportunities to use such transportation modes as transit, bicycling, and walking. Although Alternative 3 may result in greater energy consumption in the Downtown Plan Area overall, the higher overall development intensity may reduce per capita VMT and energy consumption in the City and region. Thus, Alternative 3 may result in incrementally reduced impacts with respect to the inefficient, unnecessary, or wasteful direct or indirect consumption of energy. Like the Downtown Plan, Alternative 3 would not result in energy demands that exceed the existing or planned capacity for the service area or the wider Southern California region. Neither Alternative 3 nor the Downtown Plan would conflict with applicable federal, state, and local energy conservation policies aimed at decreasing reliance on fossil fuels and increasing

reliance on renewable energy sources. Overall, impacts would be less than significant under Alternative 3, as with the Downtown Plan.

Geology and Soils

As with the Downtown Plan, Alternative 3 would generally accommodate development in the same footprints as existing structures in the Downtown Plan Area. Any new development in the Downtown Plan Area would be exposed to existing geologic and soil hazards; however, it would not increase the potential for such hazards or create new hazards. Compliance with existing regulatory requirements and policies, including the LAMC and CBC would reduce impacts from adverse effects related to seismic activity and ground shaking, liquefaction, on or off-site landslides, ground failure; or adverse effects related to expansive soil, or to a geologic unit or soil that is unstable or would become unstable as a result of the project and result in landslide, lateral spreading, liquefaction or collapse. In some cases, future development in the Downtown Plan Area may reduce the potential for property damage and/or safety concerns by replacing older structures with new structures built to current seismic standards. Similar to the Downtown Plan, Alternative 3 would have the potential to disturb paleontological resources. As with the Downtown Plan, geology and soils impacts would be less than significant under Alternative 3 with adherence to regulatory code requirements and **Mitigation Measure 4.6-1(a), (b)** and **(c)** related to paleontological resources.

Greenhouse Gas Emissions

Alternative 3 would accommodate more development and associated growth than the Downtown Plan. Implementation of Alternative 3 would result in an increase of 6,000 housing units (5%), 11,000 persons (4%), and 59,000 jobs (19%) through 2040 beyond that anticipated under the Downtown Plan. Either the Downtown Plan or Alternative 3 would generate GHG emissions through individual project construction and operation. *Section 4.7, Greenhouse Gas Emissions*, **Table 4.7-4** compares current annual GHG emissions for the Downtown Plan Area to 2040 emissions. Implementation of the Downtown Plan would result in a 24 percent increase in total GHG emissions in the Downtown Plan Area by 2040 and a 62 percent reduction in per capita GHG emissions, compared to 2017 baseline conditions. The reduction in per capita GHG emissions below baseline conditions can be attributed to a combination of state-mandated GHG emission reduction strategies and the fact that implementation of the Downtown Plan would lower per capita VMT due to the location of jobs and housing in close proximity to each other and creation of substantial opportunities to use such transportation modes as transit, bicycling, and walking. It is reasonable to assume that under Alternative 3 future per capita emissions would also be lower than existing 2017 baseline emissions due to improved energy efficiency and reduced per capita VMT. Thus, the per capita and net reduction in GHG emissions under Alternative 3 would demonstrate compliance with regional, state, and federal efforts to reduce climate impacts from development and transportation. Although Alternative 3 may result in greater GHG emissions in the Downtown Plan Area, the more intense development under Alternative 3 may contribute to an incremental reduction in Citywide and regional GHG VMT and related GHG emissions by concentrating more future growth in an area well served by transit and where housing, jobs, and services are in close proximity to one another. Overall, impacts would be less than significant under Alternative 3, as with the Downtown Plan.

Hazards and Hazardous Materials

General Plan designations under Alternative 3 and the Downtown Plan would maintain existing light and heavy industrial uses in the southeastern portion of the Downtown Plan Area but would expand the mix of uses in the Markets and Hybrid Industrial designation area to include commercial and residential uses. Although certain heavy industrial facilities would remain and hazardous materials would continue to be transported through the Downtown Plan Area, neither Alternative 3 nor the Downtown Plan would substantially increase hazardous material risks from transport, use or disposal based on the extensive

existing regulations of hazardous materials. As such, as with the Downtown Plan, impacts related to the routine transport, use, or disposal of hazardous materials or upset or accident conditions involving hazardous materials would be less than significant.

Similar to the Downtown Plan, there would be no or less than significant impacts related to airports, or emergency management plans because there are no airports, private airstrips, or wildlands in or near the Plan Area and development under Alternative 3 would not interfere with circulation plans or emergency management plans.

Redevelopment, renovation, and demolition of structures built before 1979 could potentially involve asbestos or lead but asbestos and lead would not be released into the atmosphere with compliance of existing regulations. In addition, future development would potentially occur in Methane Zones and Methane Buffer Zones and near oil wells. Compliance with applicable regulations would reduce such impacts to a less than significant level. As with the Downtown Plan, grading and construction activity could potentially result in the release of soil and/or groundwater contamination, which could potentially affect schools or involve a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment. However, with imposition of **Mitigation Measures 4.8-4(a)** and **4.8-4(b)** to Alternative 3 impacts would be less than significant. Overall impacts associated with Alternative 3 would be similar to, but slightly higher than, those of the Downtown Plan since the overall level of development would be greater.

Hydrology and Water Quality

The Downtown Plan Area is urbanized and almost entirely paved and developed except for parks, green spaces, and the Los Angeles River, which is located on the eastern boundary of the Downtown Plan Area. Similar to the Downtown Plan, Alternative 3 would generally accommodate development within the same footprints as existing structures in the Downtown Plan Area. Therefore, implementation of Alternative 3 would not substantially alter drainage patterns that would result in substantial erosion, siltation, or flooding on- or off-site. Any new development would be subject to federal, state, and local requirements that prevent violations of water quality standards or waste discharge requirements and support the preservation and expansion of pervious surfaces. In addition, any new development projects would be required to incorporate Best Management Practices to manage stormwater and reduce runoff during construction and operation, and industrial sources would be subject to additional stormwater management and discharge requirements under the NPDES program for industrial uses. Compliance with the City's LID Ordinance would further ensure that any future development would not require construction of new stormwater drainage facilities and or expansion of existing facilities beyond specific improvements needed for individual development projects. In the long-term, redevelopment of properties in the Downtown Plan Area would improve surface water quality by replacing older development with new development that incorporates LID methods. Therefore, Alternative 3 would result in less than significant impacts with respect to hydrology and water quality, similar to those of the Downtown Plan.

Land Use and Planning

As with the Downtown Plan, Alternative 3 would allow development of greater scale and intensity than currently exists in portions of the Downtown Plan Area. Alternative 3 would include greater development capacity than the Downtown Plan in the proposed Market and Community Center areas, in exchange for a higher requirement for the provision of public benefits. Under this alternative, the maximum FAR would be raised to 10.0:1 in areas that are proposed as 3:1, 4.5:1, 6.0:1 and 8.5:1 under the Downtown Plan. The FAR would also be raised to a maximum of 13.0:1 in areas that are proposed as 8.0:1 and 10.0:1. **Figure 5-3** shows the changes under the Increased Development Potential Alternative compared to the Downtown Plan. Alternative 3 would be subject to an escalating bonus system, which dictates that as the FAR capacity increases, there is a greater provision of benefits that must be provided. Thus, Alternative 3 would support

the delivery of public benefits in the form of affordable housing, open space, preservation, community facilities, and public realm improvements.

Compared to the Downtown Plan, Alternative 3 would increase development intensity and related growth in the Downtown Plan Area. This may meet objectives related to reinforcing the Downtown Plan Area as a primary center of employment for the City and the Southern California region to a greater degree than the Downtown Plan. In addition, by concentrating more development Downtown, this alternative may incrementally reduce growth elsewhere in the City where transit options and mixed uses are more limited. Either Alternative 3 or the Downtown Plan would be consistent with policies and objectives contained in the 2016-2040 RTP/SCS with respect to high density, transit-oriented development. Similar to the Downtown Plan, Alternative 3 would also be generally consistent with the City's General Plan and Framework Element, Mobility Plan 2035, Air Quality Element and Housing Element 2013-2021. Like the Downtown Plan, Alternative 3 would not physically divide an established community or conflict with an applicable habitat conservation plan or natural community conservation plan. As with the Downtown Plan, impacts would be less than significant under Alternative 3.

Noise

New sensitive uses accommodated by either Alternative 3 or the Downtown Plan would be exposed to ambient noise that is in the "normally unacceptable" to "clearly unacceptable" range based on noise level/land use compatibility standards in the Noise Element the City's General Plan. However, exposure of new development to ambient noise would not increase noise and all new development would be required to take measures to reduce interior noise levels to below 45 dBA.

Any future development in the Downtown Plan Area would include mechanical equipment, loading, trash pick-up, and other noise-generating activities. However, such activities would be typical of the urban environment within the Downtown Plan Area. In addition, any on-site activities would be required to comply with applicable provisions of the LAMC. As with the Downtown Plan, traffic-related noise may increase by more than 3 dBA in some locations, but resulting noise levels would not be in the "normally unacceptable" range. Thus, permanent noise increases due to operational activities accommodated by Alternative 3 would be less than significant.

Future construction activity would be required to comply with appropriate Regulatory Compliance Measures as well as LAMC Chapter 41.40, Section 112.05 and **Mitigation Measure 4.11-1.** Compared to the Downtown Plan, duration of construction and use of heavy duty equipment in the Alternative 3 scenario would be higher than the Downtown Plan due to greater overall development potential. Therefore, construction noise impacts from Alternative 3 is likely to be more than that of the Downtown Plan. Similar to the Downtown Plan, maximum noise levels generated by construction equipment under Alternative 3 could potentially involve two subterranean levels or more, construction durations of 18 months or more, use of large, heavy-duty equipment rated 300 horsepower or greater, or the potential for impact pile driving. Therefore, the impact would remain significant and unavoidable.

Future construction activity, specifically pile driving, could potentially generate vibration exceeding the 90 VdB threshold for buildings extremely susceptible to building damage (e.g., historical and fragile structures). Although mitigation is available to minimize the potential effects of vibration, it cannot be assured that construction-related vibration would not result in building damage. Thus, either Alternative 3 or Downtown Plan would result in a significant and unavoidable impact related to construction vibration.

It is not anticipated that new development in the Downtown Plan Area would involve activities that would result in substantial vibration levels (e.g., blasting operations). As with the Downtown Plan, operational groundborne vibration in the vicinity of new development associated with Alternative 3 would be primarily generated by vehicular travel on the local roadways. According to the FTA *Transit Noise and Vibration*

Impact Assessment guidance document, rubber tires and suspension systems dampen vibration levels from trucks to a level that is rarely perceptible (2006). Accounting for additional vehicle trips that would be accommodated by the Alternative 3, traffic vibration levels would be similar to existing conditions and not perceptible by sensitive receptors. Therefore, impacts related to operational vibration would be less than significant.

Similar to the Proposed Project, Alternative 1 would have no impacts related to airport noise.

Population and Housing

Projected growth under Alternative 3 would exceed SCAG's 2040 population forecast by approximately 74,000 persons (39%) 43,000 dwelling units (45%), and 107,000 jobs (42%). Alternative 3 would also accommodate an increase of 6,000 housing units (5%), 11,000 persons (4%), and 59,000 jobs (19%) than would be accommodated through 2040 under the Downtown Plan. Therefore, like the Downtown Plan, Alternative 3 would increase the development capacity of the Downtown Plan Area in a manner that accommodates SCAG growth projections for the Downtown Plan Area. To an even greater degree than the Downtown Plan, Alternative 3 would concentrate forecast growth in an area with a mix of jobs and housing and with good transit access.

Alternative 3 would be subject to an escalating bonus system, which dictates that as the FAR capacity increases, there is a greater provision of benefits that must be provided. Thus, Alternative 3 would support the delivery of public benefits, including affordable housing.

Although Alternative 3 would accommodate new development and redevelopment projects in the Downtown Plan Area that would likely result in some displacement of existing housing units and residents, it would substantially increase the housing stock of the Downtown Plan Area overall. Therefore, Alternative 3 would allow for additional construction of housing in an urban center, which would offset displacement of existing housing throughout the City. As with the Downtown Plan, population and housing impacts would be less than significant under Alternative 3.

Public Services

Alternative 3 would accommodate more overall development and associated growth than the Downtown Plan. Alternative 3 would result in an increase of 6,000 housing units (5%), 11,000 persons (4%), and 59,000 jobs (19%) beyond that anticipated through 2040 under the Downtown Plan. With respect to fire and police services, either scenario would accommodate new development that would increase demand for fire and police protection service in the Downtown Plan Area. This may result in the need for new or expanded fire and police facilities. Based on the urbanized character of the Downtown Plan Area, it is anticipated that new or expanded facilities could be built without creating significant environmental impacts. However, depending on the location or nature of new facilities, the construction of needed new facilities could potentially result in impacts already identified in this EIR for construction or operations. However, project-specific environmental analysis under CEQA would be required to address any site-specific environmental concerns.

With respect to schools, as summarized in **Table 5-12** residential and non-residential development accommodated by Alternative 3 would result in an estimated 56,082 new students by 2040. Of this total, an estimated 28,628 would enroll in elementary school, 8,817 would enroll in middle school, 16,600 would enroll in high school, and 2,037 would enroll in special day classes. Alternative 3 would result in approximately 8 percent increase in students as compared to the Downtown Plan. As such, Alternative 3 would accommodate development that would increase the student population of the Downtown Plan Area and would create the need for new or expanded school facilities, but to a greater extent than the Downtown Plan. As with the Downtown Plan, developers would be required to pay applicable school impact fees. As

with the Downtown Plan, any impacts associated with new school construction would be similar to those analyzed and identified in the EIR for other types of development, any site-specific impacts would be speculative and would be addressed by LAUSD as part of a project-level CEQA review.

TABLE 5-12 ALTERNATIVE 3 ANTICIPATED STUDENT GENERATION IN THE DOWNTOWN PLAN AREA

		Student Generation				
	Units	Elementary School (TK-5)	Middle School (6-8)	High School (9-12)	SDC	Total Students Generated
Residential[1]	105,017	23,828	6,417	13,610	2,037	45,892
Non-Residential[2]	210,524,997	4,800	2,400	2,989	--	10,189
Total Students Generated by Alternative 3		**28,628**	**8,817**	**16,600**	**2,037**	**56,082**

Note: du = dwelling units; sf = square feet; TK = Transitional Kindergarten; SDC = Specialized Day Care

Totals may not add up due to rounding.

1 Student generation rates for residential use is based on Level 1 – Developer Fee Justification Study for Los Angeles Unified School District (LAUSD 2017d). Residential Generation Rates: Elementary: 0.2269/du, Middle School: 0.0611/du, High School: 0.1296 /du, SDC: 0.0194/du

2 Student generation rates for non-residential use is based on the average of office and retail/service student generation rates for a conservative estimate, taken from the LAUSD Commercial/Industrial Development School Fee Justification Study, September 2010 (LAUSD 2010). Non-residential Generation Rates: Elementary: 0.0228/1,000 sf, Middle School: 0.0114/1,000 sf, High School: 0.0142/1,000 sf. Non-residential uses include commercial, industrial, and public facilities.

With respect to libraries, either Alternative 3 or the Downtown Plan would increase demand for library facilities. However, the Downtown Plan Area is well served by library facilities and would not require the construction of new or expanded facilities.

Compared to the Downtown Plan, Alternative 3 would accommodate more intense development and associated growth, thus requiring more public services Downtown. However, this may reduce development elsewhere in the City, resulting in less need for expansion of public services in other areas. Overall, impacts under Alternative 3 would be less than significant, as with the Downtown Plan.

Recreation

Alternative 3 would accommodate more development and associated growth than the Downtown Plan. As with the Downtown Plan, any new development would increase the use of existing park and recreational facilities throughout the City, including in and around adjacent to the Downtown Plan Area. The City of Los Angeles Public Recreation Plan states that in order to meet long-range local recreational standards, the City should maintain a minimum of two acres of neighborhood facilities and two acres of community recreational facilities for every 1,000 persons, or a combination of neighborhood and community facilities adding up to four acres. Under Alternative 3, the Downtown Plan Area population is projected to increase to approximately 263,000 residents by 2040, thereby decreasing the ratio of parks to residents to approximately 0.98 acre per 1,000 residents. Approximately 793 acres of new parkland would be needed in the Downtown Plan Area to meet the City's park acreage standards under Alternative 3. Future development accommodated by the Downtown Plan would increase the population of the Downtown Plan Area to an estimated 252,000 residents, thereby decreasing the ratio of parks to residents to approximately 1.0 acre per 1,000 residents. Approximately 764 acres of new parkland would be needed in the Downtown Plan Area by 2040 to meet the City's park acreage standards under the Downtown Plan. Approximately four percent more parkland would be needed to meet City standards than under the Downtown Plan. Therefore, impacts to park and recreation facilities would be incrementally greater under Alternative 3.

Developers of residential projects would be required to pay park impact fees, dedicate land, include outdoor amenity spaces, or pay in-lieu Quimby fees to fund new park and recreational facilities. This would partially

mitigate impact related to the deterioration of facilities. Nevertheless, due to the substantial population growth that would result from future development and lack of development capacity for new parks in the Downtown Plan Area, implementation of either Alternative 3 or the Downtown Plan could accelerate the deterioration of existing parks in and around the Downtown Plan Area. Such impacts to existing recreational facilities would be significant and unavoidable under either Alternative 3 or the Downtown Plan. Impacts related to construction of new parks would remain less than significant.

Transportation/Traffic

With respect to transportation, a significant impact would occur if the total daily VMT per service population under the Downtown Plan, or a proposed alternative, were to increase above the 2017 Baseline Condition or if there is inconsistency with the SCAG 2016 RTP/SCS. As shown in **Table 5-13**, VMT per service population under Alternative 3 would be 16.5, while the 2017 Baseline per service population VMT in the Downtown Plan Area is 19.6. Thus, per capita VMT under Alternative 2 would not exceed the 2017 Plan Baseline Condition threshold. Compared to the 2016 SCAG Region Conditions, Alternative 2 has lower vehicle trips per service population (2.5 versus 3.1) and lower VMT per service population (16.5 versus 35.4). Therefore, as with the Downtown Plan, impacts would be less than significant. However, the beneficial impacts to VMT in the Downtown Plan Area would not be as great with Alternative 3 compared to the Downtown Plan. On the other hand, accommodating more development in the Downtown Plan Area would be expected to generally reduce future development in other portions of the City/region, thereby placing more development in an area with good transit access and housing, jobs, and amenities in close proximity to one another. From a regional perspective, this would be expected to reduce overall VMT.

TABLE 5-13 COMPARISON BETWEEN EXISTING TRAFFIC CONDITIONS, THE DOWNTOWN PLAN AND ALTERNATIVE 3

Transportation Metric	Threshold		Downtown Plan (2040)	Alternative 3
	2016 SCAG Region Conditions	2017 Plan Baseline Conditions		
Total Daily VT	82,283,000	758,000	1,375,000	1,582,000
Total Daily VT per Service Population	3.1	2.6	2.5	2.5
Total Daily VMT	948,656,000	5,767,000	8,842,000	10,317,000
Total Daily VMT per Service Population	**35.4**	**19.6**	**15.9**	**16.5**

SOURCE: Fehr & Peers, February 2019.

As with the Downtown Plan, Alternative 3 would not result in significant impacts related to plan consistency, increased hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), or result in inadequate emergency access. However, as with the Downtown Plan, freeway off ramp queuing-related safety issues could potentially arise as additional development occurs in the Downtown Plan Area, which could make a significant and unavoidable impact to freeway safety impacts.

Alternative 3 includes the network enhancements identified in MP 2035 and incorporated in the Downtown Plan.

Tribal Cultural Resources

Development activities that include ground disturbance activities have the potential to significantly affect tribal cultural resources. The Sacred Lands File search conducted for the Downtown Plan Area was positive and the Tongva ethnographic village site of Yangna is thought to be located near Union Station. Effects on

tribal cultural resources are only known once a specific development has been proposed because the effects are highly dependent on both the individual development site conditions and the characteristics of the proposed activity. Although neither the Downtown Plan nor Alternative 3 includes specific development projects, any new development accommodated by either scenario may disturb areas that potentially contain tribal resources. Alternative 3 could have incrementally greater impacts to the Downtown Plan as it would have greater development. As with the Downtown Plan, all future development projects would continue to be subject to existing federal, state, and local requirements and discretionary projects subject to CEQA review would be required to comply with AB 52, which for projects relying on a [mitigated] negative declaration or an EIR, includes consultation with California Native American tribes.. Overall, as with the Downtown Plan, impacts under Alternative 3 would be potentially significant. However, implementation of **Mitigation Measures 4.4-2 (a)**, **(b)**, **(c)**, and **(d)** in Section 4.4, *Cultural Resources* and **4.16-1 (a)** and **(b)** in Section 4.16, *Tribal Cultural Resources*, would reduce Alternative 3 impacts to a less than significant level. Therefore, as with the Downtown Plan, impacts associated with Alternative 3 would be less than significant with mitigation incorporated.

Utilities and Service Systems

Alternative 3 would accommodate more development and associated growth than the Downtown Plan. Alternative 3 would result in an increase of 6,000 housing units (5%), 11,000 persons (4%), and 59,000 jobs (19%) beyond that anticipated through 2040 under the Downtown Plan. As shown in **Table 5-14**, implementation of Alternative 3 would increase wastewater generation in the Downtown Plan Area by approximately 26 mgd, which represents about 15 percent of the HWRP excess capacity of 175 mgd. As shown in **Table 4.17-3** in Section 4.17, *Utilities and Service Systems,* projected wastewater generation for the Downtown Plan Area with implementation of the Downtown Plan would generate an estimated 18 mgd of wastewater. This would represent about 10 percent of the HWRP excess capacity of 175 mgd. Alternative 3 would generate approximately 44 percent more wastewater as compared to the Downtown Plan. Nevertheless, the HWRP would have sufficient available treatment capacity to serve the Downtown Plan Area under Alternative 3. In addition, the HWRP would be able to adequately treat future project-generated sewage under Alternative 3 and the treatment requirements of the RWQCB would not be exceeded so new or expanded treatment facilities would not be needed. Expansion/replacement of Downtown Plan Area conveyance infrastructure may be needed and various facility improvements are already planned. Temporary traffic, air quality, and noise impacts associated with construction of such improvements would be within the parameters described for the Downtown Plan. Continued compliance with the City's Low Impact Development (LID) Ordinance for all new development would ensure that any future development under Alternative 3 would not increase demands on stormwater drainage facilities and or expansion of existing facilities beyond specific improvements needed for individual development projects. As with the Downtown Plan, impacts associated with Alternative 3 would be less than significant.

With respect to water demand, per the 2015 Urban Water Management Plan, current water supplies, planned future water conservation efforts, and planned future water supplies will enable LADWP to reliably provide water that meets the demands of the City for a 25-year planning horizon (through 2040), based on SCAG's population projections. The 2015 UWMP projects an increase of 195,960 afy (38 percent) in water demand between 2015 and 2040, under single/multiple dry year conditions. As shown in **Table 5-15**, the projected net increase in water demand of 37,891 afy generated by new development accommodated by Alternative 3 would represent about 19 percent of the forecasted water demand increase through 2040. As shown in **Table 4.17-6** in Section 4.17, *Utilities and Service Systems,* estimated water demand for the Downtown Plan Area with implementation of the Downtown Plan would be 25 mgd, or 28,000 afy, which would represent about 14 percent of the forecasted citywide water demand increase through 2040. Development under Alternative 3 would demand approximately 36 percent more water than development anticipated under the Downtown Plan. Nevertheless, water supplies would be adequate to meet projected demand through 2040 for Alternative 3 and development of new water supplies would not be necessary.

TABLE 5-14 ALTERNATIVE 3 PROJECTED WASTEWATER GENERATION

Land Use	Dwelling Units or Jobs	Wastewater Generation Rate (gpd/unit)	Wastewater Generation (gpd)
Single-family Residential	6,733 du	144.3	972,000
Multi-family Residential	131,949 du	137.9	18,196,000
Commercial	240,909 jobs	59.8	14,406,000
Industrial	96,383 jobs	123	11,855,000
Public Facilities	26,464 jobs	46.4	1,228
Total 2040 with Alternative 3 Wastewater Generation			46,657,000
Current Wastewater Generation			20,631,000
Net Change in Wastewater Generation			**26,025,000**

Notes: Wastewater generation numbers are rounded to the nearest thousand. Totals may not add up due to rounding.

gpd – gallons per day

du – dwelling units

sf – square feet

SOURCE: Wastewater is assumed to be 100% of indoor water use. Per Exhibit 2D of the 2015 UWMP, indoor water use constitutes the following percentages of overall water use: Residential single family – 46%; Residential multi-family – 68%; Commercial – 76%; Industrial – 98%; and Government – 59%.Per the UWMP, per unit water demand is forecast to decline over time; the forecast 2040 rates are assumed to apply to new development.

TABLE 5-15 ALTERNATIVE 3 PROJECTED WATER DEMAND

Land Use	New Dwelling Units (du) or Jobs in Plan Area	Daily Water Use Rate (gpd/unit)	Daily Water Demand (gpd)	Annual Water Demand (afy)
Single-family Residential	6,733 du	313.8	2,113,000	2,367
Multi-family Residential	131,949 du	202.8	26,759,000	29,974
Commercial	240,909 jobs	78.7	18,960,000	21,237
Industrial	96,383 jobs	125.5	12,096,000	13,549
Public Facilities	26,464 jobs	78.7	2,083,000	2,333
Total 2040 with Alternative 3 Demand			62,010,000	64,461
Current Water Demand			28,184,000	37,891
Net Change in Water Demand			**33,826,000**	**37,891**

Notes: Water demand numbers are rounded to the nearest thousand. Totals may not add up due to rounding.

du – dwelling unit

gpd – gallons per day

afy – acre feet per year (1 af = 325,850 gallons)

SOURCE: Water demand rates were obtained from the LADWP's 2015 Urban Water Management Plan (UWMP), Exhibit2K (LADWP 2016). Per the UWMP, per unit water demand is forecast to decline over time; the forecast 2040 rates are assumed to apply to new development.

Expansion/replacement of water distribution infrastructure may be needed, but temporary traffic, air quality, and noise impacts associated with construction of such improvements would be within the parameters described for the Downtown Plan. As with the Downtown Plan, impacts associated with Alternative 3 would be less than significant. It should also be noted that accommodating more development Downtown may reduce development elsewhere in the City, thus offsetting any increase in water demand in the Downtown Plan Area.

As shown in **Table 4.17-7** in Section 4.17, *Utilities and Service Systems*, the combined daily intake capacity of landfills serving the Downtown Plan Area is 45,540 tons per day and the average disposal intake is 19,143 tons per day, resulting in an available capacity of 26,397 tons per day. As shown in **Table 5-16**, Alternative 3 would generate an increase of approximately 1,287 tons of solid waste per day, which would represent about 5 percent of the total available daily capacity (26,397 ton per day) at local landfills. As shown in **Table 4.17-9** in Section 4.17, *Utilities and Service Systems*, development accommodate by the Downtown Plan would increase the amount of solid waste generated in the Downtown Plan Area by an estimated 1,133 tons per day, or 413,534 tons per year. This represents approximately 4 percent of the available intake capacity of landfills serving the Downtown Plan Area. Alternative 3 would generate approximately 13 percent more waste as compared to the Downtown Plan. Based on the County of Los Angeles Countywide Integrated Waste Management Plan (CIWMP) 2018 Annual Report, sufficient permitted capacity is available to accommodate the County's long-term disposal needs under the status quo. Sufficient permitted capacity is available to accommodate the Downtown Plan Area's solid waste disposal needs. As with the Downtown Plan, solid waste generation under Alternative 3 would remain within the capacity of waste disposal facilities and new or expanded facilities would not be needed. Impacts would be less than significant.

TABLE 5-16 ALTERNATIVE 3 PROJECTED SOLID WASTE GENERATION

Land Use	Dwelling Units or Square Feet	Annual Waste Generation Rate	Annual Waste Generation (tons)	Daily Waste Generation (tons)
Single-family Residential	6,733 du	1.17 ton/du[1]	7,878	22
Multi-family Residential	131,949 du	0.46 ton/du	60,697	166
Commercial	203,261,906 sf	3.01 ton/1,000 sf	611,818	1,676
Industrial	110,876,964 sf	1.24 ton/1,000 sf	137,487	377
Public Facilities	45,730,208 sf	0.93/1,000 sf	42,529	117
Total 2040 Alternative 3 Solid Waste Generation			806,409	2,357
Current Solid Waste Generation			390,771	1,071
Net Change in Waste Generation			**469,638**	**1,287**

Notes: Waste generation (tons) was rounded to the nearest whole number. Totals may not add up due to rounding.

du – dwelling unit

sf – square feet

[1] Converted from CalEEMod default data of 0.41 tons/resident, assuming a persons per unit rate of 2.86 for City of Los Angeles (California Department of Finance (DOF). 2018. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2018 with 2010 Census Benchmark. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/ (accessed April 2019))

SOURCE: CalEEMod Land Use SubType.

Electrical and natural gas supplies are not expected to be adversely affected by development under Alternative 3, but improvements to Downtown Plan Area distribution and telecommunication facilities may be needed. Temporary traffic, air quality, and noise impacts associated with construction of such

improvements would be within the parameters described for the Downtown Plan. As with the Downtown Plan, impacts associated with Alternative 3 would be less than significant.

Conclusion

Alternative 3 would accommodate increased development overall compared to the Downtown Plan and thus more growth in the Downtown Plan Area. Nevertheless, Alternative 3 would result in the same impact conclusions as the Downtown Plan in all impact categories. Unavoidable significant impacts under this alternative would relate to historical resources, air quality, construction noise and vibration, recreational facilities, and traffic safety related to highway off-ramps, and due to higher overall development these impacts would occur to a greater degree than under the Downtown Plan.

ALTERNATIVE 4: NO PROJECT ALTERNATIVE

Alternative Description

The "No Project" alternative involves continued implementation of the existing Central City and Central City North Community Plans. This alternative assumes that the City's existing plans and policies would continue to accommodate development in accordance with existing General Plan designations. As shown in **Table 5-1**, under current plans the Downtown Plan Area is projected to accommodate a population of 112,000 residents, 59,000 housing units, and 278,000 jobs by 2040. SCAG projects growth of the Downtown Plan Area to reach 189,000 residents, 96,000 housing units, and 257,000 jobs by 2040. Therefore, population and housing growth in the Downtown Plan Area would fall below SCAG's forecasts under current plans, while forecast employment growth would be accommodated. Overall, current land use patterns limit population and housing growth in the Downtown Plan Area, as compared to the Downtown Plan, and would likely cause development to occur elsewhere in the region to meet the 2040 SCAG projections for population and housing. This may increase regional emissions of air pollutants and greenhouse gases as well as increased regional energy consumption, VMT, and population displacement.

Alternative 4 was selected because it meets CEQA's requirement to study a "no project" alternative. The analysis of Alternative 4 treats the alternative as a "new" project similar to the other alternatives and discusses both potentially "significant" impacts and mitigation requirements. However, it should be recognized that Alternative 4 would not actually require any new discretionary approval from the City and, therefore, would not technically have any new impacts under CEQA, nor would the City would have a mechanism for imposing the mitigation measures proposed for the Proposed Project and other project alternatives.

Alternative 4 would meet some of the basic project objectives, including: providing for economic diversification and reinforcement of the Downtown Plan Area as a primary center of employment (Primary Objective 2); building upon Downtown's role as a regional transportation center by allowing for intensive development throughout the Plan Area and concentrating development opportunity immediately surrounding the transit stations (Primary Objective 3); promoting a mode-shift from private automobile usage while fostering a transit, bicycle, and pedestrian supportive environment (Primary Objective 4); reducing vehicle miles traveled to meet the goals of the Senate Bill 375, Senate Bill 743, and California Assembly Bill 32 to reduce carbon emissions (Primary Objective 5; supporting a growing residential population by expanding the areas where housing is permitted and allowing for a full range of housing options (Primary Objective 6); celebrating and reinforcing the character of each of the neighborhoods in the Plan Area (Primary Objective 7); maintaining a meaningful amount of the Plan Area for production and high-intensity traditional industry (Secondary Objective 2); Alternative 1 would partially meet the objective of accommodating employment, housing, and population growth projections (Primary Objective 1); however, as noted above, population growth forecast under this alternative is slightly less than SCAG's forecast.

Due to limitations placed on development in the Downtown Plan Area under existing plans and policies, Alternative 4 would not be consistent with Primary Objective 1, which aims to accommodate employment, housing, and population growth projections forecasted through the planning horizon year of 2040 and Primary Objective 8, which aims to provide a set of implementation tools that are responsive to the range of physical and functional needs across the Plan Area, and across the City. It would also fail to fulfill the following secondary objectives: refining and expanding a system that links development with public benefits to deliver community amenities in the Downtown Plan Area, and is adaptable to the policy needs across the City (Secondary Objective 1); promoting a mix of land uses that fosters sustainability, equity, community, neighborhood density, and healthy living (Secondary Objective 3); identifying appropriate locations for housing and establishing zoning tools that encourage a range of unit typologies (Secondary Objective 4); ensuring that new development provides the appropriate range of outdoor amenity space and other recreational options to tenants and property owners (Secondary Objective 5); and supporting and sustaining Downtown's ongoing revitalization (Secondary Objective 6).

Although Alternative 4 would partially fulfill other objectives, it would meet the following primary objectives to a lesser degree than the Downtown Plan would: Primary Objective 3, which aims to concentrate development opportunities immediately surrounding the transit stations with an appropriate range of building sizes and mix of uses; Primary Objective 4, which aims to promote a mode-shift from private automobile usage and foster a transit, bicycle, and pedestrian supportive environment; Primary Objective 5, which aims to reduce VMT to meet the goals of the Senate Bill 375, Senate Bill 743, and California Assembly Bill 32; and Objective 6, which aims to support a growing residential population by expanding the areas where housing is permitted and allowing for a full range of housing options.

As discussed below, Alternative 4 would incrementally increase impacts related to transportation as compared to the Downtown Plan and would have the same significant and unavoidable impacts to air quality, historic resources, construction noise and vibration, recreation and transportation safety related to freeway off-ramps.

Impact Analysis

Aesthetics

Under Alternative 4, development would continue under current planned land use patterns in the Downtown Plan Area. Existing development primarily consists of commercial and industrial land uses with small-scattered pockets of open space parks and residential areas. Structures in the Downtown Plan Area currently range from low-rise structures in industrial zones to high-rise structures located primarily in the commercial-zoned financial district. Compared to the Downtown Plan designations, Alternative 4 would generally accommodate less overall building height, scale and intensity.

The current General Plan designations would generally accommodate development with less overall height, scale and intensity, as compared to the Downtown Plan, and thus may result in fewer changes in visual character, obstruction of scenic views, alterations of historical resource and shading effects. Nevertheless, any development would be implemented in accordance with applicable state and local plans, policies and guidelines including, but not limited to, the City's General Plan Framework, Conservation Element, Mobility Plan 2035, relevant specific plans, the Downtown Design Guide and provisions of the LAMC as it relates to development standards, visual character and historical resources. Like the Downtown Plan, Alternative 4 could introduce new sources of light and glare in the Downtown Plan Area. However, development in most of the Downtown Plan Area already experiences high levels of nighttime lighting and glare, such that any additional effects would be incremental. In addition, future development would comply with applicable regulations regarding permitted light and glare. Similarly, development in the Downtown Plan Area accommodated by Alternative 4 may increase shading and shadows in specific locations; however, shadows would be limited to the immediate area of each new development and would be typical

of highly urbanized neighborhoods. Overall, similar to the Downtown Plan, development accommodated by Alternative 4 may benefit, and would generally enhance, the visual character of the Downtown Plan, and impacts related to aesthetics would be less than significant

Air Quality

Alternative 4 would accommodate less overall development and associated growth than the Downtown Plan. Alternative 4 would result in 74,000 fewer housing units (-56%), 140,000 fewer residents (-56%), and 27,000 fewer jobs (-9%) through 2040 than would be anticipated under the Downtown Plan. Like the Downtown Plan, Alternative 4 would not increase reasonably anticipated development in the Downtown Plan Area in a way that would be inconsistent with growth forecasts and, therefore, would not exceed the assumptions in the AQMP. However, the reduced level of growth in the Downtown Plan Area under Alternative 4 would likely mean that more growth would occur elsewhere in the City or region. This may increase regional impacts related to air quality as a function of VMT if growth occurs in areas with fewer transit options and longer distances between jobs, housing, and services. Like the Downtown Plan, Alternative 4 would not increase reasonably anticipated development in the Downtown Plan Area in a way that would be inconsistent with SCAG's growth forecasts for the City; therefore, Alternative 4 would not conflict with the AQMP. However, because Alternative 4 would accommodate less overall growth in the Downtown Plan Area than would the Downtown Plan, it would attain the policy goals of the RTP/SCS, AQMP, and City General Plan Framework Element and Air Quality Element goals related to concentrating development in areas with access to transit and reducing VMT and associated emissions to a lesser degree. Therefore, as with the Downtown Plan, impacts related to conflicting with or obstructing implementation of an applicable air quality plan would be less than significant.

Although less construction may occur overall under Alternative 4 as compared to the Downtown Plan, maximum daily emissions would be similar to what would occur under the Downtown Plan since the nature and magnitude of individual construction projects would be similar. Therefore, it is reasonable to assume that development would result in construction emissions of NO_X that exceed SCAQMD regional and local significance thresholds, and emissions of PM_{10} and $PM_{2.5}$ that exceed SCAQMD LSTs. Similarly, because less development would occur under Alternative 4, it is reasonable to assume that overall operational emissions would be less as compared to the Downtown Plan. Nevertheless, because a 99 percent reduction in VOC emissions would be needed to bring VOC emissions under the SCAQMD threshold, the increase in development in the Downtown Plan Area accommodated by Alternative 4 could result in daily emissions of VOC that would exceed the SCAQMD regional significance thresholds due to expanded use of consumer products and increased energy demand, similar to the Downtown Plan. In addition, future development in the Downtown Plan Area accommodated by Alternative 4 would result in daily emissions of NOx, PM_{10} and $PM_{2.5}$ from area sources and mobile sources (brake and tire wear) that would exceed the SCAQMD regional significance thresholds since Alternative 4 is not anticipated to result in 61 percent reduction in PM_{10} emissions and 68 percent reduction in $PM_{2.5}$ emissions that would be needed to bring emissions under SCAQMD thresholds. Mitigation measures required for the Downtown Plan would also reduce impacts associated with this alternative. However, because this alternative would not be subject to mitigation measures proposed in the Downtown Plan, criteria pollutant emissions would be potentially higher than the Downtown Plan. Additionally, exposure of sensitive receptors to temporary construction emissions could be significant and unavoidable without the mitigation measure and impacts from toxic air contaminants (TACs) from distribution center truck activity would be greater than that of the Downtown Plan Area. Exposure to odors would also be similar to the less than significant impact identified for the Downtown Plan. As with the Downtown Plan, impacts related to construction and operational emissions, and as well exposure of sensitive receptors to temporary construction emissions would be significant and unavoidable.

Biological Resources

The Downtown Plan Area is urbanized and generally lacks riparian habitat, wetlands, wildlife corridors and habitat that would support special status plant or animal species. The Los Angeles River, as well as small portions of parks and open space, trees and minor urban landscaping are the only sources of biological habitat in and around the Downtown Plan Area. Current City Plans and the Downtown Plan prioritize infill development, thus minimizing development in areas of potential native biological habitat or wildlife corridors. Implementation of current plans, like the Downtown Plan, would not foreseeably result in modification of the portions of the Los Angeles River, as neither plan would include components that would affect the existing use, zoning, or land use designation of the Los Angeles River. Although implementation of Alternative 4 would involve less overall development and associated growth than the Downtown Plan, any new development has the potential to disturb sensitive plant or animal species such as nesting birds and heritage or protected trees in the Downtown Plan Area. Therefore, any future development would require adherence with the federal MBTA, the CFGC, and the LAMC Tree Preservation Ordinance (177,404). Alternative 4 would not interfere with natural resources, degrade the sustainability of natural resources in the region, disrupt existing open space or encroach upon any natural settings. Therefore, Alternative 4 would not conflict with goals, policies, and programs of the General Plan Framework or the City Conservation Element. **Mitigation Measures 4.3-1(a)** and **(b)** would also reduce potential disturbance of nesting birds under Alternative 4. However, because Alternative 4 would not be subject to mitigation measures proposed for the Downtown Plan, the potential to disturb nesting birds would be greater than under the Downtown Plan and would be significant and unavoidable.

Cultural Resources

The Downtown Plan Area, which is expected to experience substantial new development, includes a high concentration of historical resources. As with the Downtown Plan, Alternative 4 may result in demolition or alteration of historical resources or their setting or disturb areas that may potentially contain archaeological resources. Alternative 4 would accommodate development consistent with current land use designation and patterns and, as such, may result in slightly reduced impacts to historical resources and associated settings as compared to the Downtown Plan. Either Alternative 4 or the Downtown Plan would have the potential to disturb archaeological resources and/or human remains. All future development projects would continue to be subject to existing federal, state, and local requirements with respect to cultural resources and discretionary projects may be subject to project-specific mitigation requirements under CEQA. As with the Downtown Plan, implementation of **Mitigation Measures 4.4-2(a)**, **(b)**, and **(c)** and **(d)** would reduce the potential to disturb archaeological resources and human remains. However, because this alternative would not be subject to mitigation measures proposed in the Downtown Plan, the potential for disturbance would be greater than under the Downtown Plan and would be significant and unavoidable. In addition, although existing regulations provide certain protections for significant historical resources, individual developments allowed by Alternative 4 could potentially cause a substantial adverse change in or disturbance of historical resources as defined in CEQA Guidelines Section 15064.5. However, because this alternative would not be subject to mitigation measures proposed for the Downtown Plan, the potential for disturbance of cultural resources would be greater than under the Downtown Plan, and significant and unavoidable.

Energy

As compared to the Downtown Plan, development under Alternative 4 would result in less transportation energy use and less electricity and natural gas consumption than the Downtown Plan in 2040. However, on a per capita basis, Alternative 4 would result in more transportation energy use and more electricity and natural gas consumption than the Downtown Plan for year 2040. In addition, Alternative 4 would result in 2040 per capita electricity and natural gas consumption higher than under 2017 baseline conditions, while the Downtown Plan would result in lower per capita electricity and natural gas consumption in 2040 as

compared to year 2017 baseline conditions. The lower per capita energy use that would occur under the Downtown Plan can be attributed in part to the fact that implementation of the Downtown Plan would lower per capita VMT due to the location of jobs and housing in close proximity to each other and creation of substantial opportunities to use such transportation modes as transit, bicycling, and walking.

Because Alternative 4 would consume less energy overall, but more energy than the Downtown Plan on a per capita basis, it may result incrementally greater impacts with respect to the inefficient, unnecessary, or wasteful direct or indirect consumption of energy as compared to the Downtown Plan. Nevertheless, as with the Downtown Plan, Alternative 4 would not result in energy demands that exceed the existing or planned capacity for the service area or the wider Southern California region. In addition, neither Alternative 4 nor the Downtown Plan would conflict with applicable federal, state, or local energy conservation policies aimed at reducing reliance on fossil fuels and increasing reliance on renewable energy sources. Overall, impacts would be less than significant under Alternative 4, as with the Downtown Plan.

Geology and Soils

Implementation of the City's current General Plan and Downtown Plan would generally accommodate development in the same footprints as existing structures in the Downtown Plan Area. Any new development in the Downtown Plan Area under either Alternative 4 or the Downtown Plan would be exposed to existing geologic and soil hazards; however, it would not increase the potential for such hazards or create new hazards. Compliance with existing regulatory requirements and policies, including the LAMC and CBC would reduce impacts from adverse effects related to seismic activity and ground shaking, liquefaction, on or off-site landslides, ground failure; or adverse effects related to expansive soil,or to a geologic unit or soil that is unstable or would become unstable as a result of the project and result in landslide, lateral spreading, liquefaction or collapse. In some cases, future development in the Downtown Plan Area may reduce the potential for property damage and/or safety concerns by replacing older structures with new structures built to current seismic standards. Similar to the Downtown Plan, Alternative 1 would have the potential to disturb paleontological resources. Implementation of **Mitigation Measures 4.6-1(a), (b)** and **(c)** would reduce the potential to disturb or damage paleontological resources. However, because this alternative would not be subject to mitigation measures proposed for the Downtown Plan, the potential for disturbance of paleontological resources would be greater than under the Downtown Plan, and significant and unavoidable.

Greenhouse Gas Emissions

Development accommodated by either Alternative 4 or the Downtown Plan Alternative would generate GHG emissions through individual project construction and operation. GHG emissions would be generated by direct sources such as motor vehicles, natural gas consumption, solid waste handling/treatment, and indirect sources such as electricity generation. Section 4.7, *Greenhouse Gas Emissions*, **Table 4.7-4** compares current annual GHG emissions for the Downtown Plan Area to 2040 emissions with and without the Downtown Plan. Implementation of Alternative 4 would result in a 3 percent reduction in total GHG emissions in the Downtown Plan Area in 2040 and a 34 percent reduction in per capita GHG emissions compared to 2017 baseline conditions. Implementation of the Downtown Plan would result in a 24 percent increase in total GHG emissions in the Downtown Plan Area in 2040 and a 62 percent reduction in per capita GHG emissions. Under either Alternative 4 or the Downtown Plan, future per capita emissions would be lower than under 2017 baseline emissions due to improved energy efficiency and reduced per capita VMT. The per capita reduction in GHG emissions demonstrates compliance with regional, state, and federal efforts to reduce climate impacts from development and transportation. Overall, impacts would be less than significant under Alternative 4, as with the Downtown Plan.

Although Alternative 4 would result in fewer GHG emissions than the Downtown Plan in the Downtown Plan Area, it would accommodate less intense development and associated growth in the Downtown Plan

Area, which may result in more population and housing growth elsewhere in the City and region where fewer transit options are available and the distances between residences, jobs, and services are greater. As a result, overall citywide and regional GHG emissions as a function of VMT may increase and Alternative 4 would not be as consistent with AB 32, SB 32, SB 375 (through demonstration of conformance with the 2016–2040 RTP/SCS), the Sustainable City pLAn and GreenLA as the Downtown Plan. Overall GHG emissions would be incrementally greater than those of the Downtown Plan.

Hazards and Hazardous Materials

Development under the City's General Plan would continue under the current planned land use pattern in the City, whereas the Downtown Plan would maintain existing light and heavy industrial uses in the southeastern portion of the Downtown Plan Area but expand the mix of uses in the Markets and Hybrid Industrial designation areas to include commercial and residential uses. Alternative 4 would involve no change to planned land use patterns and would involve less overall development capacity and associated growth than would occur under the Downtown Plan. Similar to the Downtown Plan, operational activities associated with development under Alternative 4 would not create increased potential for upset or accident conditions involving hazardous materials release from transport, use or disposal. As such, as with the Downtown Plan, impacts related to the routine transport, use, or disposal of hazardous materials or upset or accident conditions involving hazardous materials would be less than significant.

Similar to the Downtown Plan, this alternative would pose no or less than significant issues related to airports or emergency management plans because there are no airports or private airstrips in or near the Plan Area, and development under Alternative 4 would not interfere with circulation plans or emergency management plans. No wildland fire hazard areas are present Downtown; therefore, no impacts related to wildland fire risks would occur.

As with the Downtown Plan, redevelopment, renovation, and demolition of structures built before 1979 could potentially involve asbestos or lead but asbestos and lead would not be released into the atmosphere with compliance of existing regulations. In addition, future development would potentially occur in Methane Zones and Methane Buffer Zones and near oil wells. Grading and construction activity could also potentially result in the release of soil and/or groundwater contamination, which could potentially affect schools. Compliance with applicable regulations would reduce such impacts to a less than significant level. As with the Downtown Plan, grading and construction activity could potentially result in the release of soil and/or groundwater contamination, which could potentially affect schools or involve a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment. Overall impacts associated with Alternative 4 would be similar to, but slightly less than, those of the Downtown Plan since the overall level of development would be lower. As with the Downtown Plan, impacts related to the potential disturbance of contaminated soils would be significant. Adherence to **Mitigation Measures 4.8-4(a)** and **4.8-4(b),** as discussed in Section 4.8, *Hazards and Hazardous Materials*, would reduce impacts related to contaminated soils. However, because this alternative would not be subject to mitigation measures proposed in the Downtown Plan, the potential for exposure to contaminants to the public due to possible construction on hazardous sites, and release of hazardous emissions which could potentially affect schools would be greater than under the Downtown Plan and would be significant and unavoidable.

Hydrology and Water Quality

The Downtown Plan Area is urbanized and almost entirely paved and developed except for parks, green spaces, and the Los Angeles River, which is located on the eastern boundary of the Downtown Plan Area. Alternative 4 would accommodate development in a manner consistent with current land use patterns and, therefore, would not substantially alter drainage patterns or result in substantial erosion, siltation, or flooding on- or off-site. Development accommodated by the either Alternative 4 or the Downtown Plan

would be subject to federal, state, and local requirements that prevent violations of water quality standards or waste discharge requirements and support the preservation and expansion of pervious surfaces. In addition, new development projects under either Alternative 4 or the Downtown Plan would be required to incorporate Best Management Practices to manage stormwater and reduce runoff during construction and operation, and industrial sources would be subject to additional stormwater management and discharge requirements under the NPDES program for industrial uses. Compliance with the City's LID Ordinance would further ensure that any future development resulting from either this alternative or the Downtown Plan would not require construction of new stormwater drainage facilities and or expansion of existing facilities beyond specific improvements needed for individual development projects. In the long-term, redevelopment of sites in the Downtown Plan Area under either Alternative 4 or the Downtown Plan would improve surface water quality by replacing older development with new development that incorporates LID methods. Therefore, like the Downtown Plan, Alternative 4 would not adversely affect conditions with respect to hydrology and water quality and impacts would be less than significant.

Land Use and Planning

Under Alternative 4, development would continue under current planned land use patterns in the City. This alternative would not accommodate the greater building heights, scale and intensity that could occur in portions of the Downtown Plan Area under the Downtown Plan, especially in areas with proposed Transit Core, Hybrid Industrial, and Transit Community designations. Like the Downtown Plan, Alternative 1 would be generally consistent with 2016-2040 RTP/SCS policies related to the provision of high intensity and transit-oriented development as well as with the City's General Plan and Framework Element, Mobility Plan 2035, and Housing Element 2013-2021. However, as discussed under *Air Quality*, Alternative 4 may implement 2016-2040 RTP/SCS, AQMP, and Air Quality Element policies related to concentrating development near transit and reducing regional VMT to a lesser degree than the Downtown Plan since the lower overall development totals may result in increased development elsewhere in the City and incrementally higher regional VMT. Like the Downtown Plan, Alternative 4 would not physically divide an established community or conflict with an applicable habitat conservation plan, natural community conservation plan. Overall, like the Downtown Plan, this alternative would not conflict with land use plans and policies or divide a community. Overall, impacts related to land use would be less than significant under Alternative 4, as with the Downtown Plan.

Noise

New sensitive uses accommodated by either Alternative 4 or Downtown Plan would be exposed to ambient noise that is in the "normally unacceptable" to "clearly unacceptable" range based on noise level/land use compatibility standards in the Noise Element the City's General Plan. However, exposure of new development to ambient noise would not increase noise and new development would be required to incorporate methods to reduce interior noise levels to below 45 CNEL.

Any future development Downtown would include mechanical equipment, loading, trash pick-up, and other noise-generating activities. However, such activities would be typical of the urban environment in the Downtown Plan Area. In addition, any on-site activities would be required to comply with applicable provisions of the LAMC. Future development accommodated by either Alternative 4 or the Downtown Plan would also increase vehicle trips in the Downtown Plan Area that would generate mobile noise. However, mobile noise would not increase noise levels to be within the "normally unacceptable" category for land uses adjacent to affected corridors. Permanent noise increases due to stationary and mobile operational activities would be similar to those of the Downtown Plan.

All construction would be required to comply with the appropriate Regulatory Compliance Measures as well as LAMC Chapter 41.40, Section 112.05. Nevertheless, maximum noise levels generated by construction equipment under Alternative 4 could potentially involve two subterranean levels or more,

construction durations of 18 months or more, use of large, heavy-duty equipment rated 300 horsepower or greater, or the potential for impact pile driving. In addition, **Mitigation Measure 4.11-1** for the Downtown Plan would not apply. Therefore, impacts from temporary construction noise resulting from implementation of Alternative 4 would be significant and unavoidable and be greater than that of the Downtown Plan.

Any future construction activity, specifically pile driving, could potentially generate vibration exceeding the 90 VdB threshold for buildings extremely susceptible to building damage (e.g., historical structures). Although mitigation is available to minimize the potential effects of vibration, it cannot be assured that construction-related vibration would not result in building damage. Mitigation Measure 4.11-2(a) and (b) would not apply and thus, construction-related vibration would be greater to that of the Downtown Plan, and significant and unavoidable impact.

It is not anticipated that new development in the Downtown Plan Area would involve activities that would result in substantial vibration levels (e.g., blasting operations). Like the Downtown Plan, operational groundborne vibration in the vicinity of new development associated with Alternative 4 would be primarily generated by vehicular travel on the local roadways. According to the FTA *Transit Noise and Vibration Impact Assessment* guidance document, rubber tires and suspension systems dampen vibration levels from trucks to a level that is rarely perceptible (2006). Accounting for additional vehicle trips that would be accommodated by Alternative 4, traffic vibration levels would be similar to existing conditions and not perceptible.

Similar to the Proposed Project, Alternative 4 would have no impacts related to airport noise.

Population and Housing

Projected growth under Alternative 4 would fall below SCAG's 2040 population forecast by approximately 77,000 persons (-41%), 37,000 dwelling units (-39%) but would exceed employment forecasts by 21,000 jobs (8%), respectively. The population forecast for Alternative 4 is less than under SCAG's RTP/SCS, but Alternative 4 would concentrate forecast growth in an area with a mix of jobs and housing and with good transit access. As such, although it would not implement RTP/SCS policies related to jobs/housing balance and concentrating growth and development near transit to the same degree that the Downtown Plan would, it would not result in significant impacts related population or housing growth. Alternative 4 would have less potential to displace housing than the Downtown Plan, but would also include less replacement housing. Like the Downtown Plan, Alternative 4 would result in an overall increase in housing that would more than offset any housing displacement that may occur. It should be noted, however, that limiting housing development in the Downtown Plan Area as would occur under Alternative 4 may result in increased housing development elsewhere in the City, which could potentially increase displacement of existing housing in other Los Angeles neighborhoods. Like the Downtown Plan, Alternative 4 would not induce substantial population growth inconsistent with the regional growth plans. Overall, impacts related to population and housing would be less than significant under Alternative 4, as with the Downtown Plan.

Public Services

Implementation of Alternative 4 would involve less overall development and associated growth than the Downtown Plan. Nevertheless, the increased growth under either scenario may require additional public facilities to serve new residents. With respect to fire and police services, either Alternative 4 or the Downtown Plan would accommodate new development that would increase demand for fire and police protection service. This may result in the need for new or expanded fire and police facilities. Based on the urbanized character of the Downtown Plan Area, it is anticipated that new or expanded facilities could be built without creating significant environmental impacts. Depending on the location or nature of new facilities, the construction of needed new facilities could potentially result in impacts; however, like the Downtown Plan, those impacts would be consistent with those already identified in this EIR for

construction or operations. Project-specific environmental analysis under CEQA would be required to address any site-specific environmental concerns.

With respect to schools, as summarized in **Table 5-17**, residential and non-residential development accommodated by Alternative 4 would result in approximately 16,9178 new students by 2040. Of this total, an estimated 8,505 would enroll in elementary school, 2,921 would enroll in middle school, 4,999 would enroll in high school, and 493 would enroll in special day classes. Overall Alternative 4 would result in approximately 69 percent less students as compared to the Downtown Plan. As such, Alternative 4 would accommodate development that would increase the student population of the Downtown Plan Area and would create the need for new or expanded school facilities, but to a lesser extent than the Downtown Plan. As with the Downtown Plan, developers would be required to pay applicable school impact fees. As with the Downtown Plan, any impacts associated with new school construction would be similar to those analyzed and identified in the EIR for other types of development, any site-specific impacts would be speculative and would be addressed by LAUSD as part of a project-level CEQA review.

TABLE 5-17 ALTERNATIVE 4 ANTICIPATED STUDENT GENERATION IN THE DOWNTOWN PLAN AREA

		Student Generation				
	Units	Elementary School (TK-5)	Middle School (6-8)	High School (9-12)	SDC	Total Students Generated
Residential[1]	25,429 du	5,770	1,554	3,296	493	11,112
Non-Residential[2]	119,942,669 sf	2,735	1,367	1,703	--	5,805
Total Students Generated by the No Project Alternative		**8,505**	**2,921**	**4,999**	**493**	**16,918**

Note: du = dwelling units; sf = square feet; TK = Transitional Kindergarten; SDC = Specialized Day Care

Totals may not add up due to rounding.

[1] Student generation rates for residential use is based on Level 1 – Developer Fee Justification Study for Los Angeles Unified School District (LAUSD 2017d). Residential Generation Rates: Elementary: 0.2269/du, Middle School: 0.0611/du, High School: 0.1296 /du, SDC: 0.0194/du

[2] Student generation rates for non-residential use is based on the average of office and retail/service student generation rates for a conservative estimate, taken from the LAUSD Commercial/Industrial Development School Fee Justification Study, September 2010 (LAUSD 2010). Non-residential Generation Rates: Elementary: 0.0228/1,000 sf, Middle School: 0.0114/1,000 sf, High School: 0.0142/1,000 sf. Non-residential uses include commercial, industrial, and public facilities.

With respect to libraries, either Alternative 4 or the Downtown Plan would increase demand for library facilities. However, the Downtown Plan Area is well served by library facilities and would not require the construction of new or expanded facilities.

Overall, impacts related to public services would be less than significant under Alternative 4, as with the Downtown Plan.

Recreation

Implementation of Alternative 4 would involve less overall development and associated population increases than the Downtown Plan. However, any new development would increase the use of existing park and recreational facilities throughout the City, including in and around adjacent to the Downtown Plan Area. The City of Los Angeles Public Recreation Plan states that in order to meet long-range local recreational standards, the City should maintain a minimum of two acres of neighborhood facilities and two acres of community recreational facilities for every 1,000 persons, or a combination of neighborhood and community facilities adding up to four acres. Under Alternative 4, the Downtown Plan Area population is projected to increase to approximately 112,000 residents, thereby reducing the ratio of parks to residents to approximately 2.18 acres per 1,000 residents. Approximately 203 acres of new parkland would be needed in the Downtown Plan Area by 2040 to meet the City's park acreage standards under Alternative 4. Under

the Downtown Plan, the population of the Downtown Plan Area would increase to an estimated 252,000 residents, thereby reducing the ratio of parks to residents to approximately 1.0 acre per 1,000 residents. Approximately 764 acres of new parkland would be needed in the Downtown Plan Area by 2040 to meet the City's park acreage standards under the Downtown Plan.

Developers of residential projects would be required to pay park impact fees, dedicate land, include outdoor amenity spaces, or pay in-lieu Quimby fees to fund new park and recreational facilities. This would partially mitigate impacts related to deterioration of facilities. However, due to the substantial population growth that would result from future development and lack of development capacity for new parks in the Downtown Plan Area, implementation of either Alternative 4 or Downtown Plan could accelerate the deterioration of existing parks in and around the Downtown Plan Area. This potential would be incrementally less for Alternative 4. As with the Downtown Plan, Alternative 4 would not be expected to result in the construction of substantial new park acreage. As with the Downtown Plan, impacts related to deterioration of parks would be significant and unavoidable.

Transportation/Traffic

As shown in **Table 5-18**, VMT per service population under Alternative 4 would not exceed the 2017 baseline condition threshold. Compared to the 2016 SCAG region condition, Alternative 4 would have lower vehicle trips per service population (2.7 versus 3.1) and lower VMT per service population (18.9 versus 35.4). Compared to the 2017 baseline condition, Alternative 4 would have higher daily vehicle trips per service population (2.7 versus 2.6), but lower VMT per service population (18.9 versus 19.6). Alternative 4 would not have the beneficial impacts to VMT of the Downtown Plan.

TABLE 5-18 COMPARISON BETWEEN EXISTING TRAFFIC CONDITIONS FOR THE DOWNTOWN PLAN AND ALTERNATIVE 4

Transportation Metric	Threshold		Downtown Plan (2040)	Alternative 4
	2016 SCAG Region Conditions	2017 Plan Baseline Conditions		
Total Daily VT	82,283,000	758,000	1,375,000	1,045,000
Total Daily VT per Service Population	3.1	2.6	2.5	2.7
Total Daily VMT	948,656,000	5,767,000	8,842,000	7,372,000
Total Daily VMT per Service Population	**35.4**	**19.6**	**15.9**	**18.9**

SOURCE: Fehr & Peers, February 2019.

As with the Downtown Plan, Alternative 4 would not increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), or result in inadequate emergency access. However, as with the Downtown Plan, freeway off ramp queuing-related safety issues could potentially arise as additional development occurs in the Downtown Plan Area. As with the Downtown Plan, this would result in significant and unavoidable impacts to freeway safety impacts. Alternative 4 includes the network enhancements and street designations identified in MP 2035. However, it does not assume amendments to the MP 2035 that are proposed as part of the Downtown Plan.

Tribal Cultural Resources

As described in Section 4.4, *Cultural Resources*, Los Angeles has a long history of Native American occupation, and any development activities that include ground disturbance have the potential to significantly impact tribal cultural resources. Effects on tribal cultural resources are only known once a specific development has been proposed because the effects are highly dependent on both the individual

development site conditions and the characteristics of the proposed activity. The Sacred Lands File search conducted for the Downtown Plan Area was positive and the Tongva ethnographic village site of Yangna is thought to be located near Union Station. Development accommodated by either Alternative 4 or the Downtown Plan may disturb areas that potentially contain tribal resources. Similar to the Downtown Plan, all future development projects under Alternative 4 would continue to be subject to existing federal, state, and local requirements and discretionary projects, subject to CEQA review would be required to comply with AB 52, which for projects relying on a [mitigated] negative declaration or an EIR, would require consultation with California Native American tribes. Implementation of **Mitigation Measures 4.4-2 (a)**, **(b)**, **(c)**, and **(d)** in Section 4.4, *Cultural Resources,* and **Measures 4.16-1(a)** and **(b)** in Section 4.16-1, *Tribal Cultural Resources*, would reduce the potential to disturb tribal cultural resources. However, this alternative would not be subject to mitigation measures proposed in the Downtown Plan. Therefore, the potential for disturbance of tribal cultural resources would be greater than under the Downtown Plan and significant and unavoidable.

Utilities and Service Systems

Implementation of Alternative 4 would involve less overall development and associated growth than the Downtown Plan. Alternative 4 would result in 74,000 fewer housing units (-56%), 140,000 fewer residents (-56%), and 27,000 fewer jobs (-9%) than would be added through 2040 under the Downtown Plan. As shown in **Table 4.17-3,** in Section 4.17, *Utilities and Service Systems***,** projected wastewater generation for the Downtown Plan Area in 2040 with implementation of the Downtown Plan. would generate an estimated 18 mgd of wastewater, which would represent about 10 percent of the HWRP excess capacity of 175 mgd. By comparison, **Table 5-19** indicates that implementation of Alternative 4 would increase wastewater generation in the Downtown Plan Area by approximately 7 million gallons per day mgd, which represents about 4 percent of the HWRP excess capacity of 175 mgd. Alternative 4 would generate approximately 61 percent less wastewater as compared to the Downtown Plan. Therefore, as with the Downtown Plan, the HWRP would have sufficient available treatment capacity to serve the Downtown Plan Area under Alternative 4. In addition, the HWRP would be able to adequately treat future project-generated sewage under Alternative 4 and the treatment requirements of the RWQCB would not be exceeded so new or expanded treatment facilities would not be needed. Expansion/replacement of Downtown Plan Area conveyance infrastructure may be needed and various facility improvements are already planned. Temporary traffic, air quality, and noise impacts associated with construction of such improvements would be within the parameters described for the Downtown Plan. Continued compliance with the City's Low Impact Development (LID) Ordinance for all new development would ensure that any future development under Alternative 2 would not increase demands on stormwater drainage facilities and or expansion of existing facilities beyond specific improvements needed for individual development projects.

With respect to water demand, per the 2015 Urban Water Management Plan, current water supplies, planned future water conservation efforts, and planned future water supplies will enable LADWP to reliably provide water that meets the demands of the City for a 25-year planning horizon (through 2040), based on SCAG's population projections. The 2015 UWMP projects an increase of 195,960 afy (38 percent) in water demand between 2015 and 2040, under single/multiple dry year conditions. As shown on **Table 5-20**, the projected net increase in water demand of 9,947 afy generated by new development accommodated by Alternative 4 would represent about 5 percent of the forecasted water demand increase through 2040. By comparison, as shown in **Table 4.17-6,** in Section 4.17, *Utilities and Service Systems*, estimated water demand for the Downtown Plan Area in 2040 with implementation of the Downtown Plan would be 25 mgd, or 28,000 afy. This represents about 14 percent of the forecasted citywide water demand increase through 2040. Alternative 4 would demand approximately 64 percent less water as compared to the Downtown Plan. Therefore, as with the Downtown Plan, adequate water supply exists to meet projected demand through the year 2040 for Alternative 4 and development of new water supplies would not be necessary. Expansion/replacement of water distribution infrastructure may be needed, but temporary traffic, air

quality, and noise impacts associated with construction of such improvements would be within the parameters described for the Downtown Plan.

TABLE 5-19 ALTERNATIVE 4 PROJECTED WASTEWATER GENERATION

Land Use	Dwelling Units or Jobs	Wastewater Generation Rate (gpd/unit)	Wastewater Generation (gpd)
Single-family Residential	6,733 du	144.3	972,000
Multi-family Residential	52,361 du	137.9	7,221,000
Commercial	169,955 jobs	59.8	10,163,000
Industrial	51,689 jobs	123	6,358,000
Public Facilities	56,795 jobs	46.4	2,635,000
Total 2040 with Alternative 4 Wastewater Generation			27,348,513
Current Wastewater Generation			20,631,000
Net Change in Wastewater Generation			**6,717,175**

Notes: Wastewater generation numbers are rounded to the nearest thousand. Totals may not add up due to rounding.

gpd – gallons per day

du – dwelling units

SOURCE: Wastewater is assumed to be 100% of indoor water use. Per Exhibit 2D of the 2015 UWMP, indoor water use constitutes the following percentages of overall water use: Residential single family – 46%; Residential multi-family – 68%; Commercial – 76%; Industrial – 98%; and Government – 59%.Per the UWMP, per unit water demand is forecast to decline over time; the forecast 2040 rates are assumed to apply to new development.

TABLE 5-20 ALTERNATIVE 4 PROJECTED WATER DEMAND IN THE DOWNTOWN PLAN AREA

Land Use	Dwelling Units or Jobs in Plan Area	Daily Water Use Rate (gpd/unit)	Daily Water Demand (gpd)	Annual Water Demand (afy)
Single-family Residential	6,733 du	313.8	2,113,000	2,367
Multi-family Residential	52,361 du	202.8	10,619,000	11,895
Commercial	169,955 jobs	78.7	13,375,000	14,982
Industrial	51,689 jobs	125.5	6,487,000	7,266
Public Facilities	56,795 jobs	78.7	4,470,000	5,007
Total 2040 with Alternative 4 Demand			37,064,000	41,517
Current Water Demand			28,184,000	31,570
Net Change in Water Demand			8,880,000	**9,947**

Notes: Water demand numbers are rounded to the nearest thousand. Totals may not add up due to rounding.

du – dwelling unit

gpd – gallons per day

afy – acre feet per year (1 af = 325,850 gallons)

SOURCE: Water demand rates were obtained from the LADWP's 2015 Urban Water Management Plan (UWMP), Exhibit2K (LADWP 2016). Per the UWMP, per unit water demand is forecast to decline over time; the forecast 2040 rates are assumed to apply to new development.

As shown in **Table 4.17-7** in Section 4.17, *Utilities and Service Systems*, the combined daily intake capacity of landfills serving the Downtown Plan Area is 45,540 tons per day and the average disposal intake is 19,143 tons per day, resulting in an available capacity of 26,397 tons per day. As shown in **Table 5-21,** implementation of Alternative 4 would generate an increase of approximately 421 tons of solid waste per day above existing conditions, which would represent about 2 percent of the total available daily capacity (26,397 ton per day) at local landfills. As shown in **Table 4.17-9** in Section 4.17, *Utilities and Service Systems*, development accommodated by the Downtown Plan would increase the amount of solid waste generated in the Downtown Plan Area by approximately 1,133 tons per day, or 413,534 tons per year, above existing conditions. This would represent approximately 4 percent of the available intake capacity of landfills serving the Downtown Plan Area. Alternative 4 would generate approximately 63 percent less waste as compared to the Downtown Plan. Based on the County of Los Angeles Countywide Integrated Waste Management Plan (CIWMP) 2018 Annual Report, sufficient permitted capacity is available to accommodate the County's long-term disposal needs under the status quo. Sufficient permitted capacity is available to accommodate the Downtown Plan Area's solid waste disposal needs. Therefore, as with the Downtown Plan, implementation of Alternative 4 would result in solid waste generation that would remain within the capacity of waste disposal facilities serving the City. Therefore, similar to the Downtown Plan, new or expanded facilities would not be needed.

TABLE 5-21 ALTERNATIVE 4 PROJECTED SOLID WASTE GENERATION

Land Use	Dwelling Units or Square Feet	Annual Waste Generation Rate	Annual Waste Generation (tons)	Daily Waste Generation (tons)
Single-family Residential	6,733 du	1.17 ton/du[1]	7,878	22
Multi-family Residential	52,361 du	0.46 ton/du	24,086	66
Commercial	107,372,768 sf	3.01 ton/1,000 sf	323,192	885
Industrial	125,352,077 sf	1.24 ton/1,000 sf	155,437	426
Public Facilities	36,561,904 sf	0.93/1,000 sf	34,003	93
Total 2040 Alternative 4 Solid Waste Generation			544,595	1,492
Current Solid Waste Generation			390,771	1,071
Net Change in Waste Generation			**153,824**	**421**

Notes: Waste generation (tons) was rounded to the nearest whole number. Totals may not add up due to rounding.
du – dwelling unit
sf – square feet
[1] Converted from CalEEMod default data of 0.41 tons/resident, assuming a persons per unit rate of 2.86 for City of Los Angeles (California Department of Finance (DOF). 2018. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2018 with 2010 Census Benchmark. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/ (accessed April 2019))
SOURCE: CalEEMod Land Use SubType.

Electrical and natural gas supplies are not expected to be adversely affected by development under Alternative 4, but improvements to Downtown Plan Area distribution and telecommunication facilities may be needed. Temporary traffic, air quality, and noise impacts associated with construction of such improvements would be within the parameters described for the Downtown Plan.

Overall, impacts related to utilities and service systems would be less than significant under Alternative 4, as with the Downtown Plan.

Conclusion

Alternative 4 would include less development capacity overall and thus less growth in the Downtown Plan Area, as compared to the Downtown Plan. Nevertheless, as with the Downtown Plan, this alternative would have the potential to disturb cultural and tribal cultural resources, contaminated sites, and nesting birds and would also generate air pollutant emissions and construction noise and vibration exceeding applicable thresholds. Finally, similar to the Downtown Plan, it may lead to the deterioration of existing parks in and around the Downtown Plan Area and result in safety related impacts due to highway off-ramp queuing. Because this alternative would not be subject to mitigation measures proposed in the Downtown Plan, the level of impact would be greater than under the Downtown Plan despite the lower overall intensity of development in the Downtown Plan Area under this alternative and would have additional significant and unavoidable impacts to biological resources (nesting birds), archaeological, paleontological, hazardous (contaminated sites), and tribal resources. In addition, limiting development potential Downtown may induce higher levels of growth in other areas of the City and region that have fewer transit options and longer distances between housing, jobs, and services. As such, Alternative 4 may incrementally increase regional traffic and related air pollutant and GHG emissions.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires identification of the environmentally superior alternative among the options studied. In general, the environmentally superior alternative is the alternative that would be expected to generate the fewest adverse impacts. If the No Project Alternative (Alternative 4) is identified as environmentally superior, then another environmentally superior alternative shall be identified among the other alternatives.

As shown in **Table 5-22**, alternatives 1, 2, and 4 would all incrementally reduce impacts for multiple issue areas compared to the Downtown Plan. This is because these alternatives would all reduce overall development levels in the Downtown Plan Area. However, none of these alternatives would avoid any of the significant and unavoidable impacts of the Downtown Plan. Alternative 4 would involve the lowest overall level of growth and development in the Downtown Plan Area. However, because Alternative 4 would not be subject to mitigation measures proposed in the Downtown Plan, it may result in higher greater overall impacts than the Downtown Plan for certain issues. In addition, by limiting growth in the Downtown Plan Area, Alternative 1 could cause more forecast growth and associated development to occur in other areas of the City or region that have less access to transit and longer distances between housing, jobs, and services. In this way, Alternative 4 may also result in greater overall regional VMT and associated air pollutant and GHG emissions.

Among the other alternatives, Alternative 1 would involve the least growth and development and would be subject to the mitigation measures included in this EIR. Thus, it would result in the fewest impacts in the Downtown Plan Area. Based on the ability to result in reduced environmental impacts and meet project objectives, the Reduced Development Potential (Alternative 1) is the Environmentally Superior Alternative.

TABLE 5-22 IMPACT COMPARISON OF ALTERNATIVES

Issue	Alternative 1: Reduced Development Capacity	Alternative 2: Housing Redistribution	Alternative 3: Increased Development Potential	Alternative 4: No Project
Aesthetics	+	+	-	+
Air Quality	**+**	**+**	**-**	**=**
Biological Resources	+	+	-	**-**
Cultural Resources	**+**	**+**	**-**	**=**
Energy	+	+	-	-
Geology and Soils	+	+	-	**-**
Greenhouse Gas Emissions	+	+	-	+
Hazards/Hazardous Materials	+	+	-	**=**
Hydrology/Water Quality	=	=	=	=
Land Use and Planning	=	=	=	=
Noise	**+**	**+**	**-**	**=**
Population and Housing	=	=	=	=
Public Services	+	+	-	+
Recreation	**+**	**+**	**-**	**+**
Transportation/Traffic	**-**	**-**	**-**	**-**
Tribal Cultural Resources	+	+	-	**=**
Utilities/Service Systems	+	+	-	+

+ Superior to the proposed project (reduced level of impact)

- Inferior to the proposed project (increased level of impact)

= Similar level of impact to the proposed project

Significant and unavoidable impacts are bolded and red. Note that for Alternative 4, impacts would not technically be "significant" under CEQA since that alternative involves continued implementation of the existing Central City and Central City North community plans, impacts are identified as "significant and unavoidable" if the physical effect associated with the alternative would be equivalent to a "significant impact" if the alternative involved a new discretionary action.

5.6 ALTERNATIVES CONSIDERED BUT REJECTED

Section 15126.6 (c) of the *CEQA Guidelines* requires that an EIR identify those alternatives that were considered but rejected by the lead agency because they either did not meet the objectives of the project, were considered infeasible, or would not avoid or substantially lessen one or more significant effects of the proposed project. Alternative 3 addresses increased housing development as was suggested during EIR scoping. No other alternatives were identified that would feasibly attain most of the basic project objectives but would also avoid or substantially lessen the significant effects of the project. Outside of a complete moratorium on new development, none of the impacts could be reduced to below a level of significance. Any demolition or construction activity in the Downtown Plan Area would have the potential to adversely

affect historical resources or generate significant construction-related noise. In addition, because of the Downtown Plan Area already fails to meet City park standards, any population growth Downtown would exacerbate this condition and could potentially result in significant impacts related to deterioration of existing parks. With respect to air quality VOC emissions associated with projected growth in the Downtown Plan Area under the Downtown Plan are estimated at 5,004 pounds per day, more than 90 times the 55 pounds per day VOC threshold. Moreover, as previously noted, limiting development in the Downtown Plan Area may simply divert more growth and development to other areas of the City, thus increasing the potential for similar impacts in other areas and increasing overall Citywide and regional VMT and associated air pollutant and GHG emissions.

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6.0 OTHER CEQA CONSIDERATIONS

Section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all phases of a project must be considered when evaluating its impact on the environment. As part of this analysis, in addition to the impact analysis done in Chapter 4 and the alternative analysis in Chapter 5, the EIR must also analyze and identify (1) significant irreversible environmental changes that would result from implementation of the Proposed Project, (2) growth-inducing impacts of the Proposed Project, and (3) any secondary impacts from the proposed mitigation measures identified in Chapter 4. These impacts are analyzed in this Chapter.

6.1 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS

Section 15126.2(c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the proposed project. Specifically, Section 15126.2(c) states:

> *Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irreversible commitments of resources should be evaluated to assure that such current consumption is justified.*

Generally, a project would result in significant irreversible environmental changes if any of the following would occur:

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources;
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Resources that would be consumed as a result of implementation of the Downtown Plan and New Zoning Code include water, electricity, natural gas, and fossil fuels; however, the amount and rate of consumption of these resources would not result in significant environmental impacts related to the unnecessary, inefficient, or wasteful use of resources (see Chapters 4.5, *Energy*, and 4.17, *Utilities and Service Systems*). In addition, construction activities related to the reasonably expected development would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, and gasoline for automobile and construction equipment. However, use of such resources would not be unusual as compared to other construction projects and would not susbstantially affect the availability of such resources.

With respect to operation activities, compliance with applicable building codes, as well as mitigation measures, would ensure that natural resources are conserved or recycled to the maximum extent feasible. It is also likely that in response to GHG reduction mandates, new technologies or systems will emerge, or

will become more cost-effective or user-friendly, that will further reduce the reliance of Downtown Plan Area development upon nonrenewable natural resources. However, even with implementation of conservation measures, consumption of natural resources would generally increase with implementation of the Downtown Plan and New Zoning Code due to population increases.

In summary, implementation of the Downtown Plan and New Zoning Code would involve irreversible environmental changes to existing natural resources, such as the commitment of energy and water resources as a result of the operation and maintenance of future development. However, neither the Downtown Plan nor the New Zoning Code would involve wasteful or unjustifiable use of energy or other resources, and energy conservation efforts would also occur with new construction. New development accommodated by the Downtown Plan and New Zoning Code would be constructed and operated in accordance with specifications contained in Title 24 of the California Code of Regulations and local green building requirements, as discussed in Section 4.5, *Energy*. Therefore, the use of energy related to the Downtown Plan and New Zoning Code would occur in an efficient manner.

6.2 GROWTH INDUCING IMPACTS

Section 15126.2(d) of the CEQA Guidelines requires that growth inducing impacts of a proposed project be considered. Growth inducing impacts are characteristics of a project that could directly or indirectly foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. According to the CEQA Guidelines, such projects include those that would remove obstacles to population growth (e.g., a major expansion of a wastewater treatment plant). In addition, as set forth in the CEQA Guidelines, increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. The CEQA Guidelines also state that it must not be assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment. Generally, a project is considered to result in growth inducing effects if it results in one of the following:

- The extension of infrastructure (sewer, water, etc.) to an area currently undeveloped and/or lacking adequate infrastructure, thus removing an obstacle to growth; and/or
- The provision of housing or employment to an area currently undeveloped or lacking in adequate housing or employment.

The Downtown Plan Area is an urbanized community with road, water, sewer, storm drain, and other infrastructure in place. Although the Downtown Plan would include certain utility upgrades, such upgrades are specifically intended to accommodate the growth planned for the Downtown Plan Area and would not induce growth outside the Downtown Plan Area. Rather, the Downtown Plan is specifically intended to concentrate development in an area that is already served by infrastructure in order to ensure that infrastructure is utilized efficiently and in a manner that reduces the environmental impacts of development.

As analyzed in Chapter 4.12, *Population, Housing, and Employment*, of this EIR, the Downtown Plan and New Zoning Code would accommodate substantial growth in population and employment in the Downtown Plan Area. However, such growth would not induce growth outside the Downtown Plan Area beyond what is anticipated to result from the Downtown Plan itself. To the contrary, by concentrating growth in the Downtown Plan Area, it is anticipated that implementation of the Downtown Plan would actually limit growth in other areas of the City to some degree. Because growth in the Downtown Plan Area would involve high density, mixed-use infill development in an area that is well-served by transit, it is actually anticipated to reduce per capita vehicle miles traveled (VMT) and associated air pollutant and GHG emissions relative to development in other areas of the City. Further, concentrating development in the urbanized Downtown Plan Area would generally avoid impacts to agricultural, biological, and mineral resources while

redevelopment of properties with new development built to current standards would generally improve surface water quality and reduce the potential for substantial seismic damage.

Neither the Downtown Plan nor the New Zoning Code would result in unplanned growth; rather, both components of the Proposed Project would ensure that projected growth is accommodated. In conclusion, the Downtown Plan and New Zoning Code are anticipated to satisfy a portion of the anticipated population growth in the region in an efficient manner consistent with state, regional and City policies. The Downtown Plan would be consistent with the projected growth forecast for the Los Angeles region and regional policies to reduce urban sprawl. To that end, it would efficiently utilize existing infrastructure, reduce regional congestion, and improve air quality.

6.3 POTENTIAL SECONDARY EFFECTS

CEQA Guidelines Section 15126.4(a)(1)(D) states that, "[i]f a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measures shall be discussed but in less detail than the significant effects of the project as proposed." In accordance with the Guidelines, the following provides a discussion of the potential impacts that could occur from implementation of the proposed mitigation measures.

Downtown Plan:

Air Quality

Mitigation Measure 4.2-2 would reduce regional and local emissions generated by various construction activities, including equipment operation and truck trips, through best management practices. Implementation of this measure would have a beneficial impact on reducing air quality impacts and would not result in adverse secondary impacts. **Mitigation Measure 4.2-3** would require health risk assessment and, as necessary, limitations and design features to avoid significant health risks. This mitigation measure is a procedural actions that would not result in physical changes in the environment that could result in secondary impacts.

Biological Resources

Mitigation Measures 4.3-1(a) and **4.3-1(b)** require development projects on certain sites to conduct pre-construction bird nest surveys to ensure that sensitive species and/or habitats are not adversely affected. This mitigation measure is a procedural action that would not result in physical changes in the environment that could result in secondary impacts.

Cultural Resources

Mitigation Measures 4.4-2(a), **4.4-2(b)**, **4.4-2(c),** and **4.4-2(d)** would provide for the recovery of any significant archaeological resources that cannot be preserved in place. These mitigation measures are procedural actions that would not result in physical changes in the environment that could result in secondary impacts.

Geology

Mitigation Measures 4.6-6(a), 4.6-6(b), and **4.6-6(c)** would ensure that potential paleontological resources are identified and either further avoided or recovered. These mitigation measures are procedural actions that would not result in physical changes in the environment that could result in secondary impacts.

Hazards and Hazardous Materials

Mitigation Measures 4.8-4(a) and **4.8-4(b)** would require preliminary investigation for hazardous materials potential on all Downtown Plan Area excavation and grading. These mitigation measures are procedural actions that would not result in physical changes in the environment that could result in secondary impacts. Any potential remediation of contamination would be required to comply with regulations and regulatory agency oversight, which may require subsequent environmental review. Any impacts from remediation would be speculative at this time.

Noise

Mitigation Measure **4.11-1** involves specific construction-related measures to substantially reduce noise levels. Mitigation Measures **4.11-2(a)** and **4.11-2(b)** involve specific construction-related measures to substantially reduce vibration levels. These measures would not result in additional secondary impacts. The potential use of some measures, such as sound barriers and building designs, could affect the visual environment. However, the potential visual effects from this mitigation measure are expected to be similar to the effects that have been evaluated in the Aesthetics section of this EIR. No adverse secondary impacts would result from these measures.

Tribal Resources

Mitigation Measures **4.16-1(a) and 4.16-1(b)** would ensure that tribal resources are identified and either further avoided or recovered. These mitigation measures are procedural actions that would not result in physical changes in the environment that could result in secondary impacts.

New Zoning Code:

No Mitigation Measures were identified.

7.0 PREPARERS OF THE DRAFT EIR

7.1 LEAD AGENCY

CITY OF LOS ANGELES

Los Angeles Department of City Planning
200 North Spring Street, Room 667
Los Angeles, CA 90012

Downtown Planning Team:	Brittany Arceneaux Bryan Eck Clare Kelley Craig Weber Jordan Hallman Patricia Diefenderfer Tal Harari Valerie Watson Veena Snehansh
Zoning Integration Team:	Bonnie Kim Deborah Kahen Erin Coleman Erick Lopez Esther Ahn Mary Richardson Phyllis Nathanson Renae Zelmar
City Attorney:	Kathryn C. Phelan John W. Fox

7.2 DRAFT EIR PREPARERS

RINCON CONSULTANTS, INC.

250 East 1st Street, Suite 1400
Los Angeles, CA 90012

Principal/Sr. Vice President:	Joe Power
Principal Historian:	Shannon Carmack

Senior Planners/Associates:	Lindsey Sarquilla Steven Treffers (Historian) Hannah Haas (Archaeologist) Jennifer Kelly
Planners/Associates:	Vanessa Villanueva Nik Kilpelainen Devin Dinapoli (Hazardous Materials Specialist) Jennifer Pezda Jamie Power
GIS/Production Specialists:	Marcus Klatt Annette Tran Debra Jane Seltzer

AECOM

300 South Grand Avenue
Los Angeles, CA 90071

Principal Planner:	Yara Fisher
Environmental Planner:	Erin Phillips

FEHR & PEERS

600 Wilshire Boulevard, Suite 1050
Los Angeles, CA 90017

Principal:	John Muggridge, AICP
Senior Transportation Planner:	Amanda Chapman, AICP

EDUCATION

MA, Architecture and Urban Planning, UCLA Graduate School of Architecture and Urban Planning (1991)

BA, Urban and Economic Geography, University of Georgia (1985)

AFFILIATIONS

American Planning Association

American Institute of Certified Planners # 010273

- *Certified Environmental Planner*

Joe Power, AICP CEP

SENIOR PRINCIPAL

Joe Power is a Principal and Planning Manager with Rincon Consultants. He has over 27 years of experience in the planning field and has managed or primarily authored successful planning and environmental and planning studies on projects ranging from affordable housing to urban redevelopment to citywide transportation systems. Mr. Power has prepared numerous CEQA and NEPA environmental documents and is an expert in interpreting state and federal planning and environmental law, as well as in developing environmental documentation that is informative, readable, and legally defensible. He has prepared specialized technical reports on a range of planning and environmental topics, including noise, air quality, greenhouse gases, sustainability, and water supply. Mr. Power is a skilled public presenter and moderator, having facilitated public workshops for various General Plan Elements and EIRs, and conducted professional presentations at both the California and National American Planning Association conferences.

DETAILED PROJECT EXPERIENCE

DEVELOPMENT

Los Angeles County Community Development Commission - CEQA/NEPA Review, Los Angeles County, California
Mr. Power oversees Rincon's contract to provide as needed NEPA/ CEQA documentation and consulting services to the Los Angeles Community Development Commission. He has managed the preparation of the majority of NEPA-required environmental documentation for projects proposed under the CDBG Program within unincorporated Los Angeles County and 48 cooperating cities within the County during this timeframe. Rincon's involvement in this program has included preparation of well over 500 ERR documents prepared in compliance with 24 CFR Part 58. Mr. Power also prepares and provides technical review for the required NEPA documentation for the CDC's Neighborhood Stabilization Program (NSP).

Program Manager, NEPA Environmental Review Services On-Call Contract, City and County of San Francisco Mayor's Office of Housing and Community Development
Rincon Consultants is in the first year of the second consecutive five-year contract with the City and County of San Francisco's Mayor's Office of Housing and Community Development to provide as needed NEPA documentation. As part of this contract, Mr. Power has overseen preparation of several ERRs required by HUD and described in 24 CFR Part 58, including preparation of CEs and EAs. The contract also includes preparation of EISs, as appropriate.

Project Manager, Palisades Bluffs Improvement Project CEQA/NEPA Compliance, Santa Monica, California
Mr. Power was the project manager in charge of preparing the CEQA and NEPA documentation for the Palisades Bluffs Improvement Project for the City of Santa Monica. The bluffs extend about 1.6 miles along Pacific Coast Highway (PCH) from the McClure Tunnel northwest to the City's northern limits. Palisades Park, which sits atop the bluff, has been an important recreational and visual resource for the City for over 100 years. A Mitigated Negative Declaration (MND) was completed per CEQA guidelines and a Categorical Exemption (CE) and a series of Technical Studies were completed for NEPA. The technical studies included traffic, earth resources and

geotechnical constraints, biological and historical resources, noise and visual resources.

PROJECT EXPERIENCE

TRANSPORTATION

- Principal, Alamitos Avenue "Road Diet" Improvements Project Focused EIR

DEVELOPMENT

- Over 100 NEPA EAs for affordable housing, commercial rehabilitation, and infrastructure projects, Los Angeles County CDC
- Over 50 NEPA CEs for affordable housing projects, Santa Barbara County Housing Authority
- Principal, City of Long Beach, Outlets at the Pike Initial Study, Long Beach, California (2014)
- Principal, City of Long Beach, Civic Center Supplemental EIR, Long Beach, California (2015-2016)
- Long Beach North Village Redevelopment Project EIR, City of Long Beach
- Principal, City of Long Beach, Thomas Safran Senior Housing Project EIR, City of Long Beach, California (2012-2013)
- UPS Ontario Expansion Project, Ware Malcomb
- Principal, City of Long Beach, Press-Telegram EIR Addendum, City of Long Beach, California (2012)
- Principal, City of Long Beach, Auto Nation Automobile Auction EIR, City of Long Beach, California (2012)
- Principal, City of Long Beach, Downtown Plan FEIR Long Beach, California (2011-2012)
- Principal, City of Long Beach, Addendum to the Downtown Plan FEIR Long Beach, California (2012)
- Principal, City of Long Beach, Pacific Pointe East Development EIR, City of Long Beach California (2013-2014)
- Principal, City of Long Beach, Long Beach Riverwalk EIR, Long Beach, California (2014-2016)
- Principal, City of Long Beach, 3655 N. Norwalk Boulevard Residential Development EIR, Long Beach, California (2015-2017)
- Principal, City of Long Beach, Long Beach Police Department Tunnel Project IS-MND Long Beach, California (2011-2012)
- Bahia Marina MND, City of Long Beach
- Port of Los Angeles Southern California International Gateway Project EIR Peer Review, City of Long Beach
- Cherry Ave Charter School MND, City of Long Beach
- Principal, City of Long Beach, Press-Telegram Mixed Use Development EIR, City of Long Beach, California (2008-2012)

ORDINANCE STUDIES

- Principal, City of Long Beach, Long Beach Plastic Carryout Bag Ordinance IS-MND, City of Long Beach California (2010)
- Principal, City of Long Beach, Plastic Carryout Bag Ordinance EIR Addendum, City of Long Beach California (2011)

GENERAL PLANS, SPECIFIC PLANS, AND MASTER PLANS

- TOD Pedestrian Master Plan IS-MND, City of Long Beach

INFRASTRUCTURE

- Port of Los Angeles Pier S Terminal and Backchannel Improvement Project EIR/EIS Peer Review, City of Long Beach
- Studebaker LB Tank Removal ND, City of Long Beach

ON-CALL CONTRACTS

- City of Long Beach, Environmental Services On-call, Long Beach, California (2005- Present)

Shannon Carmack

PRINCIPAL/ARCHITECTURAL HISTORY PROGRAM MANAGER

Shannon Carmack is a Principal and the Architectural History Program Manager for Rincon Consultants. Ms. Carmack has more than 19 years of professional experience providing cultural resources management and historic preservation planning for large-scale and high-profile projects. She has worked throughout California in numerous sectors including local planning, development/construction, public utilities, Department of Defense, transportation, recreation, and education. Ms. Carmack prepares documentation to satisfy CEQA/NEPA, Section 106, and Local Historic Preservation Ordinances. She also provides reports and studies that are in compliance with the Secretary of the Interior's (SOI) Standards for the Treatment of Historic Properties (Standards) and the California Historic Building Code. She has developed and implemented successful mitigation for countless projects that included Historic American Building Survey (HABS) documentation, oral histories and interpretive programs. Ms. Carmack meets and exceeds requirements in the Secretary of the Interior's Professional Qualification Standards in Architectural History and History.

EDUCATION

B.A., History, emphasis in American History, California State University, Long Beach (2007)

SPECIALIZED EDUCATION/ TRAINING

Green Strategies for Historic Buildings, National Preservation Institute (2008)

CEQA Workshop Training, AEP (2007)

Oral History Methods, CSU Long Beach (2005)

Identification and Evaluation of Mid-20th Century Buildings, National Preservation Institute (2004)

Section 4(f) Cultural Resources Compliance for Transportation Projects, National Preservation Institute (2003)

PROJECT EXPERIENCE

- City of Ventura – 867 East Main Street Historic Building Assessment, Ventura, California
- City of San Buenaventura Housing Authority– Cultural Resources Assessment Report for the Willett Ranch Project, Ventura, California
- Cultural Resources Technical Study-1240-1280 North Ventura Avenue, City and County of Ventura, California
- County of Ventura Public Works – Kenney Street Widening and Pedestrian Improvements Project Cultural Resources Study, Ventura County, California
- County of Ventura Public Works – Yerba Buena Road Guardrail Project Cultural Resources Study, Ventura County, California
- County of Ventura Public Works – Santa Clara Bike Lanes and Pedestrian Facilities Historic Resources Evaluation Report, Ventura County, California
- City of Riverside and the State Office of Historic Preservation, *Latino Historic Context Statement*, Riverside, California
- City of Long Beach, Grant Neighborhood Historic Context Statement and Historic Resources Survey, Long Beach, California
- City of Long Beach, Citywide Historic Context Statement Update, Long Beach, California
- City of Indio Reconnaissance-Level Historic Resources Survey, General Plan Update, Indio, California
- World Citrus West Evaluation; City of Fullerton, Orange County, California

  6634 Sunset Avenue Historic Habitation, Los Angeles, California
- Roger Y. Williams Residence, National Register of Historic Places Nomination; City of San Juan Capistrano, Orange County, California
- Hobby City Redevelopment; Cities of Anaheim and Stanton, Orange County, California
- South Coast Shipyard Redevelopment Project; City of Newport Beach, Orange County, California

PROJECT EXPERIENCE, CONT'D

- Susan Street Exit Ramp Improvement Project; City of Costa Mesa, Orange County, California
- Lambert Ranch General Plan Amendment and Zone Change EIR; City of Irvine, Orange County, California
- Mountain Park Specific Plan Amendment EIR; City of Anaheim, California
- Fort McArthur "Hey Rookie" Pool Historic Habitation, Los Angeles, California
- Woodland Hills Fire Station Historic Assessment and HABS, Los Angeles, California
- Long Beach Courthouse Historic Impacts Assessment, Long Beach, California
- Chapman's Millrace Relocation and Rehabilitation; San Gabriel Mission, Los Angeles County, California
- 7 Oakmont Drive Historic-Cultural Monument (HCM) Application, Los Angeles, California
- Windsor Square Design Review, Los Angeles, California
- Edwards Air Force Base Cold War Historic Context, EAFB, Los Angeles and Kern Counties, California
- Venice Post Office Rehabilitation, Venice Beach, Los Angeles, California
- Terminal Island Historic Survey Evaluation and Historic Context Statement; Los Angeles, California
- University Park Historic District Design Review, Los Angeles, California
- Metro Gold Line Foothill Extension Intermodal Parking Facility Project; Azusa, Los Angeles County, California
- Metro Green Line to LAX Project, Los Angeles, California
- Metro Crenshaw/LAX Transit Corridor EIR Cultural Resources Services; Los Angeles, California
- Olympic Boulevard and Mateo Street Improvements; Los Angeles, California
- Port of Los Angeles Berths 167-169 Rehabilitation Project; Los Angeles, California
- Metro Regional Connector Transit Corridor Project; Los Angeles, California
- Port of Los Angeles Al Larson Boat Shop Historic Assessment; Los Angeles, California
- ACE San Gabriel Trench Project Cultural Resources Services; Los Angeles County, California
- Interstate 5 Improvement Project; Cities of La Mirada, Cerritos, Norwalk, Downey and Santa Fe Springs, Los Angeles County, California

DETAILED PROJECT DESCRIPTIONS

Fagan Canyon Project; City of Santa Paula, Ventura County
Served as architectural historian for project that included the redevelopment of a historic cattle ranch property. Conducted field surveys, historic research, oral histories, and prepared DPRs and a technical report that included methods, findings and an impacts assessment. The ranch residence was found to be historically significant for its design by Austen Pierpont, former owner/operator of the locally significant Pierpont Inn.

TY Lin International, Cabrillo Blvd Rail Bridge Replacement, Santa Barbara, California

Ms. Carmack is responsible for the preparation and management of the cultural reports and studies conducted for the project. The Cabrillo Rail Bridge Project involves pedestrian and bicycle Improvements on Cabrillo Boulevard, between US-101 and the intersection of Cabrillo Boulevard and Los Patos Way. The project will include the replacement of the UP Railroad Overhead bridge over Cabrillo Boulevard and retirement of the existing UP Overhead Bridge along with construction of a round-a-bout at Cabrillo Boulevard and Los Patos Way. The bicycle improvements will consist of a new Class 1 bike path under the new UP Overhead Bridge, connecting the existing bike path to the Beachway bike path. Rincon is providing environmental (CEQA/NEPA) and Caltrans coordination assistance on this project, including Section 106 compliance. The project is located within a City Historic District with contributing elements located within the project APE.

Lindsey Sarquilla, MESM

SENIOR ENVIRONMENTAL PLANNER

Lindsey Sarquilla is a Senior Environmental Planner within Rincon's Environmental Sciences and Planning group. In this capacity, she is responsible for managing and preparing CEQA and NEPA documentation, as well as technical air quality, greenhouse gas (GHG) emissions, health risk, and noise impact analyses. Her experience includes a wide range of technical environmental and planning studies across the state involving land and infrastructure development, seaports, urban redevelopment, solar power facilities, oil extraction and refining facilities, landfills, general plans and specific plans, climate action plans, and other long-range planning documents. Ms. Sarquilla is experienced with a variety of air pollutant and GHG emissions models, including AERMOD, HARP 1 and 2, the CalEEMod land use emissions forecast tool, and the California Air Resources Board's Mobile Source Emissions Inventory (EMFAC). She is also experienced with the Federal Highway Administration's Traffic Noise Model and Roadway Construction Noise Model, as well as noise protocols in use by a variety of agencies, including the Environmental Protection Agency, the Federal Transit Administration, and the Department of Housing and Urban Development.

EDUCATION

MESM, Bren School of Environmental Science & Management, University of California, Santa Barbara

B.A., Environmental Studies, Brandeis University

TRAINING

HUD Region IX Environmental Review Training, 2016

CARB Health Risk Assessments & Dispersion Modeling, 2016

CARB HARP 2, 2017

PROJECT EXPERIENCE

- Private Solar Client – Gaskell West Solar Project Air Quality and Greenhouse Gases Technical Report, Kern County, California
- First Solar – Cuyama Solar Project Photovoltaic Installation Phase Monitoring Services, Santa Barbara County, California
- Henkels & McCoy, Port of Long Beach Cerritos Channel Tower Removal Project Air Quality Thresholds Analysis, Los Angeles County, California
- STV Incorporated, Purple Line Project, Los Angeles County Metropolitan Transportation Authority
- California High Speed Rail, Merced to Fresno Segment, Madera County, California
- California High Speed Rail
  - Merced to Fresno Segment Construction Package-1 North Extension Re-Evaluation
  - Bakersfield F Street Station Supplemental EIR/EIS
- Solar Farm Project IS-MND, California State University Channel Islands
- Air Quality, Health Risk, and Greenhouse Gas Technical Reports for Distributed Solar Sites, Kern County, Confidential Client
- Santa Barbara County Air Pollution Control District, Environmental Document CEQA Assistance Open Services, Santa Barbara County, California
- Oxnard Harbor District, Port of Hueneme Reducing Emissions Supporting Health (PHRESH) Plan, Port of Hueneme, California
- Oxnard Harbor District, Port of Hueneme Berth Deepening and Wharf Improvement Project Subsequent IS-MND, Port of Hueneme, California
- Hollister Avenue - State Street Improvements Project, Noise, Air Quality, GHG and Water Quality Technical Studies, County of Santa Barbara

- City of Buellton Various Mixed-Use, Commercial, and Industrial Projects Air Quality, Greenhouse Gas Emissions, and Noise Technical Studies
- Saticoy Area Plan Update, Health Risk Assessment, County of Ventura
- Terraphase Engineering, Health Risk Assessment for Cement Processing Facility, San Bernardino County
- City of Los Angeles, Updates to the Downtown Plan EIR, Los Angeles, California
- Metropolitan Water District of Southern California, F.E. Weymouth Water Treatment Plant Upgrades Project, La Verne, California
- West Basin Municipal Water District, Palos Verdes Recycled Water Pipeline Project, Torrance, California
- Los Alamos Community Services District, Water Well #6 Project IS-MND, Los Alamos, California
- Kennedy/Jenks Consultants, City of Los Angeles Sanitation District (LASAN) LA-Glendale Wastewater Treatment Plant IS-MND and Technical Studies, Los Angeles County, California
- Yuba County Water Agency, Cottage Creek Dam Spillway Removal IS-MND
- City of Oxnard, 1641 Mountain View Avenue Facility Noise Study
- City of Menifee, Trumble Road Open Pit Restoration Technical Studies

Steven Treffers, MHP

SENIOR ARCHITECTURAL HISTORIAN

Mr. Treffers is a senior architectural historian with Rincon's Cultural Resources Group. With nearly 10 years of professional experience and a Master's in historic preservation from the University of Southern California, School of Architecture, he meets and exceeds the Secretary of the Interior's Professional Qualification Standards for History and Architectural History. He has a wide range of experience with projects requiring historic resources compliance with Section 106 of the National Historic Preservation Act, California Environmental Quality Act, and local ordinances. With extensive experience in Southern California, Mr. Treffers has overseen and contributed to numerous projects for the Los Angeles Bureau of Engineering. For these efforts, Mr. Treffers has managed and conducted historic resource surveys, and coordinated directly with state and local agencies. Both professionally and as a former commissioner on the South Pasadena Cultural Heritage Commission, Mr. Treffers has also worked closely with design teams on projects involving alterations to historic resources to ensure compliance with SOI Standards and applicable design guidelines. As a result, he has extensive experience identifying character-defining features, reviewing architectural drawings, and collaborating with local governments, stakeholders, architects, and engineers to meet project objectives while retaining those elements that convey the reason for a historic resource's significance.

EDUCATION

M.H.P., Historic Preservation; University of Southern California, Los Angeles; 2012

Graduate Certificate Program, Architecture & Urbanism; University of Southern California, Los Angeles; 2011

B.A., European History; University of California, Santa Cruz; 2003

TRAININGS

Section 106 Compliance Training; Society for American Archaeology 2014

CEQA Training, California Preservation Foundation; 2015

CERTIFICATIONS/ REGISTRATIONS

Meets and exceeds requirements in the Secretary of the Interior's Professional Qualification Standards in Architectural History and History

SELECT PROJECT EXPERIENCE

- Los Angeles River Valley Bikeway and Greenway Project; Los Angeles, California
- El Sereno Clubhouse Historic Building Documentation Package; Los Angeles, California
- El Sereno Clubhouse Historic Resources Evaluation; Los Angeles, California
- Alma Park Historic Resources Evaluation; Los Angeles, California
- Cesar Chavez Median Project; Los Angeles, California
- Main Street Lighting Improvement Project; Los Angeles, California
- Woodland Hills Recreation Center Cultural Resources Survey; Los Angeles, California
- Phase I Architectural Review for the Cypress Park Community Center –Youth Facility; Los Angeles, California
- Highland Park Junior Arts Center Project; Los Angeles, California
- Metro West Santa Ana Branch EIR/EIS Cultural Resources Technical Studies; Los Angeles County
- Port of Los Angeles Immigration Station Historic Resources Evaluation and Design Review; Los Angeles, California
- Terminal Island Historic Resources Survey; Port of Los Angeles, City and County of Los Angeles
- Everport Terminal Cultural Resources Assessment, Port of Los Angeles, City and County of Los Angeles
- Port of Los Angeles Berths 167-169 Rehabilitation Project; City and County of Los Angeles

PROJECT EXPERIENCE, CONT'D

- City of Long Beach, *Citywide Historic Context Statement Update*, Long Beach, California
- City of Indio Reconnaissance-Level Historic Resources Survey, General Plan Update, Indio, California
- LA Plaza de Cultura y Artes Project; Los Angeles, California
- 7 Oakmont Historic Review, Los Angeles, California
- Lacy Street Studios Historic Resources Evaluation; Los Angeles, California
- 118-126 Flores Peer Review; Los Angeles, California
- 1332 West Jefferson Historic Resources Assessment; Los Angeles, California
- 10 South Van Ness Avenue Historic Resource Evaluation; San Francisco, California
- Fifth Church of Christ Scientist Peer Review; Los Angeles, California
- Alameda Corridor East – San Gabriel Trench Project; San Gabriel, Los Angeles County
- Metro Gold Line Foothill Extension Intermodal Parking Facility Project; Azusa, Los Angeles County
- Metro Crenshaw/LAX Transit Corridor EIR Cultural Resources Services; City and County of Los Angeles
- East Los Angeles College (ELAC) Firestone Building Cultural Resources Services; South Gate, County of Los Angeles
- HABS Documentation of the Placentia Orange Growers Association; Placentia, California
- 6634 Sunset Boulevard Rehabilitation Project; Los Angeles, California
- Venice Post Office Rehabilitation Project; Los Angeles, California
- Windsor Village Historic Preservation Overlay Zone Review; City and County of Los Angeles
- River Grove Bridge Rehabilitation Project; Community of Whitley Gardens, San Luis Obispo County
- Bello Bridge Rehabilitation Project; Pismo Beach, San Luis Obispo County
- Branch Mill Bridge Project; Arroyo Grande, San Luis Obispo County
- High Speed Rail, Construction Package 4 Project; Fresno County
- Complete the Gap Trail Project; San Mateo County
- East Cabrillo Boulevard Bridge and Pedestrian Improvements; City and County of Santa Barbara
- Shell Beach Road Streetscape Project; Pismo Beach, San Luis Obispo County
- Higuera Widening Project; City and County of San Luis Obispo
- Monterey Regional Airport Historic Resources Survey; City and County of Monterey
- Historic District Survey for the Air Force Research Laboratory; Edwards Air Force Base
- Cold War Era Buildings Survey and Context Report; Edwards Air Force Base
- Camarillo Airport Hanger Project; Camarillo, Ventura County
- Chino Airport; Chino, San Bernardino County
- Cold War Era Buildings Survey and Context Report; Edwards Air Force Base
- California American Water Slant Test Well Project; Marina, Monterey County
- Indian Flat Substation Expansion Project; El Portal, Mariposa County
- Humboldt Bay-Humboldt #1 60kV Reconductoring Project; Humboldt County
- PG&E Compressed Air Energy Storage; San Joaquin, Solano, and Yolo Counties
- Academy of Art Existing Sites Technical Memorandum; City and County of San Francisco
- Montecito Union School; Montecito, Santa Barbara County
- Flood County Park; Menlo Park, San Mateo County

EDUCATION

M.A., Anthropology, San Diego State University (2017)

B.A., Anthropology, University of California, Santa Barbara (2012)

EXPERIENCE

Rincon Consultants, Inc. (July 2012 – present)

Channel Islands National Park (2012)

California Archaeology Lab, University of California, Santa Barbara (2012)

Paleoethnobotany and Zooarchaeology Lab, University of California, Santa Barbara (2011)

California Archaeology Lab, University of California, Santa Barbara (2010 – 2011)

University of California, Santa Barbara (2011)

Hannah G. Haas, M.A., RPA

ARCHAEOLOGIST & PROJECT MANAGER

Ms. Haas is an Archaeologist at Rincon Consultants. Her responsibilities include performing archaeological and cultural resources survey, archaeological testing and monitoring, and the preparation of technical reports. Ms. Haas received her Masters of Liberal Arts and Sciences in Anthropology from San Diego State in 2017. Her research focused on California's Northern Channel Islands and historical ecology. Ms. Haas has over five years of experience working in cultural resources management conducting projects in compliance with the California Environmental Quality Act (CEQA), Section 106 of the National Historic Preservation Act (NHPA), and the National Environmental Policy Act (NEPA). She has worked on more than 130 projects and served as lead author of more than 90 cultural resources technical reports. Ms. Haas uses her academic training and professional experience to ensure that all cultural resources components of projects are satisfactorily conducted.

PROJECT EXPERIENCE

- Cultural Resources Specialist and Report Author, Brannan-Andrus Levee Maintenance District Levee Repair Project, Isleton, Sacramento County, CA – Conducted cultural resources records search, pedestrian survey, and Native American scoping and served as primary author of a technical report. – Client: Robertson-Bryan, Inc.
- Cultural Resources Specialist, Mokelumne Trail Project, Brentwood, Contra Costa County, CA – Conducted cultural resources records search, pedestrian survey, and prepared cultural resources section of EIR addendum. – Client: Circlepoint
- Cultural Resources Specialist and Report Author, Grand Avenue Improvement Project, Oakland, Alameda, CA –As Author, prepared resource documentation and Caltrans style technical reports, including an ASR, HRER, and HPSR. The work was performed for compliance with Section 106 of the NHPA. Client: City of Oakland
- Cultural Resources Specialist and Report Author, Lakeside Green Streets Improvement Project, Oakland, Alameda County, CA - -- As Author, prepared resource documentation and Caltrans style technical reports, including an ASR, HRER, and HPSR. The work was performed for compliance with Section 106 of the NHPA. Client: City of Oakland
- Cultural Resources Specialist, Dexter Canyon Bridge Replacement Project, Santa Clara County, CA – Conducted cultural resources records search and technical memorandum. Client: Fall Creek Engineering, Inc.
- Cultural Resources Specialist, Cultural Resources Records Search for the SJSU End Zone Project, San Jose, Santa Clara County, CA – Conducted cultural resources records search and prepared technical memorandum. Client: San Jose State University
- Cultural Resources Specialist, Cultural Resource Study for the Milpitas Recycled Water Pipeline Project, Milpitas, Santa Clara County, CA – Conducted cultural resources records search, Native American scoping, and served as primary author of CEQA+ format technical report. Client: RMC Water and Environment

- Cultural Resources Specialist, 3001 El Camino Real Project, Palo Alto, Santa Clara County, California – Managed cultural resources study, conducted cultural resources records search, provided AB 52 assistance to City, and prepared technical memorandum. Client: City of Palo Alto
- Cultural Resources Specialist, 2755 El Camino Real Project, Palo Alto, Santa Clara County, California – Managed cultural resources study, conducted cultural resources records search, provided AB 52 assistance to City, and prepared technical memorandum. Client: City of Palo Alto
- Cultural Resource Specialist, Environmental Impact Report for the Bay Fair BART Transit Oriented Development Specific Plan, San Leandro, Alameda County, California – Client: City of San Leandro
- Cultural Resources Specialist, Initial Study/Mitigated Negative Declaration for the 22626 4th Street Project, Hayward, Alameda County, CA – Managed cultural resources tasks and prepared technical memorandum and Cultural and Tribal Cultural Resources sections of IS/MND. Client: City of Hayward
- Cultural Resources Specialist, Initial Study/Mitigated Negative Declaration for the Gading Road Project, Hayward, Alameda County, CA – Managed cultural resources tasks and prepared technical memorandum and Cultural and Tribal Cultural Resources sections of IS/MND. Client: City of Hayward
- Cultural Resource Specialist and Report Author, Upper Sand Creek Basin Expansion Project, Antioch, Contra Costa County, CA – Monitored grading and excavation in Sand Creek and prepared negative findings technical memorandum. Client: Top Grade Construction
- Cultural Resources Specialist, Environmental Impact Report for the City of Novato General Plan Update, Novato, Marin County, California – Prepared Cultural and Tribal Cultural resources section of EIR. Client: City of Novato
- Cultural Resources Specialist, 7701 Redwood Avenue Hotel Project, Novato, Marin County, California – Conducted Native American scoping and prepared technical memorandum. Client: City of Novato
- Cultural Resources Specialist, Residence Inn Project, Novato, Marin County, California – Conducted pedestrian survey, archival research, Native American scoping and prepared technical memorandum and cultural and tribal cultural resources sections of IS/MND. Client: City of Novato
- Cultural Resource Specialist and Report Author for the Morro Bay Harborwalk Project, Morro Bay, County of San Luis Obispo, CA – As Author, prepared resource documentation and Caltrans style technical reports, including an ASR, HRER, and HPSR. The work was performed for compliance with Section 106 of the NHPA. Client: Caltrans
- Cultural Resources Specialist, Hollister Avenue Widening Project, Goleta and Santa Barbara, Santa Barbara County, CA- As Author, prepared resource documentation and Caltrans style technical reports, including an ASR, HRER, and HPSR, and aided in the preparation of an Archaeological Resources Evaluation Proposal. Excavation at the project site is ongoing. The work is being performed for compliance with Section 106 of the NHPA. Client – County of Santa Barbara
- Cultural Resources Specialist, Clark Avenue Interchange PEAR Project, Santa Barbara County, CA – As Author, prepared resource documentation and Caltrans style technical reports, including an ASR, HRER, and HPSR. The work was performed for compliance with Section 106 of the NHPA. Client: County of Santa Barbara
- Cultural Resources Specialist, State Route 1/State Route 166 Intersection Widening and Improvements Project, Santa Barbara County, CA – As Author, prepared resource documentation and Caltrans style technical reports, including an ASR, HRER, and HPSR. The work was performed for compliance with Section 106 of the NHPA. Client: Psomas Engineering
- Cultural Resources Specialist, State Route 166 and Black Road Improvements Project, Santa Maria, Santa Barbara County, CA– As Author, prepared resource documentation and Caltrans style technical reports, including an ASR, HRER, and HPSR. The work was performed for compliance with Section 106 of the NHPA. Client: Psomas Engineering
- Cultural Resources Specialist, State Route 91 and Beach Boulevard project, Santa Ana, Orange County, CA – A Cultural Resources Specialist, conducted archaeological fieldwork and prepared Caltrans Style HRCR. The work was performed for compliance with CEQA. Client: Kimley-Horn and Associates.

Yara Fisher, AICP

Principal Planner

Education
MURP, Urban and Regional Planning, University of California, Irvine, 1998
BA, Political Science, University of California, San Diego, 1995

Professional Affiliations
Member, American Institute of Certified Planners
Member, American Planning Association

Selected Program Level Planning and Environmental Projects
- *UCSD Long Range Development Plan and EIR*
- *Clairemont Community Plan Amendment, Affordable Housing Development*
- *County of San Diego Advance Planning On-Call Services, Affordable Housing Projects and Density Bonus Code Amendments*
- *Re:code LA and Community Plans EIRs*
- *SANDAG 2050 RTP/SCS EIR, Region Forward Project Evaluation Criteria and Plan Performance Measures, TOD Strategy*
- *City of San Diego General Plan Program EIR*
- *City of La Mesa General Plan, CAP, and Program EIR*
- *City of West Hollywood General Plan and CAP Program EIR*
- *City of Santa Ana Climate Action Plan ND*
- *Downey Zoning Ordinance*
- *Salinas Zoning Code*
- *Rancho Santa Margarita Zoning Code*
- *Salinas General Plan and Program EIR*
- *Aliso Viejo General Plan and EIR*
- *Rancho Santa Margarita General Plan and Program EIR*
- *Laguna Hills General Plan and Program EIR*
- *City of San Marcos General Plan, Zoning Ordinance and Program EIR*
- *San Juan Capistrano General Plan and EIR*
- *City of Imperial Beach Mixed Use Zoning and Program EIR, 2019 LCP Update and ND*
- *Midway-Pacific Highway and Old Town Community Plans and EIRs*
- *Downtown Long Beach Plan and Program EIR*
- *Civic San Diego On-Call Environmental Services*
- *Los Angeles County Housing Element*
- *Numerous Housing elements for agencies throughout Southern California*

Yara Fisher has led teams developing comprehensive plans and environmental documents for a variety of local, regional, and private clients. Many of these projects have focused on long range housing, transportation and infill planning efforts and their associated Program EIR. Her experience ranges from general plans, zoning ordinances, housing elements, specific plans, and climate action plans/strategies to environmental documentation and climate change mitigation strategies for a variety of private, local, and regional planning projects. Her environmental experience includes the preparation and management of program- and project-level environmental impact reports, mitigated negative declarations, and other tiered documents required under CEQA. She has been with AECOM since 1998.

Project Experience

City of Pasadena General Plan Implementation, City of Pasadena, CA
Ms. Fisher is assisting the City of Pasadena in preparing environmental documentation for eight Specific Plans, tiering from the prior General Plan EIR. As part of a broader team updating the Specific Plans, Ms. Fisher oversaw environmental staff and subconsultants, directing the technical work for successful completion of eight Addenda. [2019-ongoing]

Community Plans and New Zoning Code EIR, City of Los Angeles, CA
Ms. Fisher managed the preparation of Citywide program-level impact analyses for the re:code LA effort within the Downtown Community Plan EIR. Re:code LA is a program to comprehensively revise the City of Los Angeles Zoning Code. The re:code LA program will amend the text of the Los Angeles Municipal Code (LAMC) to replace the City's existing Zoning Ordinance (Chapter 1 of the LAMC) with a New Zoning Code. The new Zoning Code will be implemented through community plan updates. The New Zoning Code will include, among other

provisions, new zone classifications and revised/reorganized development standards and requirements for new zone classifications. This effort was involved extensive collaboration with staff and consultants in preparing the environmental anlaysis. (2017-ongoing)

Los Angeles County, Housing Element,
Los Angeles County, CA
As project manager, Ms. Fisher oversaw the preparation of the 2008–2014 Los Angeles County Housing Element. Working closely with Veronica Tam & Associates and numerous county staff, Ms. Fisher helped deliver a quality product on time and within budget. A huge component of this effort was identifying suitable vacant and underutilized sites to allow of the housing units needed to meet the Regional Housing Needs Assessment. In addition to a comprehensive update of all element sections, a major component of this work program was developing an organizational structure and format that complemented the draft general plan.

UCSD Long Range Development Plan and EIR, San Diego, CA. Principal-in-Charge of the preparation of a program-level EIR for UCSD's Long Range Development Plan (LRDP). Working closely with Campus Planning Staff, she also assisted with the drafting and formatting of the LRDP, which establishes the development and growth parameters for the campus in light of UC Regents' goals for the statewide educational system. The EIR addressed impacts associated with the Plan in light of its surrounding communities and coastal resources. The Plan and EIR included a detailed greenhouse gas emissions analysis and reduction strategy to address implementation of the LRDP. The EIR also included a VMT analysis for the years 2025 and 2035, one of the first VMT analyses prepared for a UC campus. *AEP and APA Award winning project.* [2016-2018]

City of Imperial Beach Local Coastal Program Update and Climate Action Plan, Imperial Beach, CA. Project Director for the development of the City's first Sea Level Rise adaptation framework and Climate Action Plan. This includes leading efforts to translate the City's 2016 Sea Level Rise Vulnerability Assessment into Sea Level Rise adaptation policies for the City's Local Coastal Program and General Plan Update as well as the corresponding Implementation Plan. As part of this effort, AECOM also developed a Sea Level Rise checklist for the City to guide the selection of particular adaptation strategies over time that are fiscally and economically sustainable and preserve beaches and private property. She also oversaw the development of the Negative Declaration to support the project. {2017 - 2020]

County of San Diego Advance Planning and Environmental Services
San Diego County, CA
Through an on-call contract with the County of San Diego Planning and Development Services Department, Yara prepared updated sections of the Land Development Code related to the County's affordable housing and density bonus programs. Through an on-call with Department of General Services she also assisted the County with obtaining entitlements for an affordable housing community. The site was a commercially zoned surplus County property located within the City of San Diego within a Transit Priority Area and Community Commercial Core. The goal was to entitle the site and prep it through demolition activities to allow an affordable housing developer to be able to process a future affordable housing project ministerially through the City of San Diego. She also oversees adjunct staffing services for a variety of staff working on efforts ranging from Code Compliance to preparation of the Alpine Community Plan Supplemental EIR.

City of San Marcos, General Plan, Zoning Ordinance, and Program EIR, San Marcos, CA
As project manager, Ms. Fisher led a team of community outreach specialists, sustainability planners, and environmental analysts in a comprehensive update to this general plan and zoning ordinance. The program included an extensive public outreach program, including a website, newsletters, a General Plan Advisory Committee, extensive stakeholder engagement with Palomar College and CSU San Marcos, youth outreach, and public workshops. The land use alternatives process was informed by the AECOM's Sustainable Systems Integration Model (SSIM), which helped highlight key sustainability factors. As a tandem process, the Zoning Ordinance was also updated to reflect a form-based approach to development in targeted mixed use areas. Ms. Fisher also led the Program EIR. The General Plan won a local and State APA award for comprehensive planning for a small jurisdiction. [2010 – 2013**]**

University Innovation District (UID). Chula Vista, CA. Strategic CEQA Advisor for HomeFed, who was proposing a re-envisioned University Innovation District in co-operation with the City of Chula Vista. The UID provided a flexible zoning approach to developing a mix of campus, housing, and industrial uses. CEQA guidance included an evaluation of options for tiering from three previously certified environmental impact reports within the UID area. [2020]

Port of San Diego Master Plan Update, San Diego, CA. Project Manager for the Port Master Plan update. Ms. Fisher is

leading a team of community planners, economists, urban designers, coastal policy planners, and mobility experts to comprehensively update the Port's Master Plan. This work program builds upon an extensive stakeholder and strategic visioning process with the intent of developing a modern, streamlined Port Master Plan document to meet Coastal Act requirements as well as facilitate future project implementation. The updated Plan includes refined land and water uses as well as Baywide and District-level policies to increase coastal access and recreation opportunities consistent with the District's goals. A unique aspect of this effort was developing a dynamic model to plan and evaluate scenarios within each of the Districts ten Planning Districts. [2015-2017]

Civic San Diego, Environmental Services, San Diego, CA
Project manager and staff liaison for the processing of environmental projects for Civic San Diego. Primary tasks include the preparation of CEQA secondary studies, which tier off of the previously adopted master EIR and subsequent EIR for redevelopment in downtown San Diego. Other environmental documentation and general environmental consulting services were also provided, ranging from CEQA exemptions, revised secondary study content and format, and addendums to previously certified EIRs, including the greenhouse gas analysis and Addendum for the Ballpark Village project, a multi-use development oriented to Petco Park in downtown San Diego. Since 2003, Ms. Fisher has assisted Civic San Diego in the processing of more than 100 publicly and privately initiated projects. [2003 – 2019]

City of La Mesa GHG Inventory, CAP, and General Plan EIR
Project Manager for a unique and collaborative shared work approach with City staff preparing an updated GHG inventory, CAP, and Program EIR for their Centennial General Plan. The work program included an update to the previously prepared International Council for Local Government Initiatives (ICLEI) GHG inventory, making refinements to the municipal operations assumptions as well as addressing communitywide emissions generated by vehicular traffic, energy, and water use. The inventory was used to refine General Plan policies related to the City's sustainability goals as well as support the GHG emissions analysis within the Program EIR. The Program EIR covered all environmental topics and was completed in a cost efficient manner using a mix of AECOM and City staff resources. The Plan and Program EIR were unanimously approved/certified with no legal challenge to either document. Following adoption of the General Plan, Ms. Fisher assisted the team with development of the CAP and a Supplemental Focused EIR. [2012-2018]

City of San Diego, Old Town and Midway Community Plan Updates and Program EIR, San Diego, CA
Ms. Fisher led parallel updates to the Old Town and Midway Community Plans. In the heart of San Diego, these Community Plan areas are within the coastal zone and include regional destinations such as Lindbergh Field, Old Town Historic State Park, and the Sports Arena. Transportation and transit planning, creating linkages to historic resources and open spaces, and balancing regional needs with those who live and work in the areas are key considerations in the updates of these Community Plans. The team for the Community Plan updates and EIR included outreach specialists, urban designers, sustainability planners, land planners, historic designers, mobility experts, and environmental resource specialists. The marriage of these specialties afforded a comprehensive approach to planning and environmental review for these two important areas of San Diego. [2010 – 2018**]**

City of West Hollywood General Plan Noise Element, CAP, and Program EIR
Project Manager for completion of the General Plan Noise Element, Climate Action Plan and Program EIR for the City of West Hollywood's updated General Plan. The team coordinated closely with City staff and their consultant team to complete the City's first CAP as well as a comprehensive Program-level EIR for the two planning documents. The General Plan, CAP, and EIR were unanimously approved by the decision-makers and no legal challenge was brought. [2009-2013]

SANDAG RCP and RTP/SSCS Planning And Environmental Services, San Diego, California
For many years, Ms. Fisher has provided a variety of services in support of SANDAG's Regional Comprehensive Plan (RCP) and Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) efforts. She was Project Manager for the Program EIRs for the most recent RCP, as well as the two most recent RTP/SCS documents. The RTP/SCS EIRs provided a program-level analysis of impacts related to regional growth and multi-modal transportation improvements for the entire San Diego region. Impacts were detailed for three separate time periods – 2020, 2035, and 2050. In response to input received from the public and decision makers throughout development of the RTP/SCS and EIR, the EIR also provided an extensive analysis of alternatives to the project. To meet statutory deadlines, development of the EIR was fast-tracked once the preferred RTP/SCS was established.

Recently, Ms. Fisher assisted SANDAG in updating the project evaluation criteria and plan performance measures for San Diego Forward. The goal of this work effort is to identify criteria and measures that best allow the public and decision makers to evaluate how well regional plan alternatives and the preferred plan meet the agency's established objectives.

Yara was also Project Manager for the SANDAG TOD Implementation Strategy. This work effort involves identifying key factors that affect the viability and ultimate success of TOD, with case studies both locally and nationally. The goal of this effort is to identify prioritized actions for SANDAG and its member agencies to implement that will facilitate TOD. These collaborative processes with SANDAG staff have provided Ms. Fisher deep knowledge of the SANDAG region's environmental, political, and planning context, as well as an understanding of the resources and tools available to analyze land use, transportation, and environmental impacts throughout the region. [2008 – 2016]

Town & Country Hotel and TOD Master Plan and EIR, San Diego, CA
Project Director and EIR task manager for the revitalization of the Town & Country hotel and mixed use transit oriented development project located in Mission Valley, San Diego. The project included the development of a comprehensive Master Plan, supporting technical studies, and a project-level EIR for the Town & Country project. The project reconfigured the existing convention center and hotel to included 700 units, nearly 200,000 square feet of convention space, and incorporated 4.3 acres of park and 840 residential units to complement the nearby amenities of Fashion Valley Transit Center and San Diego River. [2014-2018]

County of San Diego San Dieguito LCP, LUP, and IP.
Project Director for the San Dieguito Local Coastal Program, Land Use Plan, and Implementation Plan for the County of San Diego. With this effort, Ms. Fisher oversaw a team of coastal and resiliency planners to update the existing 2011 LCP in conformance with the California Coastal Act to reflect current circumstances and new scientific information, including new understandings and concern for the effects of climate change and sea-level rise. The project included analysis of the portion of the unincorporated County located within the Coastal Zone (CZ) and the development of related policy for: land use and development standards, public access and recreation, scenic/visual resources, archaeological/paleontological resources, water quality, agricultural resources, sensitive habitats, climate change, hazards, and steep slopes. Concurrently, AECOM also worked closely with County staff to develop the Implementation Plan for the LUP.

City of Imperial Beach, Commercial/Mixed-Use Zoning Review, Zoning Amendments and EIR, Imperial Beach, CA
Project manager and advisor for a review of the commercial zoning and mixed-use overlays within the city's coastal zone, including preparation of a Program EIR. The city initiated this project because recent mixed-use projects have not achieved city design and economic development goals. The team was composed of urban designers, mobility/parking planners, zoning experts, environmental analysts, and economists to assess the existing zoning and development trends to craft hybrid traditional and form-based zoning amendments that better achieve the community's vision. [2008 – 2013**]**

Chollas Triangle Community Plan Update EIR
San Diego, CA
Managed the preparation of a program-level EIR for the Mid-City Communities Plan—Chollas Triangle, General Plan Amendment and Rezone project. The project proposed a General Plan amendment, Mid-City Communities Plan amendment, and a rezone to implement a new land use designation within Chollas Triangle to allow for the site to develop as a mixed-use neighborhood village. The project also included the vacation of a roadway to allow for development of passive park space adjacent to Chollas Creek. (2014-2015)

City of Long Beach, Downtown Community Plan and Program EIR, Long Beach, CA
Project advisor who assisted in developing overall approach and development standards for this plan, as well as overseeing a Program EIR to facilitate tiering. The Community Plan combines form-based design guidelines and development standards intended to facilitate and incentivize revitalization in the downtown. The framework for development focuses growth and density near transit, while ensuring transition areas to the surrounding communities. A graphic approach to design guidelines and standards are provided to illustrate key components of a pedestrian-friendly downtown, including topics such as building massing, mixed-use development, and the design of street frontage and streetscape. A key component of this process is the development of a Program EIR that will ensure a streamlined environmental process for future development. [2007 – 2013**]**

Carson Shell Revitalization Project Specific Plan
Carson, CA

Project manager for the environmental documentation for the Carson Revitalization Project located in the City of Carson. The 448 acre property is the site of a former refinery and the underutilized areas of the property have been planned for revitalization with new light industrial and business park land uses coordinated with continuation an expansion of some of the current onsite fuel distribution operations. The AECOM team, working closely with Shell and the City of Carson, prepared a Specific Plan identifying six separate revitalization areas for future retail, industrial and manufacturing land uses. Also included was an expansion of the petroleum and renewable fuel storage and distribution capacity and a site for a solar power generation facility. [2009-2015]

St. Paul's Cathedral Redevelopment Project EIR, San Diego, CA
Project manager for the development of a project-level EIR for the St. Paul's Cathedral Redevelopment project, which rehabilitated and expanded the historic St. Paul's Cathedral and developed two residential towers on adjacent parcels next to Balboa Park. Key issues addressed in the EIR included historic resources, aesthetics and light and glare, and traffic. [2009-2011]

Irvine Planning Areas 1, 2, and 9 EIR, Irvine, CA
Project manager responsible for peer review services, overall project management, and document preparation and distribution of a program EIR. This work program also involved community outreach such as public noticing, the scoping meeting, and a community workshop. The project consisted of a general plan amendment and zone change for Irvine Planning Areas 1, 2, and 9. Total development proposed was 4,310 dwelling units and 200,000 square feet of community commercial development in combined Planning Areas 1 and 2. The project also included a transfer of dwelling units from Planning Area 1 to Planning Area 9 to replace approximately 2.6 million square feet of research and industrial development in Planning Area 9. All CEQA Guideline issue areas were addressed in the technical reports and EIR. [2004**]**

Grant-Tucker Properties/County of San Diego, Albertsons EIR, Alpine, CA
Assistant project manager who prepared an EIR for the proposed Alpine Village Center (Albertson's) located in the unincorporated community of Alpine. The proposed project involved the construction of an approximately 73,000-square-foot neighborhood commercial shopping center complex on an approximately 9.65-acre site. The project includes a supermarket, retail shops, fast-food restaurant, service station, and mini mart. Issues examined in the EIR were land use, traffic, air quality, noise, biological resources, public services and utilities, visual aesthetics, and hydrology/water quality. During this EIR program, acted as primary author and coordinator between county staff, the client, and subconsultants. [1999– 2001**]**

City of Laguna Hills, General Plan Update and Program EIR, Laguna Hills, CA
Ms. Fisher managed the general plan update, Housing Element, and Program EIR. Laguna Hills is a master planned community in Orange County, California, focusing on opportunities for strategic infill development that will help the city achieve its community-building and economic development goals. The city is particularly interested in increasing community interaction, encouraging healthy lifestyles, and establishing a distinct sense of place. Ms. Fisher leaded the team of land planners, economic/ fiscal consultants, circulation experts, urban designers, and environmental specialists to identify key opportunity areas for redevelopment and community enhancement that will help the city achieve its vision for the future. She also lead the preparation of the Program EIR and its associated technical studies. [2007 – 2009**]**

City of Downey, Zoning Ordinance, Downey, CA
Project manager who assisted in comprehensively updating the zoning ordinance. A key component of this work program was drafting regulations and incentives to support community sustainability. In addition to developing new mixed-use regulations, the code addressed small wind generators, solar access, permeable paving, community gardens, farmers markets, tree preservation, and green roofs. [2009**]**

City of San Diego, General Plan Program EIR, San Diego, CA
Ms. Fisher assisted the city in preparing a program EIR analyzing the impacts associated with adoption and implementation of the city's updated general plan. As part of this role, Ms. Fisher oversaw multiple AECOM and city staff in the preparation of each section of the EIR. She also provided third-party review of sections drafted by city staff, providing overall strategy and direction for preparing a legally defensible Program EIR. Two important components of this work program were assisting with the development of a program-level analysis and mitigation that reflected the city's many policies, programs, and implementation plans, and drafting global warming analysis and mitigation that reflected a balance

between the city's and Attorney General's goals for global warming analyses. [2007 – 2008]

City of Salinas, Zoning Ordinance, Salinas, CA
Assistant project manager and primary author who assisted the city in comprehensively updating its zoning ordinance to reflect current city policy and administrative procedures, new technology, and changes in state and local laws. A major component of this work program was drafting New Urbanism regulations and a Transfer of Development Rights ordinance to reflect the goals and polices of a recently updated general plan. Drafting of the New Urbanism regulations and design standards included extensive community outreach and a hybrid traditional/form-based approach to development regulations. [2005]

City of El Centro, Zoning Ordinance, El Centro, CA
Project manager for an update to the City of El Centro's Zoning Ordinance. A primary goal of the work program was to provide consistency between the newly updated general plan and the zoning ordinance. Other aspects of the work program included creating a more readable and user-friendly document that included updated terms and recent changes to state law. Ms Fisher was responsible for leading public brainstorming and study sessions to ensure adequate input was received from the community and decision makers. As part of the zoning ordinance update, the city's sign ordinance was also revised. [2004 – 2005]

City of Richmond, Zoning Ordinance, Richmond, CA
Project advisor for a comprehensive update to this zoning ordinance. Ms. Fisher's role in this work program involved a detailed and critical review of the city's zoning ordinance and several specific plans to determine the appropriate approach for meeting the city's goals. As part of the community outreach process, opportunities for form-based zoning were identified in several distinct areas of the community. Ms. Fisher oversaw these efforts and provided technical review and quality assurance for the prepared documents. [2005]

City of Rancho Santa Margarita, Zoning Ordinance, Rancho Santa Margarita, CA
Project manager and author of the City of Rancho Santa Margarita's first zoning ordinance. Preparation of the ordinance involved drafting regulations that improved upon the numerous existing planned community texts, and existing codified and un-codified ordinances. The ordinance is user-friendly with liberal use of illustrations to clarify terms, development standards, and zoning concepts. The document establishes consistent, effective administrative procedures using graphic charts and provides highly illustrative examples of planning and design standards reflecting the city's general plan vision. [2003]

City of Aliso Viejo Zoning Ordinance, Aliso Viejo, CA
Project manager and primary author of the City of Aliso Viejo's first Zoning Ordinance. Preparation of the zoning ordinance involved simplifying regulations and land use categories from numerous planned community texts. The ordinance also addressed several unique environmental conditions, including location within the coastal zone, high fire hazards areas, scenic corridors, and flooding. [2003]

City of Holtville, Zoning Ordinance, Holtville, CA
Primary author of an updated zoning ordinance for the City of Holtville in Imperial County. The update objectives were to ensure consistency with the city's general plan, meet requirements of California planning and zoning law, and provide land development regulations that ensure high-quality future developments. [2000]

City of Long Beach, Framework Element, Long Beach, CA
Long Beach is undertaking a general plan update with a focus on establishing integrated development strategies for infill opportunity areas. At the heart of the effort will be a framework that incorporates citywide mobility, urban design, sustainability, and preservation strategies. The main component of this framework is context sensitive, form-based place types that guide desirable development types and intensities to appropriate opportunity areas. As urban and environmental planner, Ms. Fisher primarily worked on developing an innovative implementation program that kept the Framework Element at the forefront of all major planning decisions. [2008]

City of Seaside, General Plan and EIR, Seaside, CA
Assistant project manager for this general plan program, responsible for coordination of the general plan update, Housing Element, and preparation of the associated EIR. Located in Monterey County, Seaside has a population of approximately 32,000 residents and now includes about 6.2 square miles of the former Fort Ord military base. The acquisition of the Fort Ord property brought new opportunities and challenges for the coastal community that had to be addressed by the updated general plan. A primary purpose of the general plan was to comprehensively address issues, opportunities, and constraints facing both the established portion of Seaside and the newly acquired portions of the former Fort Ord military base. Along with the required elements, the general plan program focused on redevelopment/revitalization, urban design, and economic

development for areas within the older portion of the community, Seaside Proper. HCD certified the 2002–2007 housing element. [2006]

City of San Juan Capistrano, General Plan and EIR, San Juan Capistrano, CA
Project planner and coauthor who assisted in the preparation of a general plan update and EIR for the historical community of San Juan Capistrano in South Orange County. The program included a substantial community participation and vision building component. The revised plan includes the seven mandatory elements required by state law, as well as several optional elements: cultural resources, community design, growth management, parks and recreation, public facilities, and flood plain management. Using ArcView and other computer techniques developed by P&D, land use and circulation components were carefully analyzed and matched. Orange County APA Award-Winning Project. [2001 – 2002]

City of Salinas, General Plan and EIR, Salinas, CA
Project planner and coauthor of a general plan and associated program EIR for a compact city surrounded by land in agricultural production. To address substantial growth pressures and the city's interest in preserving agricultural land, the Salinas General Plan program included a substantial community participation program to identify goals, policies, and a preferred land use plan, which ultimately supported more compact, traditional neighborhood development patterns. Major issues addressed in the general plan and analyzed in the EIR included agricultural preservation, compatibility between agricultural and urban development, community design and livability, water supply and quality, and the conservation of open space and natural resources. [2000 – 2006]

City of Rancho Santa Margarita, General Plan and EIR, Rancho Santa Margarita, CA
Project planner and coauthor of the first general plan for the newly incorporated City of Rancho Santa Margarita, the 33rd city in Orange County. With a population of about 42,300, Rancho Santa Margarita consists of several pre-incorporation large-scale planned communities. The general plan includes innovative planning policy and programs designed to actively manage the community's future and ensure its sustainability. Also one of the primary authors of the city's first HCD-certified housing element and program EIR. [2000 – 2002]

City of Aliso Viejo, General Plan and EIR, Aliso Viejo, CA
As a project planner, Ms. Fisher assisted with project start-up for the first general plan for the City of Aliso Viejo. Her responsibilities included preparation for and leading of community meetings, leading the visioning process, and helping design the format and content for the general plan. Ms. Fisher also provided peer review of the planning document and associated EIR. Orange County APA Award-Winning Project. [2001 – 2003]

City of San Jacinto, General Plan and EIR, San Jacinto, CA
Project manager and coauthor of an updated general plan, housing element, and associated program EIR for the City of San Jacinto located in Riverside County. A major issue addressed in the general plan and analyzed within the EIR was traffic and circulation, as several alternative alignments for State Route 79 were considered. Other issues analyzed were land use, prime agricultural resources and Williamson Act lands, biological resources, historical resources, and aesthetics. The housing element was successfully certified by HCD while achieving the city's goals for maintaining its rural character. [2002 – 2004]

City of Los Altos, General Plan and Mitigated Negative Declaration (MND), Los Altos, CA
Project planner and environmental analyst who assisted in the preparation of an updated general plan for the City of Los Altos in Santa Clara County, as well as the associated MND. The community of Los Altos is concerned to maintain and enhance its quality of life and create a more livable city. The team included Dan Burden of Walkable Communities and focuses on how the quality of life and livability can be improved by creating safe and convenient local access throughout the city with improvements to the walking and bicycling system, as well as through traffic calming. [2000]

Padre Dam Municipal Water District, Riverview Water District, Lakeside Water District Upper San Diego River Municipal Service Review (MSR)/Sphere of Influence (SOI) Update/Reorganization Study, San Diego County, CA
Project manager for this project, which involved a detachment of the Lakeside and Riverview districts from Padre Dam and subsequent reorganization to join Lakeside and Riverview Water districts into one successor agency. The studies required approval of the districts and the San Diego Local Formation Commission. [2003 – 2005]

City of Salinas, Boronda Crossing Precise Plan, Salinas, CA

Project manager who helped the City of Salinas successfully complete a revised precise plan for a 41.5-acre property. The purpose of the amended precise plan was to remove auto-related restrictions and allow a general retail shopping center. Coordinated the effort so that the precise plan comprehensively addressed land use, design, engineering, and infrastructure requirements for developing the site with a maximum of 540,000 square feet of retail uses, including restaurants, big box retail, and auto dealerships. Primary issues addressed include drainage/hydrology, compatibility with surrounding uses, circulation, and public services. [2005**]**

Westmount Properties/DD&E, Calexico Specific Plans, Calexico, CA
As project manager, provided direct oversight of the preparation of three Specific Plans (Las Ventanas, Los Lagos, and Rancho Diamante) on parallel processing tracks through Calexico. Combined, the three Specific Plans provided the planning tools necessary to develop 1,746 acres of land with approximately 7,200 housing units, regional- and neighborhood-serving commercial, schools, parks, and other public facilities and infrastructure. [2005 – 2007**]**

Westmount Properties/DD&E, Waterford/ Anderson Specific Plan, El Centro, CA
Project manager for this Specific Plan, which established the framework for development of 1,056-acre area within the City of El Centro's Sphere of Influence and in proximity to the Imperial Valley Mall. The proposed Specific Plan included land use, design, and infrastructure standards to allow the development of a pedestrian-friendly community with 5,500 dwelling units, including age-restricted units. [2005**]**

County of San Diego Department of Public Works, Ramona Air Center EIR, Ramona, CA
Ms. Fisher was project manager for a project-level EIR analyzing the impacts of a proposed public/private aviation facility within the Ramona Airport Master Plan area. Ramona Airport is a 362-acre facility owned and operated by the County of San Diego Department of Public Works that averaged 165,000 flight operations in 2007. The proposed public and private aviation uses required an amendment to the Airport Layout Plan and a thru-the-fence agreement with the Federal Aviation Administration. The EIR analyzed all environmental issue areas identified in CEQA Guidelines Appendix G. [2006 – 2010**]**

City of Lake Forest, Road Landscape and Improvement Project EIR, El Toro, CA
Project planner who assisted in completing a second-tier EIR for improvements to El Toro Road based on the earlier first-tier EIR prepared for the El Toro RDA Specific Plan. This EIR focused on environmental impacts (both construction and operational impacts) and necessary mitigation for planned improvements to El Toro Road segments and interchanges. Specific environmental issues analyzed were land use and planning, traffic/circulation, air quality, noise, hazardous materials, geotechnical, water quality, drainage, aesthetics, and public services and utilities. [2003**]**

City of Santee, Trolley Square Commercial Center EIR, Santee, CA
Project environmental analyst and primary author of an EIR for a commercial and entertainment center of approximately 360,000 square feet located in the Santee Town Center. The project was developed around a light rail and bus station and included a 24-screen theater complex, retail, restaurants, a 30,000-square-foot public library and up to 100 units of housing for older adults. Major issues analyzed in the EIR were traffic/circulation and public transit operations, land use, compatibility, flight safety and noise from a nearby airport, air quality, biology, geology/soils, and hydrology. [2000– 2001**]**

City of Santee, Square Revised EIR, Santee, CA
Project planner who prepared a revised EIR to address the revisions to the proposed Santee Trolley Square project. The major revision to the project was the removal of a formerly proposed 20-screen multiplex theater and replacement with two large retail anchors, increasing the overall square footage of the project. The revised project included a commercial center anchored by a 126,000-square-foot Target with a 9,350-square-foot garden center. An 86,000-square-foot major retail pad is also proposed for Kohl's. An additional 165,143 square feet of retail uses and 43,000 square feet of restaurant uses are proposed. A 30,000-square-foot city library is also proposed. Issues addressed in the EIR included land use, traffic, noise, air quality, biology, geology, hydrology/water quality, and public services and utilities. [2001– 2002**]**

County of San Diego, Valley Center Septic Moratorium/ Policy I-78 Amendment EIR, San Diego County, CA
Project environmental analyst who assisted in the preparation of a program EIR for a 14,000-acre area in the Valley Center portion of San Diego County. The program EIR evaluated the impacts of lifting a 20-year sewer moratorium, in addition to amending existing county policies for the provision of small

wastewater (package) treatment plants and septic systems. Coordinated with P&D's GIS mapping department to prepare quantified buildout assumptions and analysis. Issues addressed in the EIR included land use, circulation, noise, biology, archaeology, water quality, public services/facilities, growth inducing, and cumulative effects. [1998 – 2000**]**

County of San Diego, Environmental Services, San Diego County, CA
Project environmental analyst who provided general environmental services to the County of San Diego to assist its Department of Planning and Land Use with processing of land use applications. These land use applications included subdivision maps, conditional use permits, variances, and others. Environmental documentation included initial studies, mitigated negative declarations, exemptions, and other county-required materials. [1998 – 2000**]**

City of Escondido, Promenade Center/Citracado Middle School EIRs, Escondido, CA
Project environmental analyst and primary author of EIRs for two closely related, but separate projects. The first project involved redevelopment of the existing 24-acre Del Dios Middle School site at I-15 and Valley Parkway in Escondido into the second phase of the Promenade Shopping Center. With more than 260,000 square feet of floor area, Promenade II will include either traditional retail uses or a multiscreen theater complex with ancillary uses. Critical environmental issues included traffic, air quality, noise, and aesthetics. The second project involved development of the 1,200-student Citracado Middle School by the Escondido Union School District as a replacement for the Del Dios Middle School. The new school was proposed to be located at Del Dios Highway and Citracado Parkway on an undeveloped 34.2-acre site. Critical issues analyzed in the EIR included compatibility with surrounding residential uses, biological and archaeological resources, grading, noise, and traffic. [2000**]**

City of Carlsbad, Oaks North Specific Plan, Carlsbad, CA
Coauthor of an EIR for a project involving three major components:

- Development of the Carlsbad Oaks North Specific Plan
- Construction and operation of a 1.3-mile-long extension of Faraday Avenue (a four-lane arterial roadway connecting the cities of Carlsbad and Vista)
- Construction and operation of an 11,700-foot-long segment of the South Agua Hedionda Trunk Sewer

The specific plan proposes industrial uses and supporting infrastructure on a 414-acre site. The project will impact sensitive biological habitats including coastal sage scrub, scrub oak chaparral, southern coast live oak, riparian forest, and wetlands. Impacts to these habitats require permitting from the US Army Corps of Engineers, US Fish and Wildlife Service, and California Department of Fish and Game. A key component of the work program is a proactive approach to identify the least damaging alternatives for the roadway and sewer as required by section 404 of the Clean Water Act. Issues addressed in the EIR included biological resources, cultural resources, hydrology/water quality, traffic/ circulation, land form alternation, geology/soils, noise and air quality. [1999 – 2000**]**

City of Carlsbad, Municipal Golf Course EIR, Carlsbad, CA
Project environmental analyst who assisted in the preparation of the EIR for the Carlsbad Municipal Golf Course. Located on approximately 350 acres of land west of Palomar Airport and east of the LegoLand theme park, the project includes an 18-hole championship course, 22,000-square-foot clubhouse, driving range, shooting range (for law enforcement personnel), 6 acres of golf-related commercial, and approximately 11 acres of light industrial. Environmental issues addressed in the EIR included biological resources, traffic/circulation, air quality, hydrology/water quality, water resources, public services and utilities, cultural resources, landform alteration, electromagnetic fields (EMF) hazards from overhead electrical transmission lines, and agricultural resources. [1999 – 2000**]**

City of Escondido, General Plan Update EIR, Escondido, CA
Project environmental analyst who assisted in the preparation of a program EIR. The general plan update involved a combination of private requests for land use changes on specific properties, consideration of land use alternatives initiated by the city council, amendment of several quality-of-life standards for city facilities, and miscellaneous policy revisions. The EIR was prepared in a format to allow flexibility for decision makers and in selecting any combination of general plan amendments. The EIR was completed on a fast-track schedule to allow the city to place the amendments on the November 2000 ballot for citizen approval. [1999 – 2000**]**

County of San Diego, North Edgemoor Initial Environmental Study, Santee, CA
Project environmental analyst who prepared an Initial Environmental Study for the county-owned North Edgemoor

property. The property is approximately 33 acres and is the potential future site of a county-run skilled nursing hospital and senior housing facility. To obtain state funding for the project, the county was required to complete an application package that included an assessment of the feasibility of developing the project at that location with respect to environmental constraints. Primary author of a detailed initial environmental study of the property focusing on biological resources, cultural resources, traffic/circulation, noise, land use, geology, hydrology, and hazardous materials. The document was prepared on a fast-track (6-week) schedule to meet the state's application deadline for funding. [2000]

Los Angeles County, Housing Element, Los Angeles County, CA
As project manager, Ms. Fisher oversaw the preparation of the 2008–2014 Los Angeles County Housing Element. Working closely with Veronica Tam & Associates and numerous county staff, Ms. Fisher helped deliver a quality product on time and within budget. In addition to a comprehensive update of all element sections, a major component of this work program was developing an organizational structure and format that complemented the draft general plan. [2008]

City of Carmel-by-the-Sea, Housing Element, Carmel, CA
Project manager who coordinated the preparation of the 2002–2007 Housing Element. Carmel is a small coastal community of 5,000 residents located in Monterey County. Because limited land is available for additional residential development, the city was particularly interested in using second units and residential units located above commercial development to meet its regional housing need allocation. To assist in this task, AECOM assisted in the preparation, coding, and analysis of two separate surveys of commercial and residential property owners to identify the rental structure and potential incentives for property owners to provide residential units above commercial and/or second units. [2001 – 2002]

City of Yuma, Consolidated Plan/AI, Yuma, AZ
Project manager who coordinated the preparation of a Consolidated Plan and Analysis of Impediments to Fair Housing choice (AI). The project also involved coordination with the Housing Element. The Consolidated Plan included housing and community development needs assessment, a 5-year strategy to address the identified needs, and a 1-year action plan to allocate Community Development Block Grant/Home funds. To identify needs and housing conditions in the community, assisted in the preparation, implementation, and analysis of a week-long windshield survey of housing, property maintenance, and infrastructure conditions. [2000]

San Diego County, Consortium Consolidated Plan, San Diego County, CA
Project planner who assisted in the preparation of a Five-Year Consolidated Plan for the San Diego County Consortium. The consortium consists of seven participating cities in the unincorporated portion of the county. The consortium receives approximately $6.5 million in Community Development Block Grant funds, $3.6 million in HOME funds, and $230,000 in ESG funds. To comply with Housing and Urban Development regulations, the consortium is required to prepare a 5-year Consolidated Plan identifying its housing and community development needs and the planned use of the funds in addressing the identified needs. P&D conducted a resident survey and a service provider survey to solicit public input on needs and preferred uses of the funds. [2008]

City of Corona, Housing Element Update, Corona, CA
Coauthor of an update to the City of Corona's Housing Element to cover the periods 2000–2005 and 2005–2010. The work programs included a review and update to background information, population projections, dwelling units and market data, accomplishments, the Regional Housing Needs Assessment and evaluation of residential sites, and an update to the housing plan. [2000 – 2005]

City of National, City Consolidated Plan, National City, CA
Primary author of the 5-year Consolidated Plan and Action Plan for National City for the use of Community Development Block Grant and HOME funds. The Consolidated Plan included an assessment of housing and community development needs in the city, and a 5-year strategy to address the needs. The One-Year Action Plan detailed the city's specific actions to address the priority needs. [2000]

City of La Mesa, Consolidated Plan, La Mesa, CA
Project planner and primary preparer of the La Mesa Consolidated Plan for the 2000–2005 period. The city receives Community Development Block Grant funds annually from Housing and Urban Development and participates in the San Diego HOME Consortium. The Consolidated Plan preparation was built on the Housing Element. [2000]

Imperial County, Housing Element, Imperial County, CA
Project planner who coordinated the update program and also served as coauthor of the county's 2000–2005 Housing Element. This update of the county's Housing Element included

a comprehensive update of the housing needs assessment as the basis for the element's program strategy for expenditure of housing funds. Existing programs were also revised and augmented to meet identified housing needs. [2000**]**

City of Holtville, Housing Element, Imperial County, CA
Project planner who prepared the 2000–2005 Housing Element for the City of Holtville, a community of 5,500 in the Imperial Valley. Prepared an update of the city's zoning ordinance concurrently, coordinating changes in the ordinance with actions needed to successfully implement the housing element. [2000**]**

City of Brawley, Housing Element, Imperial County, CA
Project planner who prepared the 2000–2005 Housing Element for the City of Brawley in Imperial County. Key areas addressed in the Housing Element included evaluation of potential residential sites illustrated in the Land Use Element, opportunities to fulfill a portion of the city's site requirements through committed assistance permitted under Assembly Bill 438, and past housing accomplishments. [2000**]**

City of National City, Housing Element, CA
Project planner who assisted in the preparation of the 1999–2004 Housing Element for the City of National City in San Diego County. Under Assembly Bill 1715, the city was able to self-certify the housing element. [1999 – 2000**]**

Erin Phillips
Environmental Planner

Professional History
08/2014 - present, AECOM, Environmental Planner

Education
BS, City and Regional Planning, California Polytechnic State University, San Luis Obispo, 2014

Years of Experience
With AECOM: 6
With Other Firms: 0

Professional Affiliations
Association of Environmental Professionals, San Diego Chapter Newsletter Editor

Erin Phillips is an environmental planner who has worked on a variety of projects involving California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) compliance. Ms. Phillips specializes in addressing land use and planning impacts as evident by her experience completing various community plan and zoning ordinance environmental documents.

Project Experience

County of San Diego Planning & Development Services, Land Development Code Update, San Diego, California. Deputy project manager for the preparation of CEQA compliance documentation to analyze adopting and implementing an update to the County's Land Development Code, which includes the County's Zoning Ordinance. Responsible for drafting a baseline assessment memorandum to understand changes since approval of the General Plan as well as CEQA tiering opportunities. Also involves preparation of an Initial Study to determine impacts and the type of CEQA compliance documentation required. [Present]

City of Los Angeles Planning Department, Zoning Code Update Environmental Impact Report, Los Angeles, California. Deputy project manager for the preparation of an Environmental Impact Report to qualitatively analyze adopting and implementing a new zoning code for the City of Los Angeles. Responsible for drafting the basic arguments table to layout the method for analyzing each resource topic as well as authoring a majority of the CEQA sections. [Present]

City of Pasadena, Specific Plan Update Addenda, Pasadena, California. Primary environmental analyst for the preparation of several addenda to the 2015 City of Pasadena General Plan Update Environmental Impact Report. Responsible for determining changed existing conditions via preparation of a baseline assessment memorandum and background technical studies related to infrastructure and utilities, cultural resources, and transportation. [Present]

County of San Diego Department of General Services, Clairemont Mesa Community Plan Amendment, San Diego, California. Planner assisting in the preparation of a community plan amendment to allow for a future affordable, multifamily residential development on a site currently zone for commercial-only use. Responsible for drafting and assembling the amendment application package, background research and coordination, and drafting changes to the Clairemont Mesa Community Plan. [September 2018-February 2020]

County of San Diego Department of General Services, Family Court Demolition and Ground Lease Project – CEQA Consistency Analysis, San Diego, California. Environmental analyst for the preparation of a CEQA Consistency Analysis analyzing impacts associated with the demolition of existing structures, approval of a ground lease to convey property to a developer, and future construction and operation of a mixed-use, multi-family affordable housing development. Tiered off the Downtown Community Plan Environmental Impact Report to satisfy CEQA. [March 2018-April 2018]

Caydon USA, California Theatre, CEQA Consistency Analysis, San Diego, California. Primary environmental analyst and project manager for the preparation of a CEQA Consistency Analysis analyzing potential impacts associated with a proposed mixed use development. Tiered off the City of San Diego's Downtown Community Plan, General Plan, and Climate Action Plan EIR's to satisfy CEQA. [Present]

Heidelberg Law Office, 4th and J, CEQA Consistency Analysis, San Diego, California. Primary environmental analyst and project manager for the preparation of a CEQA Consistency Analysis analyzing potential impacts associated with a proposed hotel development. Tiered off the City of San Diego's Downtown Community Plan, General Plan, and Climate Action Plan EIR's to satisfy CEQA. [Present]

City of San Diego Planning Department, Midway and Old Town Community Plan Updates – Program Environmental Impact Reports, San Diego, California. Deputy project manager for the preparation of two Environmental Impact Reports analyzing updates to the existing community plans, which involved rezoning and amending the Land Development Code. Analyzed land use, transportation/circulation, hydrology/water quality, public services and facilities, public utilities, and alternatives. Responsible for day to day coordination with the client and other project team members. [February 2017 – February 2018]

City of San Diego Planning Department, University Community Plan Amendment – Program Environmental Impact Report, San Diego, California. Environmental analyst for the preparation of an Environmental Impact Report analyzing the amendment of the existing community plan, which involved the removal of roadway widening and bridge projects. Involved in addressing client and public review comments. [April 2016 – November 2016]

Civic San Diego, Hilltop and Euclid Disposition and Development Agreement & Purchase and Sale Agreement, CEQA Consistency Analysis, San Diego, California. Environmental analyst for the preparation of the CEQA Consistency Analysis analyzing potential impacts associated with the approval of the agreements to convey property to private develops for future construction of a mixed-use, multi-family affordable housing development and a market rate residential development. Tiered off the Southeastern San Diego and Encanto Neighborhoods Community Plan Update Programmatic Environmental Impact Report. [August 2017-November 2017]

San Diego County Water Authority, As-Needed Environmental Services Contract, San Diego, California. Serves as deputy project manager for tasks under AECOM's as-needed environmental services contract with the Water Authority, assisting in a range of projects for the Water Resources Department. Responsible for providing support on environmental-compliance strategy related to the Water Authority's Natural Community Conservation Plan/Habitat Conservation Plan. Also assists with a host of CEQA documentation tasks related to pipeline relining projects, pump station construction and modification, habitat revegetation, and emergency repairs. Involved in various contract management tasks and invoicing. [2017-2020]

FEHR PEERS

John Muggridge, AICP

Principal

EDUCATION

Master of Science, Transportation Planning and Engineering, University of Leeds

Bachelor of Engineering, Mechanical and Process Engineering, University of Sheffield

REGISTRATIONS

American Institute of Certified Planners (021879)

AFFILIATIONS

American Planning Association (APA)

EXPERTISE

- Long-range Multimodal Transportation Planning
- Multimodal Corridor Planning
- Transportation Demand Management
- Travel Demand Modeling
- Land Use and Transportation
- Traffic Analysis

ABOUT

John has over 20 years of experience in transportation planning and engineering, both in England and in the United States. As a transport planner, John has research and analysis experience in both the private and academic sectors. John is knowledgeable in multi-disciplinary transportation and research projects, including multi-modal transportation planning projects and travel demand forecasting. He has authored numerous reports, managed and participated in a large range of transportation planning, traffic engineering, and parking studies for both private and public clients in Southern California and Hawaii. He also has extensive experience in conducting parking and circulation studies, traffic impact studies, downtown parking studies, long-range transportation plans, corridor studies and specific plans. John has worked with interdisciplinary teams to develop consensus on a wide range of transportation improvements.

SELECTED PROJECT EXPERIENCE

Downtown Community Plan
Fehr & Peers is currently working on the Downtown Community Plan Update for the City of Los Angeles. This community plan was initiated as part of an ongoing process to update all 35 community plans in the city by 2024, and serves as an example to future community plan updates in both analysis format and integration of latest city initiatives. Fehr & Peers is leading the transportation element of the plan, using the travel demand forecasting (TDF) model our team built for the City to regional and local specifications to analyze the changes estimated to take place with the adoption of the plan, including network, socio-economic, and zoning updates. John is serving as Principal-in-Charge on this project.

DTLA Mobility Investment Plan
Fehr & Peers is leading a team to support the City in developing the DTLA Mobility Investment Plan (MIP), a project that is reliant on technical objectivity for Downtown Los Angeles that is built upon stakeholder interests and acceptance. It is particularly dependent on addressing the community's mobility needs through engagement designed to obtain input from many diverse segments of the community. John is serving as Principal-in-Charge on this project.

Burbank Impact Fee Study
Fehr & Peers, as part of a team, is preparing an updated impact fee study for the City of Burbank. In a shift from the existing fee program, the updated transportation section will focus on multi-modal improvement projects instead of auto-oriented infrastructure projects. The fee update will also shift from a trip-based fee to a VMT-based fee in accordance with SB 743. This process including reviewing the projects on the City's existing Infrastructure Blueprint and assisting the project team with the identification of new transportation projects for the updated fee program.

Fehr & Peers is conducting a nexus analysis to relate the needs for the identified transportation improvements to new development in the study area. The fee study establishes a reasonable relationship between new development, the proportion of expected vehicle trips, and congestion levels attributable to new development, and the necessary roadway, sidewalk, bike lane or other transportation improvements that will be funded by the development impact fee program. The City of Burbank's Travel Demand Model, which Fehr & Peers developed, will be used to ascertain the portion of traffic/VMT that is attributed to new trips generated by new development in the City. John is serving as Principal-in-Charge on this project.

Pasadena Travel Demand Forecasting Model
Fehr & Peers developed a travel demand model for the City of Pasadena to be used as a tool in the evaluation of Land Use and Mobility Element land use scenarios and transportation system alternatives. The model will provide the ability to evaluate transportation system network and modal alternatives and assess various performance indicators for land use and transportation alternatives.

The travel forecasts will be used to estimate the effectiveness of the proposed Land Use and Mobility Element policies on the transportation system. As envisioned, the model will also be sensitive enough for traffic impact analysis purposes – for project and cumulative impacts. John was the Principal-in-Charge on this project.

Expo Corridor Transit Neighborhood Plans
Fehr & Peers served the City of Los Angeles in their "Transit Neighborhood Planning" for 10 future light rail stations along the Crenshaw and Expo lines. The project included new land use and streetscape regulations, general plan amendments, and specific plans for five of the stations. Our approach to trip generation, parking demand estimation, and transportation evaluation was informed by the City's new and innovative approaches to transportation evaluation contained in the LA2B update to the circulation element.

Fehr & Peers' combination of experience with market based private development impact analysis and our citywide efforts on the Mobility Element came together to meet the City's desire to incentivize an appropriate mix and density of land uses, foster economic development, improve ridership, provide and maintain affordable housing, and enhance the quality of the built environment. John was the Project Manager on this project.

Infill and Complete Streets - Capturing VMT Impacts and Benefits to CEQA, City of Los Angeles
The City of Los Angeles is shifting from an auto-oriented metropolis to a city built around transit, compact transit-oriented development, and multi-modal "Complete Streets" which emphasize all travel modes. However, these dynamic policy shifts have been significantly impeded by requirements under CEQA to mitigate automobile delay. The City wants to seize the historic opportunity, mandated by SB 743, to realign the environmental review processes with policies that support infill development and Complete Streets transportation projects.

Fehr & Peers was selected to work closely with the LADCP and LADOT to develop new VMT-based CEQA thresholds and to update the tools necessary to implement the new procedures. In addition to developing the new thresholds, Fehr & Peers is updating the City's travel demand model, which John is overseeing, and developing a sketch model tool to perform project-level VMT analysis; quantifying the parking demand and vehicle trip reduction benefits for mixed-use projects, creative office buildings, market rate housing, and affordable housing, and Transportation Demand Management (TDM) strategies. The affordable housing sites are broken down based on population and location. Fehr & Peers is educating city staff, private developers, and the community about the new impact review methodology through an engaging public outreach program.

West Hollywood SB 743 Implementation
Fehr & Peers is assisting the City of West Hollywood with SB 743 Implementation. We are providing knowledge and insight that will allow the City to be well prepared for a transition to Vehicle Miles Traveled (VMT) as its primary transportation impact metric for CEQA analysis, marrying the State's objectives to encourage transportation efficient development with the City's own goals and objectives.

The primary tasks involve developing the methodology for vehicle miles traveled assessment, helping the City with VMT screening options and impact thresholds for both land use and transportation projects, evaluating case studies for specific land uses, development of a VMT impacts and mitigation assessment tool and ultimately developing new transportation guidelines. John is serving as Principal-in-Charge on this project.