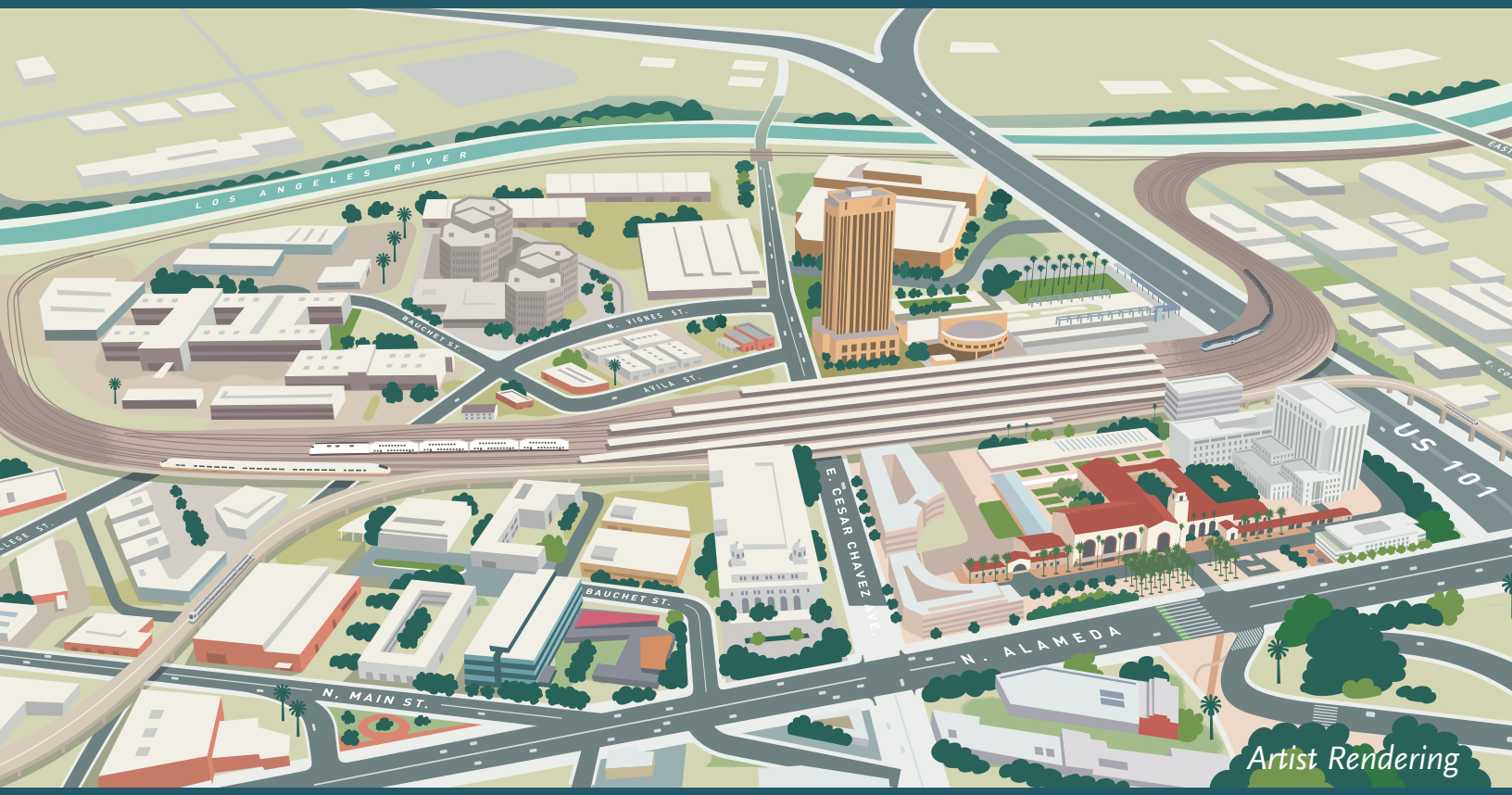
Link Union Station

Draft Visual Impact Assessment

June 2024



The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the Federal Railroad Administration and the State of California.

Metro

CALIFORNIA High-Speed Rail Authority

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CONTENTS

FIGURES

TABLES

ACRONYMS

ADA	Americans with Disabilities Act
Caltrans	California Department of Transportation
CBC	California Building Code
CEQ	Council on Environmental Quality
CHSRA	California High-Speed Rail Authority
CP	Control Point
EIR	Environmental impact report
EIS	environmental impact statement
FHWA	Federal Highway Administration
FR	Federal Register
FRA	Federal Railroad Administration
FTIP	Federal Transportation Improvement Program
HACLA	Housing Authority for the City of Los Angeles
HSR	high-speed rail
LAUS	Los Angeles Union Station
Link US	Link Union Station
Metro	Los Angeles County Metropolitan Transportation Authority
MOU	memorandum of understanding
NEPA	National Environmental Policy Act
Project	Link Union Station Project
ROW	right-of-way
RTP	regional transportation plans
SCAG	Southern California Association of Governments
SCS	Sustainable Communities Strategy
U.S.	United States
US-101	United States Highway 101
USC	United States Code
VCE	vertical circulation element
VIA	visual impact assessment

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ES.0 Executive Summary

The purpose of this visual impact assessment (VIA) is to document changes related to visual quality and aesthetics, identify potential visual impacts caused by the Build Alternative and proposed mitigation measures to minimize the potential for adverse effects relative to visual quality and aesthetics for the Link Union Station Project (Project or proposed action). This VIA was prepared in accordance with the National Environmental Policy Act (NEPA) and addresses applicable laws and regulations regarding visual resources.

The Project study area was divided into six visual assessment units. Each visual assessment unit has its own visual character and visual quality, defined by boundaries in visual characteristics. Representative locations were identified within each of the visual assessment units to illustrate the visual change associated with proposed infrastructure. Seventeen key views were assessed as part of this VIA. Key views also represent the viewer groups that have the highest potential to be affected by the proposed infrastructure, considering exposure and sensitivity. Visual effects are determined by assessing changes to the visual resources and predicting viewer response to those changes.

Direct and indirect adverse effects would occur in Visual Assessment Units #1 and #3 with regard to resource change and viewer response of the proposed retaining walls and required sound walls. Direct adverse effects would also occur due to temporary nighttime lighting during construction. Implementation of mitigation measures would avoid and minimize the potential for adverse effects in Visual Assessment Units #1 and #3.

The Build Alternative would result in no adverse effects with regard to resource change and viewer response for Visual Assessment Units #2, #4, #5, and #6. Additionally, the Build Alternative would have a beneficial effect on resource change and viewer response for Visual Assessment Unit #6.

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1.0 Introduction

The Los Angeles County Metropolitan Transportation Authority (Metro), as the owner of Los Angeles Union Station (LAUS), is proposing the infrastructure improvements associated with the Link Union Station (Link US) Project (Project or proposed action) to address existing capacity constraints at LAUS. For the purposes of the National Environmental Policy Act (NEPA), Metro is serving as the local Project sponsor and joint lead agency.

Pursuant to 23 United States Code (USC) Section 327 and a memorandum of understanding (MOU) between the Federal Railroad Administration (FRA) and the State of California, effective July 23, 2019, under a program known as NEPA Assignment, the California High-Speed Rail Authority (CHSRA) is responsible for the federal review and approval of environmental documents for projects on the high-speed rail (HSR) system and other passenger rail projects that directly connect to the HSR system, including the Link US Project. For the purposes of the environmental impact statement (EIS) being prepared, CHSRA is serving as the federal lead agency with NEPA responsibilities pursuant to the requirements of the NEPA Assignment MOU. CHSRA and Metro are preparing the EIS in compliance with NEPA (42 USC Section 4321 et seq.), the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500–1508), FRA's Procedures for Considering Environmental Impacts (FRA's Environmental Procedures) (*Federal Register* [FR] 64(101), 28545-28556, May 26, 1999), 23 USC Section 139, and the NEPA Assignment MOU.[1, 2]

Pursuant to the MOU requirements between FRA and the State of California, FRA's Environmental Procedures are being used to determine environmental effects of the No Action Alternative and the Build Alternative.

Below is an overview of the purpose and need, the Project study area, the No Action Alternative, and the major components associated with the on-site infrastructure improvements proposed at and within the vicinity of LAUS that are associated with the Build Alternative considered in the EIS.

[1] While this environmental document was being prepared, FRA adopted new NEPA compliance regulations (23 CFR 771). Those regulations only apply to actions initiated after November 28, 2018. See 23 CFR 771.109(a)(4). Because this environmental document was initiated prior to that date, it remains subject to FRA's Environmental Procedures rather than the Part 771 regulations.

[2] The CEQ issued new regulations, effective April 20, 2022, updating the NEPA implementing procedures at 40 CFR Parts 1500–1508. However, because this environmental document was initiated prior to the effective date, it is not subject to the new regulations and CHSRA is relying on the regulations as they existed on the date of the initial Notice of Intent, May 31, 2016. Therefore, all citations to CEQ regulations in this environmental document refer to the 1978 regulations and the 1986 amendment, 51 *Federal Register* 15618 (April 25, 1986).

1.1 Purpose

The purpose of the proposed action is to increase the regional and intercity rail service capacity of LAUS and to improve schedule reliability at LAUS through the implementation of a run-through tracks configuration and elimination of the current stub end tracks configuration while preserving current levels of freight rail operations, accommodating the planned HSR system in Southern California, increasing the passenger/pedestrian capacity and enhancing the safety of LAUS through the implementation of a new passenger concourse, meeting the multi-modal transportation demands at LAUS.

1.2 Need

The need for the proposed action is generated by the forecasted increase in regional population and employment; implementation of federal, state, and regional transportation plans (RTP) that provide for increased operational frequency for regional and intercity trains; and introduction of the planned HSR system in Southern California. Localized operational, safety, and accessibility upgrades in and around LAUS will be required to meet existing demand and future growth.

1.3 Project Location and Study Area

The Build Alternative consists of infrastructure improvements in Downtown Los Angeles in the vicinity of LAUS (Figure 1-1). LAUS is located at 800 Alameda Street in the City of Los Angeles, California. LAUS is bounded by United States Highway 101 (US-101) to the south, Alameda Street to the west, Cesar Chavez Avenue to the north, and Vignes Street to the east. The northern Project limit is at North Main Street (Mile Post 1.18) and the southern Project limit is in the vicinity of Control Point (CP) Olympic, south of Interstate 10 and Olympic Boulevard (Mile Post 142.70).

Figure 1-2 depicts the Project study area, which is generally used to characterize the affected environment, unless otherwise specified, and provide a geographic context for the existing and proposed infrastructure improvements at and within the vicinity of LAUS. The Project study area includes three main segments (Segment 1: Throat Segment, Segment 2: Concourse Segment, and Segment 3: Run-Through Segment). The existing conditions within each segment are summarized north to south below:

- **Segment 1: Throat Segment** – This segment, known as the LAUS throat, includes CP Chavez and the area north of the platforms at the LAUS rail yard, from North Main Street at the north to Cesar Chavez Avenue at the south. In the throat segment, all arriving and departing trains are required to traverse through a complex network of lead tracks, switches, and crossovers. Five lead tracks provide access into and out of the rail yard, except for one location near the Vignes Street Bridge, where it reduces to four lead tracks. Currently, special track work consisting of multiple turnouts and double-slip switches are used in the throat to direct trains into and out of the appropriate assigned terminal platform tracks. The Garden Tracks (stub-end tracks where private train cars are currently stored)

are also located just north of the platforms. Land uses in the vicinity of the throat segment are residential, industrial, and institutional.

- **Segment 2: Concourse Segment** – This segment is between Cesar Chavez Avenue and US-101 and includes LAUS, the rail yard, the East Portal Building, the baggage handling building with associated parking areas and access roads, the ticketing/waiting halls, and the 28-foot-wide pedestrian passageway with connecting ramps and stairways below the rail yard. Land uses in the vicinity of the concourse segment are residential, commercial, and public.
- **Segment 3: Run-Through Segment** – This segment is south of LAUS and extends east to west from Alameda Street to the west bank of the Los Angeles River and north to south from Keller Yard to CP Olympic. This segment includes US-101, the Commercial Street/Ducommun Street corridor, Metro Red and Purple Lines Maintenance Yard (Division 20 Rail Yard), BNSF Railway West Bank Yard, Keller Yard, the main line tracks on the west bank of the Los Angeles River from Keller Yard to CP Olympic, and the Amtrak lead track connecting the main line tracks with Amtrak's Los Angeles Maintenance Facility in the vicinity of 8th Street. Land uses in the vicinity of the run-through segment are primarily industrial and manufacturing.

The Project study area has a dense street network ranging from major highways to local city streets. The roadways within the Project study area include the El Monte Busway, US-101, Bolero Lane, Leroy Street, Bloom Street, Cesar Chavez Avenue, Commercial Street, Ducommun Street, Jackson Street, East Temple Street, Banning Street, First Street, Alameda Street, Garey Street, Vignes Street, Main Street, Aliso Street, Avila Street, Bauchet Street, and Center Street.

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Figure 1-1. Project Location and Regional Vicinity

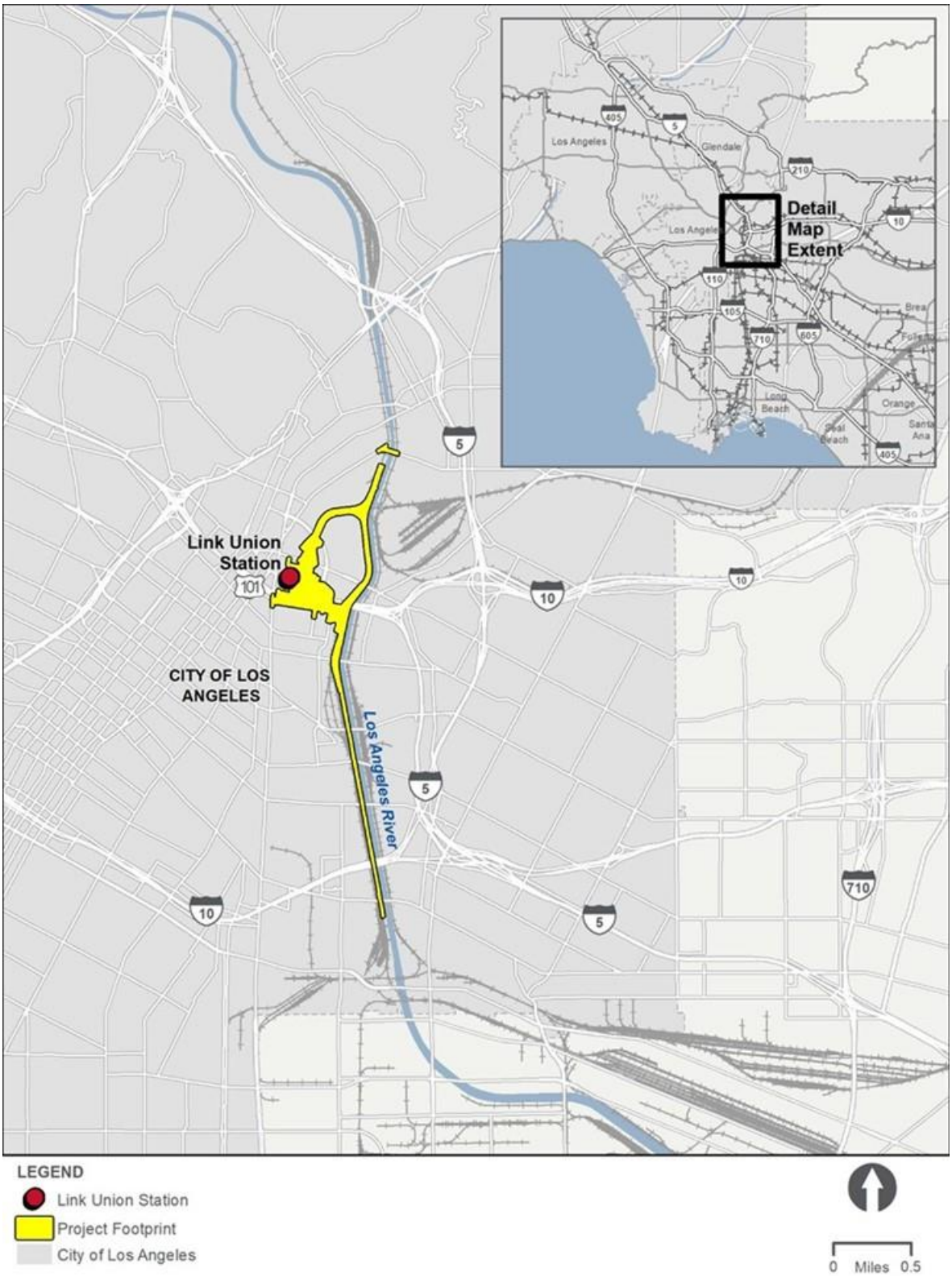

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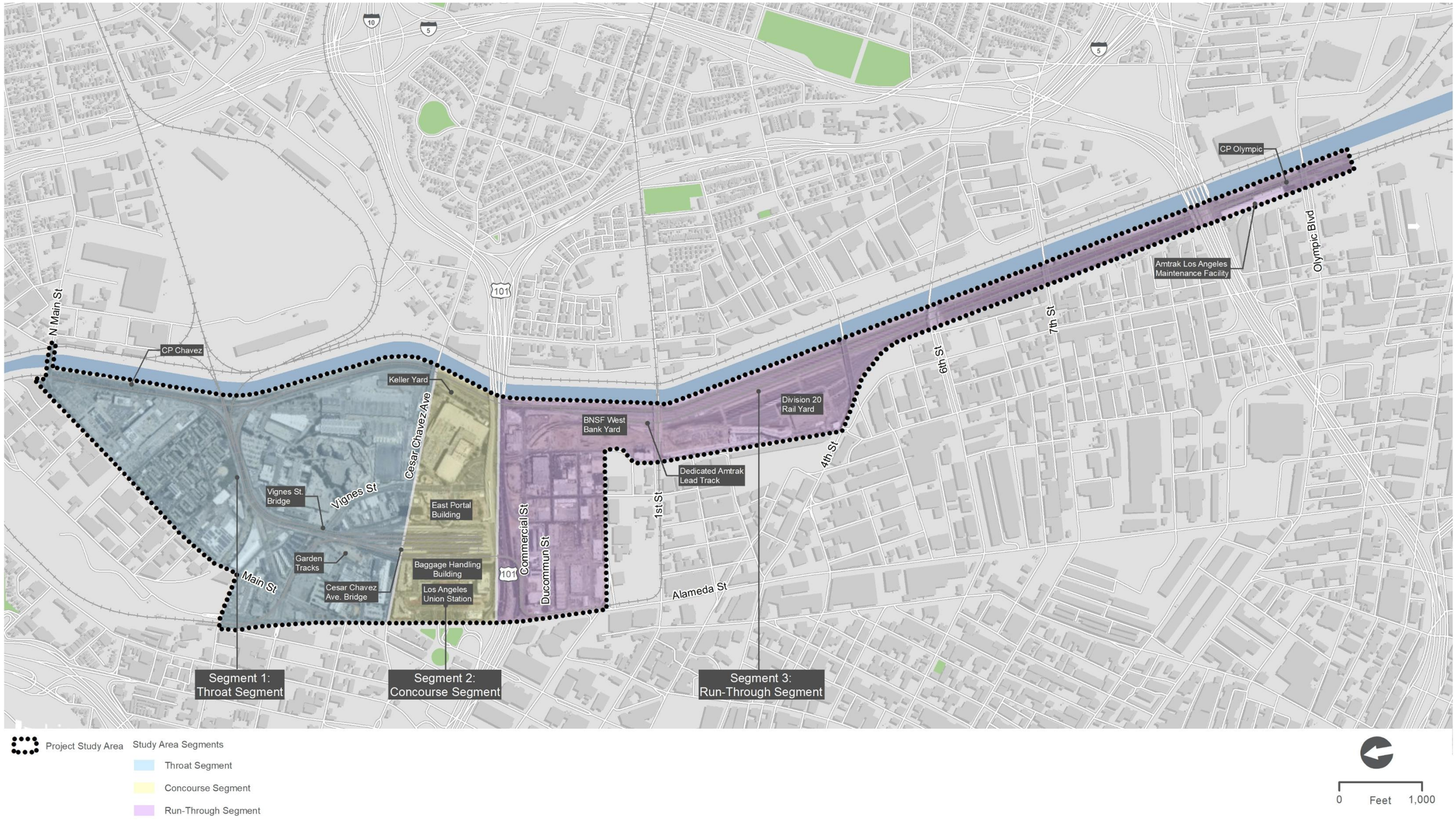
Figure 1-2. Project Study Area



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1.4 Project Alternatives

The EIS includes an evaluation of the No Action Alternative and one build alternative (Build Alternative). The Build Alternative would include, but not be limited to, new lead tracks north of LAUS (Segment 1: Throat Segment), an elevated throat and rail yard with concourse-related improvements at LAUS (Segment 2: Concourse Segment), and 10 run-through tracks south of LAUS (Segment 3: Run-Through Segment).

1.4.1 No Action Alternative

NEPA (40 CFR 1502.14(d)) requires federal agencies to include an analysis of "the alternative of no action." For NEPA purposes, the No Action Alternative is the baseline against which the effects of implementing the Build Alternative is evaluated against to determine the extent of environmental and community effects. For the No Action Alternative, the baseline year is 2016, and the horizon year is 2040.

The No Action Alternative represents the future conditions that would occur if the proposed infrastructure improvements and the operational capacity enhancements at LAUS were not implemented. The No Action Alternative reflects the foreseeable effects of growth planned for the area in conjunction with other existing, planned, and reasonably foreseeable projects and infrastructure improvements in the Los Angeles area, as identified in planning documents prepared by Southern California Association of Governments (SCAG), Metro, and/or Metrolink, including the *2023 Federal Transportation Improvement Program* (FTIP) (SCAG 2023), *Final 2008 Regional Comprehensive Plan* (SCAG 2008), and *the 2020 RTP/Sustainable Communities Strategy (SCS): Connect SoCal* (SCAG 2020).

Conditions in the Project study area would remain similar to the existing condition, as described below:

- **Segment 1: Throat Segment** – Trains would continue to operate on five lead tracks that do not currently accommodate the planned HSR system. The tracks north of LAUS would remain at the current elevation, and the Vignes Street Bridge and Cesar Chavez Avenue Bridge would remain in place.
- **Segment 2: Concourse Segment** – LAUS would not be transformed from a stub-end tracks station into a run-through tracks station, and the 28-foot-wide pedestrian passageway would be retained in its current configuration. No modifications to the existing passenger circulation routes or addition of vertical circulation elements (VCE; escalators and elevators) at LAUS would occur.
- **Segment 3: Run-Through Segment** – Commercial Street would remain in its existing configuration, and implementation of active transportation improvements would likely be implemented along Center Street in concert with the *Connect US Action Plan* (Metro 2015). No modifications to the BNSF West Bank Yard would occur.

1.4.2 Build Alternative

The key components associated with the Build Alternative are summarized north to south below:

- **Segment 1: Throat Segment (lead tracks and throat track reconstruction)** – The Build Alternative includes subgrade and structural improvements in Segment 1 of the Project study area (throat segment) to increase the elevation of the tracks leading to the rail yard. The Build Alternative includes the addition of one new lead track in the throat segment for a total of six lead tracks to facilitate enhanced operations for regional/intercity rail trains (Metrolink/Amtrak) and future operations for HSR trains within a shared track alignment. Regional/intercity and HSR trains would share the two western lead tracks in the throat segment. The existing railroad bridges in the throat segment at Vignes Street and Cesar Chavez Avenue would also be reconstructed. North of CP Chavez on the west bank of the Los Angeles River, the Build Alternative also includes safety improvements at the Main Street public at-grade railroad crossing (medians, restriping, signals, and pedestrian and vehicular gate systems) to facilitate future implementation of a quiet zone by the City of Los Angeles.
- **Segment 2: Concourse Segment (elevated rail yard and expanded passageway)** – The Build Alternative includes an elevated rail yard and expansion of the existing 28-foot-wide pedestrian passageway in Segment 2 of the Project study area (concourse segment). The rail yard would be elevated approximately 15 feet. New passenger platforms would be constructed on the elevated rail yard with associated VCEs (stairs, escalators, and elevators) to enhance safety elements and improve Americans with Disabilities Act (ADA) accessibility. Platform 1, serving the Gold Line, would be lengthened, and elevated to optimize east to west passenger circulation. The pedestrian passageway would be expanded at the current grade to a 140-foot width to accommodate a substantial increase in passenger capacity with new functionally modern passenger amenities while providing points of safety to meet applicable California Building Code (CBC) and National Fire Protection Association 130 Standards for Fixed Guideway Transit Systems. The expanded passageway and associated concourse improvements would facilitate enhanced passenger circulation and provide space for ancillary support functions (back-of-house uses, baggage handling, etc.), transit-serving retail, and office/commercial uses while creating an opportunity for an outdoor, community-oriented space with new plazas east and west of the elevated rail yard (East and West Plazas). Amtrak ticketing and baggage check-in services would be enhanced, and new baggage carousels would be constructed in a centralized location under the rail yard. A canopy would be constructed over the West Plaza up to 70 feet in height, and two design options are considered for canopies that would extend over the rail yard (Section 1.4.3).
- **Segment 3: Run-Through Segment (10 run-through tracks)** – The Build Alternative includes 10 new run-through tracks south of LAUS in Segment 3 of the Project study area (run-through segment). The Build Alternative includes common rail infrastructure from LAUS to the west bank of the Los Angeles River (vicinity of First Street Bridge) to support run-through tracks for both regional/intercity rail trains and future HSR

trains. At the BNSF West Bank Yard, dedicated lead tracks for Amtrak trains and BNSF trains, in combination with implementation of common rail infrastructure would result in permanent loss of freight rail storage track capacity at the north end of BNSF West Bank Yard (5,500 track feet).

The Build Alternative would also require modifications to US-101 and local streets (including potential street closures and geometric modifications); improvements to railroad signal, positive train control, and communication systems; modifications to the Gold Line light rail platform and tracks; modifications to the main line tracks on the west bank of the Los Angeles River; modifications to the Amtrak lead track; addition of access roadways to the railroad right-of-way (ROW); land acquisitions; addition of utilities; utility relocations, replacements, and abandonments; and addition of drainage facilities/water quality improvements.

1.4.3 Rail Yard Canopy Design Options

Two design options for canopies over the elevated platforms in the rail yard are considered in conjunction with the concourse-related improvements as part of the Build Alternative.

- **Rail Yard Canopy Design Option 1 (individual canopies)** – This design option would include replacing the existing historic butterfly canopies with individual canopies above each platform. New individual canopies would extend up to 25 feet above each platform and would be similar in form to the existing butterfly canopies but sized to fit the widened and lengthened platforms. Platform lengths would vary between 450 and 1,445 feet. Platforms would be up to 30 feet wide.
- **Rail Yard Canopy Design Option 2 (grand canopy)** – This design option would include replacing the existing historic butterfly canopies with a large grand canopy that would extend up to 75 feet above the elevated rail yard platforms. The grand canopy would be up to 1,500 feet long and wide enough to provide cover over all elevated platforms in the rail yard.

1.5 Project Implementation Approach

The implementation of infrastructure improvements would generally occur in three main phases that are evaluated as scenario years in the EIS: the interim condition, the full build-out condition and the full build-out with HSR condition. The infrastructure improvements for each of these scenarios are described below.

1.5.1 Interim Condition

The interim condition is when the run-through track infrastructure south of LAUS and the associated signal modifications, property acquisitions, and civil/structural improvements to facilitate new run-through service would be implemented. The interim condition does not include new lead tracks north of LAUS, or the elevated rail yard and new concourse-related improvements at LAUS. The interim condition aligns with a construction completion date as early as 2026.

A summary of the proposed activities associated with the interim condition is provided below.

- Acquire properties south of LAUS within the Project footprint;
- Relocate utilities north and south of LAUS;
- Acquire a portion of the BNSF West Bank Yard (majority north of First Street) and remove 5,500 feet of existing storage tracks at BNSF West Bank Yard;
- Construct special track work and modify signal/communication infrastructure north of LAUS;
- Construct a run-through track ramp on the southern extent of Platform 4 at LAUS;
- Construct a common viaduct/deck over US-101;
- Construct a common embankment from Vignes Street to Center Street south of LAUS;
- Construct common Center Street Bridge south of LAUS;
- Construct common embankment or new common bridge from Center Street to Amtrak Bridge south of LAUS;
- Construct common Amtrak Bridge south of LAUS;
- Construct Division 20 access road;
- Construct common rail embankment on the west bank of the Los Angeles River (from Amtrak Bridge to First Street Bridge);
- Construct new dedicated lead tracks for BNSF freight trains and Amtrak trains; and
- Construct two run-through tracks from Platform 4 at LAUS to the main line tracks along the west bank of the Los Angeles River.

Some embankments and/or bridges south of LAUS could be constructed in a phased manner.

1.5.2 Full Build-Out Condition

The full build-out condition is when new lead tracks and the elevated throat north of LAUS, along with the elevated rail yard and concourse-related improvements at LAUS would be implemented. The full build-out condition aligns with a construction completion date as early as 2031.

A summary of the proposed activities associated with the full build-out condition is provided below.

- Construct new compatible lead tracks and reconstruct throat north of LAUS;
- Construct new bridges over Vignes Street and Cesar Chavez Avenue north of LAUS;
- Construct elevated rail yard, concourse-related improvements, and East/West Plazas at LAUS; and
- Construct remaining run-through tracks for regional/intercity rail operations on previously constructed structures south of LAUS.

1.5.3 Full Build-Out with High-Speed Rail Condition

The full build-out with HSR condition is when HSR tracks and catenaries would be implemented through the Project limits to facilitate operation of the planned HSR system. CHSRA is responsible for construction and operation of the planned HSR system, and the EIS identifies where future HSR tracks, catenaries, and related operational infrastructure would be located throughout the Link US Project limits. Operation of HSR trains would occur on two of the lead tracks north of LAUS, Platforms 2 and 3 and associated Tracks 3 through 6 at LAUS, and common rail bridges and embankments south of LAUS. The full build-out with HSR condition corresponds to an HSR opening year consistent with CHSRA's 2022 Business Plan (as early as 2033).

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2.0 Regulatory Setting

2.1 Federal Regulations

2.1.1 National Environmental Policy Act

NEPA was established, in part, to "assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings" (42 United States Code Section 4331). NEPA requires federal agencies to undertake an assessment of the environmental effects, including visual effects, of their proposed actions prior to making decisions.

2.1.2 Federal Railroad Administration Environmental Procedures (64 *Federal Register* 28545)

The FRA's Procedures for Considering Environmental Impacts (1999) indicate that an EIS should identify any significant changes likely to occur in the natural environment and the developed environment. The EIS should also discuss the consideration given to design quality, art, and architecture in project planning and development as required by United States (U.S.) Department of Transportation Order 5610.4.[3]

2.1.3 National Historic Preservation Act

Section 106 of the National Historic Preservation Act of 1966 requires that federal agencies take into account the effects of their projects on historic properties included in, or eligible for inclusion in, the National Register of Historic Places. Adverse effects occur when a project "may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register of Historic Places in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association." Examples of adverse effects include "[i]ntroduction of visual…elements that diminish the integrity of the property's significant historic features," which often includes the larger setting and viewshed.

2.1.4 Section 4(f) of the United States Department of Transportation Act of 1966

Section 4(f) of the U.S. Department of Transportation Act of 1966 restricts the "use of land from publicly owned parks, recreation areas, wildlife and waterfowl refuges, and public or private historic sites" for federally funded highway projects. The Federal Highway Administration's

[3] While this environmental document was being prepared, FRA adopted new NEPA compliance regulations (23 CFR 771). Those regulations only apply to actions initiated after November 28, 2018. See 23 CFR 771.109(a)(4). Because this environmental document was initiated prior to that date, it remains subject to FRA's Environmental Procedures rather than the Part 771 regulations.

regulations for complying with Section 4(f) are identified in 23 Code of Federal Regulations Part 774 including the coordination requirements detailed in 23 Code of Federal Regulations 774.5 were followed for the Project. As part of the VIA, visual impacts on Section 4(f) properties were also identified in coordination with the analysis of Section 4(f) properties.

2.1.5 Federal Highway Administration Visual Impact Assessment Guidelines for Highway Projects (1988)

In 1981, the Federal Highway Administration (FHWA) developed a set of VIA guidelines to analyze changes to visual quality caused by the development of federally funded highway projects. The FHWA guidelines were influenced by the visual management systems used by the U.S. Forest Service, the Bureau of Land Management, Natural Resources Conservation Services, the Office of Coastal Zone Management, and other federal agencies. In 1988, the FHWA VIA guidelines were updated from the original 1981 guidelines in response to a growing number of alternative methods being used for visual assessments.

2.1.6 Federal Highway Administration Guidelines for the Visual Impact Assessment of Highway Projects (2015)

In January 2015, FHWA released an update to the 1988 VIA guidelines. The 2015 guidance requires a description of a “baseline” and includes provisions for an analysis of scale, form, materials, and overall visual character. One of the key changes in the methodology between the two versions involved the categories used to describe and compare changes in visual quality. The 1988 guidelines utilize “Vividness, Intactness, and Unity” while the 2015 guidelines utilize “Natural Harmony, Cultural Order, and Project Coherence.” Because the visual and aesthetic environment of the Project study area remains topographically flat and heavily urbanized, and because the analysis methods and corresponding results would not be appreciably different, the 1988 guidelines were used to determine potential Project-related visual and aesthetic impacts. Analysis using the 1988 guidelines captured similar qualities as the 2015 guidelines would have, only with different descriptors used for some of the baseline setting and analysis results.

2.2 State Regulations

2.2.1 Caltrans Scenic Highway Program

California Department of Transportation (Caltrans) oversees the California Scenic Highway Program, which was created in 1963 by California legislature to designate certain portions of the state highway system as state scenic highways for the protection and enhancement of California’s natural scenic beauty. The program includes a list of highways that are eligible or have been designated as scenic highways. State Scenic Highways are governed under California Streets and Highways Code, Article 2.5, Sections 260 through 263 and 280 through 284.

2.3 Local Regulations

2.3.1 City of Los Angeles General Plan-Framework and Conservation Plan Elements

The City of Los Angeles General Plan includes the following policies and sections that may be applicable to visual impacts.

Framework Element

Chapter 9 of the General Plan, Framework Element (Infrastructure and Public Services), includes the following policies relating to street lighting:

- Policy 9.40.1: Require lighting on private streets, pedestrian oriented areas, and pedestrian walks to meet minimum City standards for street and sidewalk lighting.
- Policy 9.40.2: Require parking lot lighting and related pedestrian lighting to meet recognized national standards.
- Policy 9.40.3: Develop regulations to ensure quality lighting to minimize or eliminate the adverse impact of lighting due to light pollution, light trespass, and glare for facade lighting, security lighting, and advertising lighting, including billboards.
- Policy 9.40.4: Establish regulations and standards which eliminate the adverse impacts due to light pollution, light trespass, and glare for the area lighting of rail yards, transit yards, trucking facilities, and similar facilities.
- Policy 9.40.6: Coordinate placement and location of street trees with the placement of streetlights.

Conservation Element

The Conservation Element (City of Los Angeles 2001) includes the following section relating to lighting:

- Section 15: Landform and Scenic Vistas aims to protect and reinforce natural and scenic vistas as irreplaceable resources and for the aesthetic enjoyment of present and future generations.

2.3.2 City of Los Angeles Municipal Code

The Los Angeles Municipal Code includes the following ordinances or policies relating to lighting or visual character.

Ordinance Number 185472

- Clarifies Historic Cultural Monument designation criteria, enhances due process and notification procedures affecting property owners, and provides for extensions of time limits.

Ordinance Number 177404

- All existing protected trees and relocation and replacement trees specified by the advisory agency in accordance with Sections 17.02, 17.05, 17.06, 17.51, and 17.52 of this code will be indicated on a plot plan attached to the building permit issued pursuant to this code.

Chapter 9, Article 3, Sec. 93.0117

- No exterior light source may cause more than 2 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 1, Article 2, Sec. 12.21 A5(k)

- All lights used to illuminate a parking area will 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 will be submitted to and approved by the Bureau of Street Lighting.

Division 62, Sec. 91.6205M

- No sign will be arranged and illuminated in such a manner as to produce a light intensity of greater than 3 foot-candles above ambient lighting, as measured at the property line of the nearest residentially zoned property.

2.3.3 City of Los Angeles Cornfield Arroyo Seco Specific Plan

The Cornfield Arroyo Seco Specific Plan includes the following requirements applicable to lighting that may be applicable to the Project:

- Lighting will be provided along all vehicular access ways and pedestrian walkways.
- Lighting (exterior building and landscape) will be directed away from properties and roadways and shielded as necessary. In particular, no lighting will be directed at the window of a residential unit located either within or adjacent to a project.

2.3.4 Downtown Community Plan

The Downtown Community Plan includes the following policies related to visual quality and aesthetics for transit projects included in the Draft Downtown Community Plan:

- LU 10.1: Require active ground floors and street frontages that improve walkability and connectivity, especially between transit stations and nearby destinations.

- LU 10.6: Require that pedestrian bridges minimize visual impacts, be architecturally integrated into building design, connect with public entrances, incorporate lighting and directional signage, and include maintenance and safety programs.
- LU 14.1: Ensure that where new development occurs, it complements the physical qualities and distinct features of existing historic resources.
- LU 14.3: Preserve and promote the distinct qualities and features of historically and culturally significant neighborhoods and communities.
- LU 17.1: Promote a pedestrian environment that enhances thermal, visual, and audible comfort and provides opportunities for resting and socializing.
- LU 21.1: Encourage well-designed, intensive development that contributes to a safe and inviting pedestrian realm and includes substantial benefits that reinforce Downtown's character and enhance livability.
- 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 street walls.
- LU 21.15: Encourage a mix of uses that intensifies and activates Union Station and surrounding neighborhoods.
- LU 49.1: Promote Downtown as an attractive home for civic, cultural, and other institutional uses to reinforce the area's identity.
- LU 52.5: Locate and design civic, institutional, and cultural buildings, and public spaces, to be easily accessible to pedestrians, cyclists, and transit users.
- MC 3.4: Enhance the pedestrian experience between major destinations and transit stations through improved streetscapes and wayfinding programs.
- PO 3.3: Require that public spaces are well lit and visible to ensure that they are safe and inviting.
- PO 4.2: Facilitate the integration of locally produced and community-oriented public art projects and cultural programming into public spaces to reinforce community character.

The community plan also includes urban design policies and standards to ensure that residential, commercial, and industrial projects, and public spaces and rights of way incorporate specific elements of good design.

2.3.5 City of Los Angeles Alameda District Specific Plan

The Alameda District Specific Plan was established to manage continued and expanded development of the specific plan area as a major transit hub for the region and mixed-use development area providing office, hotel, retail, entertainment, tourism, residential, and related uses, in conformance with the goals and objectives of local and regional plans and policies. The plan includes policies regarding allowable and prohibited land uses, building height requirements, historic preservation requirements, open space, pedestrian, and landscaping requirements, transportation, and other policies pertaining to the planning area. The plan also includes mitigation measures for resource topics, including lighting.

3.0 Assessment Method

This VIA was prepared using guidance outlined in *Visual Impact Assessment for Highway Projects* (FHWA 1988) and the Caltrans's template, modified as needed for this project type. Although FHWA VIA guidelines were updated in 2015, the 1988 FHWA VIA guidelines were used for this evaluation to maintain consistency with the VIA conducted for the Link US Final Environmental Impact Report (EIR), which included an evaluation of visual impacts following the 1988 guidelines. The 1988 FHWA VIA guidelines were used for the Project based on the following:

- Project type: The Project is a linear transportation project located within and adjacent to an existing railroad ROW.
- Project location and topography: The Project is located in a relatively flat and heavily urbanized area surrounded by existing transportation infrastructure. Additionally, there are no scenic vistas or scenic highways located near the Project study area.
- Consistency with the underlying analysis in the Link US Final EIR: The analysis presented in the Final EIR certified in 2019 is based on the 1988 guidelines. To avoid conflicting analysis, the same methodology was used.

The 2015 guidance describes the initial establishment phase in the VIA process as defining the project's visual character, determining the regulatory context, and defining the area of visual effect. Following this establishment phase, the 2015 guidance assesses the visual effects using (1) an inventory phase to define the existing status of the affected environment and the affected population and the existing or preferred condition of visual quality and (2) an analysis phase to assess changes to the degree of visual quality as being beneficial or adverse to the relationship viewers have with their visual environment. Similar to the 2015 guidance, the analysis in this document includes a description of baseline conditions within the affected environment and analyzes the changes in visual quality that would occur with implementation of the Project (see Section 4.0 and Section 5.0). For these reasons, and because the analysis method and results would not be appreciably different, the 2015 guidance was not used for this analysis.

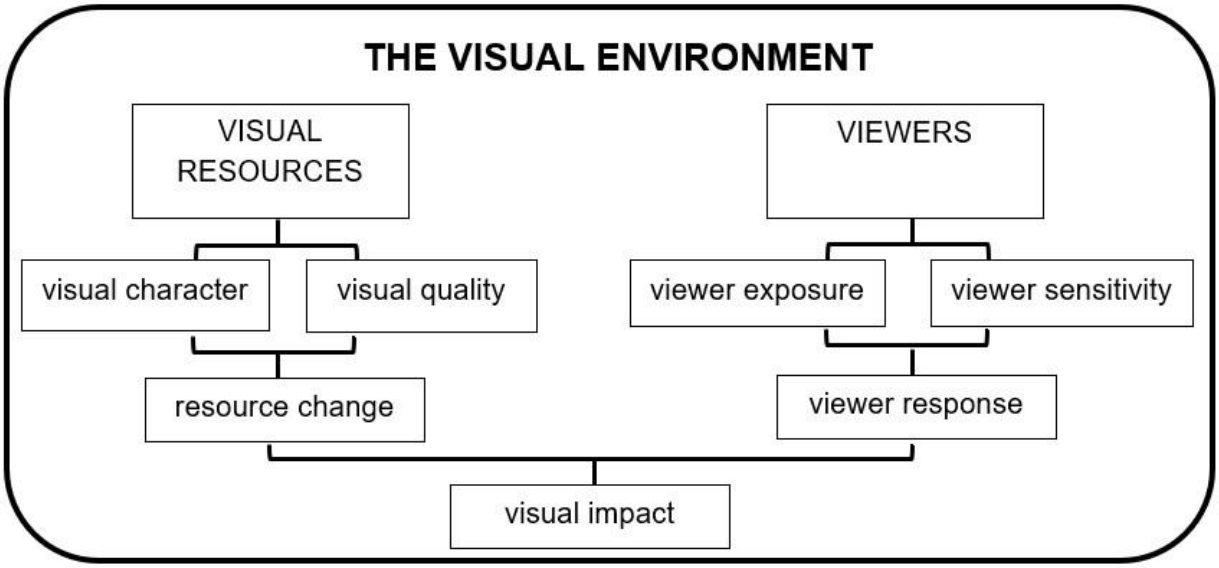
The key changes in the methodology between the 2015 and 1988 guidelines involve the characteristics used to describe and compare changes in visual quality. For instance, the 1988 guidelines use "Vividness, Intactness, and Unity" while the 2015 guidelines use "Natural Harmony, Cultural Order, and Project Coherence." The three criteria are evaluated to assess visual quality of a project area and it is noted that none of the three by themselves are equivalent to visual quality; all three must be high to indicate high quality.

Vividness is the visual power or memorability of landscape components as they combine in striking and distinctive visual patterns, *intactness* is the visual integrity of the natural and man-built landscape and its freedom from encroaching elements, and *unity* is the visual coherence and compositional harmony of the landscape considered as a whole (FHWA 1988). *Natural harmony, cultural order,* and *project coherence* are determined by viewing the character of the visual resources of the natural environment through the lens of viewer preferences – the greater the

degree to which the natural visual resources of the area of visual effect meet the viewer's preferred concept of natural harmony, cultural order, or project coherence, the higher value the viewer places on those visual resources (FHWA 2015). The analysis using the 1988 guidelines captures similar qualities that the 2015 guidelines would, only with different descriptors. The visual and aesthetic environment of the Project study area remains topographically flat and heavily urbanized and the difference in analysis language between the 1988 and 2015 guidelines would not affect any of the impact conclusions in this VIA.

Following FHWA's 1988 methodology, visual effects are determined by assessing changes to the visual resources and predicting viewer response to those changes. Figure 3-1 depicts a generalized visual impact assessment process.

Figure 3-1. Federal Highway Administration Visual Impact Assessment Process Concept Diagram



Source: Federal Highway Administration 1988

The following steps were taken to determine potential visual effects:

1. Defining the location and setting.
2. Identifying existing visual resources, viewers, and viewer groups.
3. Identifying visual assessment units and key viewpoints.
4. Assessing resource change and viewer response.
5. Simulating visual appearance of major components at key viewpoints (as deemed necessary given the existing resources or degree of change).
6. Analyzing context and intensity of visual effects of Proposed Infrastructure.

3.1 Defining Project Location and Setting

The setting considers existing landscape constraints (landform and land cover) and the physical limits of human sight as it relates to the location, proximity, and quantity and quality of light of the viewer.

3.2 Identifying Existing Visual Resources, Viewers, and Viewer Groups

For the purpose of this evaluation, visual resources correspond to each of the visual assessment units evaluated. Viewers and viewer groups considered include neighbors (residents, business owners/employees, business patrons) and users (commuters and visitors/tourists).

Visual resources and the associated viewers/viewer groups are described below.

1. William Mead Homes and Care First Village (residents).
2. Vignes Street Corridor (business owners/employees/patrons, commuters, visitors/tourists).
3. Cesar Chavez Avenue Corridor/Mozaic Apartments (residents, business owners/employees/patrons, commuters).
4. Alameda Street Corridor/Father Serra Park (business owners/employees/patrons, commuters, visitors/tourists).
5. Commercial Street/US-101 Corridor (business owners/employees/patrons, commuters, visitors/tourists).
6. LAUS (business owners/employees/patrons, commuters, visitors/tourists).

3.3 Identify Visual Assessment Units and Key Viewpoints

The Project study area was divided into a series of visual assessment units defined by geographic features. The visual assessment units are focused on areas that would be subject to the most visually dominant features of the proposed infrastructure in conjunction with land uses, buildings, transportation facilities, etc. in each segment of the Project study area.

Each visual assessment unit has its own visual character and visual quality. Several key views were selected within each visual assessment unit that would most clearly illustrate the resulting change to visual resources, if any. Key views also represent the viewer groups that have the highest potential to be affected by the proposed infrastructure, considering exposure and sensitivity.

Six visual assessment units and 17 key viewpoints or “key views” were identified for this evaluation. The location of key views for each visual assessment unit are described/depicted in detail in the discussion of the affected environment (Section 4.1).

3.3.1 Assessing Resource Change and Viewer Response

Resource change is assessed by evaluating the visual character and the visual quality of the visual resources in each of the visual assessment units before and after the construction of the Build Alternative. Resource change is one of the two major variables in the equation that determine visual impacts (the other is *viewer response*, discussed below).

Viewer response is a measure or prediction of the viewer's reaction to changes in the visual environment and has two dimensions (viewer exposure and viewer sensitivity). Viewer response is assessed by evaluating the change in viewer exposure and sensitivity.

The overall level of resource change and viewer response was qualitatively assessed by assigning one of five resource change levels: low, moderately low, moderate, moderately high, or high. Table 3-1 provides a reference for determining levels of visual impact by combining resource change and viewer response.

Table 3-1. Visual Impact Using Resource Change and Viewer Response

Resource Change	Viewer Response				
	Low	Moderately Low	Moderate	Moderately High	High
Low	Low	Moderately Low	Moderately Low	Moderate	Moderate
Moderately Low	Moderately Low	Moderately Low	Moderate	Moderate	**Moderately High**
Moderate	Moderately Low	Moderate	Moderate	**Moderately High**	**Moderately High**
Moderately High	Moderate	Moderate	**Moderately High**	**Moderately High**	**High**
High	Moderate	**Moderately High**	**Moderately High**	**High**	**High**

Source: Federal Highway Administration 1981
Notes:
Bold indicates when an adverse effect would occur

Visual Character

Visual character comprises the attributes of form, line, color, texture, dominance, scale, diversity, and continuity, and is used for description purposes, not for evaluation purposes. These attributes are described below:

- **Form** – visual mass and shape.
- **Line** – edges or linear definition.

- **Color** – reflective brightness (light, dark) and hue (red, green).
- **Texture** – surface coarseness.
- **Dominance** – position, size, or contrast.
- **Scale** – apparent size as it relates to the surroundings.
- **Diversity** – a variety of visual patterns.
- **Continuity** – uninterrupted flow of form, line, color, or textural pattern.

Visual Quality

Visual quality within the Project study area is described based on existing visual character, viewer groups, and expected community preferences. Community preferences were gathered during the public outreach process when stakeholder feedback was received throughout the environmental process. Visual quality is evaluated by identifying the vividness, intactness, and unity present in the Project study area. The three criteria for evaluating visual quality are described below:

- **Vividness** – the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements.
- **Intactness** – the integrity of visual features in the landscape and the extent to which the existing landscape is free from nontypical visual intrusions.
- **Unity** – the extent to which all visual elements combine to form a coherent, harmonious visual pattern.

Viewer Exposure

Viewer exposure is a measure of the viewer's ability to see a particular object. Viewer exposure has three attributes: location, quantity, and duration. Location relates to the position of the viewer in relationship to the object being viewed. The closer the viewer is to the object, the more the exposure. Quantity refers to how many people see the object. The more people who can see an object or the greater frequency with which an object is seen, the more exposure the object has to viewers. Duration refers to how long a viewer sees an object. The longer an object can be kept in view, the more the exposure. High viewer exposure helps predict viewers who would have a response to a visual change such as those viewers that are residents and recreationists. Low viewer exposure exists when few viewers experience a defined view or when viewers such as commuters on a freeway are passing by and not as concerned with the view.

Viewer Sensitivity

Viewer sensitivity is a measure of the viewer's recognition of a particular object. Viewer sensitivity has three attributes (activity, awareness, and local values), described below.

- Activity relates to the preoccupation of viewers, whether they are doing something else or are engaged in observing their surroundings. The more they are observing their surroundings, the more sensitivity viewers would have to changes in visual resources.

- Awareness relates to the focus of view. Whether the focus is wide and the view general, or the focus is narrow and the view specific. The more specific the awareness, the more sensitive a viewer is to change.
- Local values and attitudes also affect viewer sensitivity. If the viewer group values aesthetics in general or if a specific visual resource has been protected by local, state, or national designation, it is likely that viewers would be more sensitive to visible changes.
- High viewer sensitivity, assessed qualitatively, helps predict if viewers would have a high concern for a visual change.

3.4 Simulating Visual Appearance of Major Components at Key Viewpoints

To create a visual representation of proposed infrastructure elements, photo-realistic simulations were prepared to help convey what aspects of the existing visual setting would be changed and what would not be changed by the proposed infrastructure elements. Artist renderings were also prepared to depict the elements of the concourse-related improvements.

3.5 Analyzing Context and Intensity of Visual Effects of Proposed Infrastructure

Based on the affected environment for the geographic area considered and, in consideration of both context and intensity as outlined in 40 CFR 1508.27, the methodology to determine effects for each of the topics considered is presented below.

3.6 Visual Impacts

Visual impacts (synonymous with effects) can be beneficial or adverse, and would occur when the level of resource change, combined with the level of viewer response, is moderately high or high (Table 3-1):

- Beneficial Visual Effect: Beneficial effects would occur if proposed infrastructure either enhances views within a visual assessment unit by improving visual quality or character or results in a positive viewer response.
- Adverse Visual Effect: Adverse effects would occur if proposed infrastructure either diminishes views within a visual assessment unit by degrading visual quality or character or results in a negative viewer response.

3.7 Light and Glare Impacts

Light and glare impacts are typically related to the extent of light spill and glare effects on nearby drivers and residential land uses. The light emissions and potential glare from proposed infrastructure improvements, including nighttime construction activities (resource change) are compared to baseline conditions to determine if increases in light or glare would result in undesired exposure or disruption of normal activities (viewer response).

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4.0 Affected Environment

4.1 Visual Assessment Units and Key Views

The Project study area was divided into a series of visual assessment units defined by geographic features. The visual assessment units are focused on areas that would be subject to the most visually dominant features of the proposed infrastructure in conjunction with land uses, buildings, transportation facilities, etc. in each segment of the Project study area. Each visual assessment unit has its own visual character and visual quality. Several key views were selected within each visual assessment unit that would most clearly illustrate the resulting change to visual resources, if any. Key views also represent the viewer groups that have the highest potential to be affected by proposed infrastructure, considering exposure and sensitivity.

Six visual assessment units and 17 key viewpoints or “key views” were identified for this evaluation (Table 4-1). Figure 4-1 shows the locations of key views in each of the six visual assessment units. For each visual assessment unit, a description of the corresponding key views, visual character, and visual quality is provided to characterize the affected environment. Each key view is numbered relative to the corresponding visual assessment unit.

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Table 4-1. Los Angeles Union Station – Visual Assessment Units and Key Views for the Project Study Area

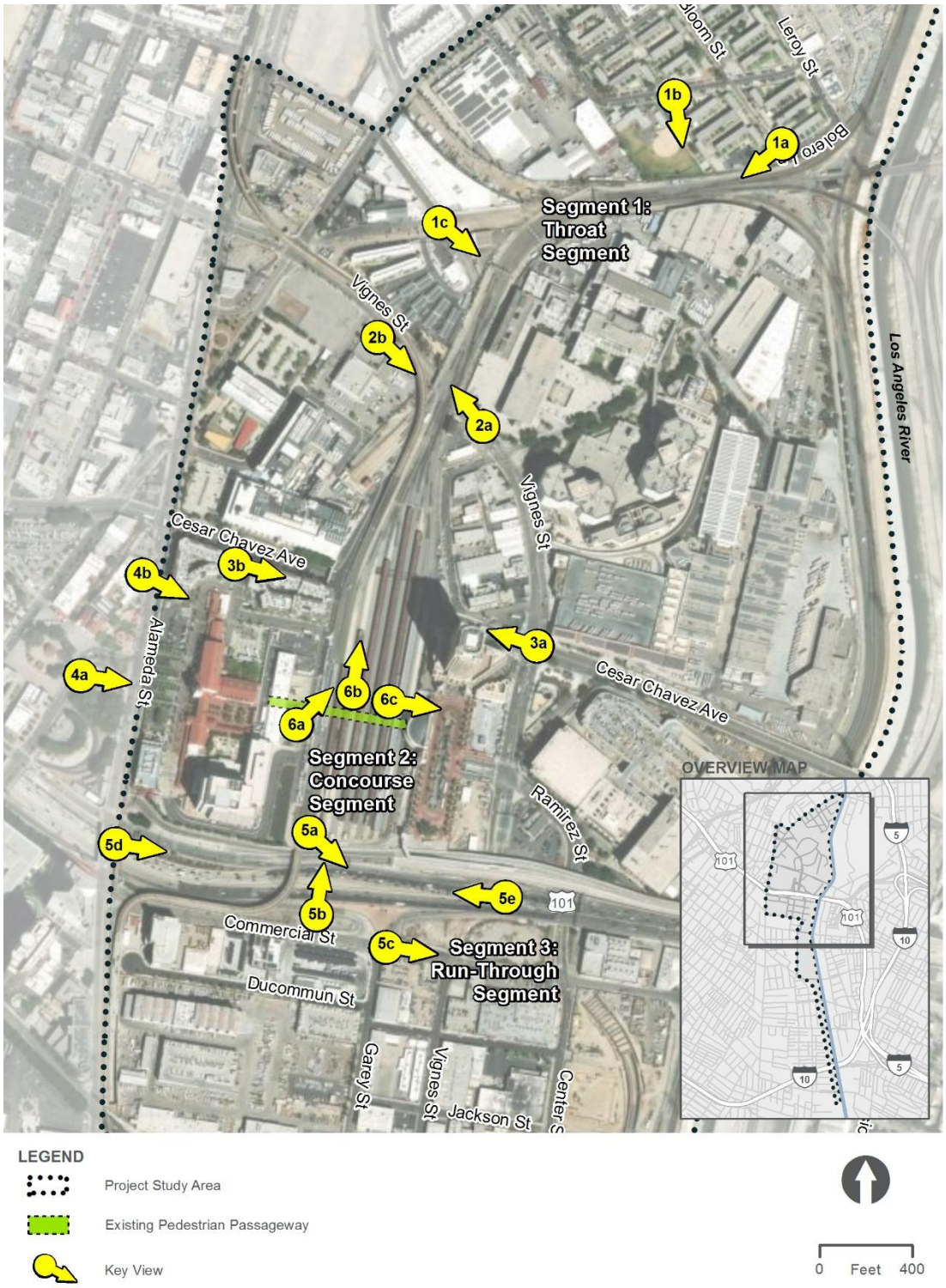
Visual Assessment Unit and Viewer Group Represented	Key View Number	Key View Description
#1 – William Mead Homes and Care First Village (Residents)	1a	William Mead Homes (view looking southwest from corner of Bolero Lane/Bloom Street toward railroad ROW)
	1b	William Mead Homes (view looking south from East Elmyra Street toward railroad ROW)
	1c	Care First Village (view looking southeast from East College Street toward railroad ROW)
#2 – Vignes Street Corridor (Business Owners/Employees/Patrons, Commuters, Visitors/Tourists)	2a	Vignes Street (view looking north from road toward bridge)
	2b	Vignes Street (view looking south from road toward bridge)
#3 – Cesar Chavez Avenue Corridor/Mozaic Apartments (Residents, Business Owners/Employees/Patrons, Commuters)	3a	Cesar Chavez Avenue (view looking west from road toward bridge)
	3b	Cesar Chavez Avenue (view looking east from road toward bridge)
#4 – Alameda Street Corridor/Father Serra Park (Business Owners/ Employees, Patrons, Commuters)	4a	LAUS entrance (view looking southeast from Alameda Street toward LAUS)
	4b	LAUS entrance (view looking east from Father Serra Park toward LAUS)
#5 – Commercial Street/US-101 Corridor (Business Owners/ Employees/Patrons, Commuters, Visitors/Tourists)	5a	US-101/Commercial Street (view looking southeast from LAUS Southern Platform Limit toward US-101/Commercial Street)
	5b	Commercial Street (view looking north from Commercial Street toward US-101 and LAUS)
	5c	Commercial Street (view looking east from US-101 on-/off-ramps)
	5d	Southbound US-101 (view looking east from Alameda Street toward run-through tracks)

Table 4-1. Los Angeles Union Station – Visual Assessment Units and Key Views for the Project Study Area

Visual Assessment Unit and Viewer Group Represented	Key View Number	Key View Description
	5e	Northbound US-101 (view looking west from US-101 toward Downtown Los Angeles)
#6 – LAUS (Business Owners/Employees/Patrons, Commuters, Visitors/Tourists)	6a	LAUS rail yard (view looking northeast toward platform area)
	6b	LAUS platform access (view looking north toward pedestrian ramp)
	6c	LAUS pedestrian passageway (view looking west toward passageway entrance)

Notes:
LAUS=Los Angeles Union Station; ROW=right-of-way

Figure 4-1. Key Views for the Project Study Area



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4.1.1 Visual Assessment Unit #1: William Mead Homes and Care First Village

Key Views

Visual Assessment Unit #1 represents residential viewers from within the William Mead Homes residential development and the Care First Village transitional housing complex. Three key views were chosen to determine where visual changes may result from proposed infrastructure.

- Key View #1a is located at the corner of Bolero Lane and Bloom Street, in front of one of the apartment buildings, facing southwest toward the railroad ROW (Figure 4-2).
- Key View #1b is located on Elmyra Street, between two of the apartment buildings, facing south toward the railroad ROW (Figure 4-3).
- Key View #1c is located in the vicinity of Care First Village located at East College Street, facing southeast toward the railroad ROW (Figure 4-4).[4]

These key views were chosen to illustrate views of the throat tracks and structural improvements within Segment 1 of the Project study area from two vantage points within William Mead Homes and one vantage point from Care First Village. These vantage points represent views from residents at the rear of these two properties.

Visual Character

The visual character of Visual Assessment Unit #1 is reflective of high-density residential development within an urban industrial setting. The William Mead Homes residential buildings are rectangular in shape and are brick red with green trim, which represent dominant physical components. The Care First Village buildings are orange with white railings, which add contrast to the industrial area. These buildings provide continuity in form, line, color, texture, dominance, and scale because the buildings on the properties are designed with uniformity and are interspersed at a patterned interval. The surrounding streets, power lines, commercial/industrial buildings, and train tracks are also linear in form. Landscaping surrounding these buildings, includes trees, shrubs, lawns, and individual ornamental plantings, and provide diversity in form, line, color, and texture to the landscape. Within Visual Assessment Unit #1, the buildings are relatively close together, and the streets are narrow, creating a pedestrian-scale environment.

Visual Quality

Table 4-2 summarizes the visual quality in Visual Assessment Unit #1.

[4] Due to restricted access to the Care First Village transitional housing complex during site visits conducted in February 2023, the closest viewpoint from the property was selected to depict typical views and perform the visual impact evaluation.

Table 4-2. Visual Quality of Visual Assessment Unit #1 – William Mead Homes and Care First Village

Category	Description	Rating
Vividness	Visual Assessment Unit #1 is visually distinctive in that all of the buildings have consistent architecture and distinctive colors that contrast with the surrounding development. The physical setting of the residential scale development within the larger Downtown Los Angeles landscape also presents an interesting contrast in scale. However, there are a large number of visual intrusions, including power transmission and local distribution lines, satellite dishes, cluttered balconies, garbage cans, and vehicles, which distract from the overall memorability of the landscape.	Moderately Low
Intactness	Visual Assessment Unit #1 consists entirely of built elements. The continuity of the residential buildings and landscaping increase visual integrity. However, there are a large number of visual intrusions, including power lines, satellite dishes, garbage cans, and vehicles, which distract from the views.	Moderately Low
Unity	Visual Assessment Unit #1 is comprised mainly of geometric residential buildings of similar size with bright color, which create uniform patterns in the landscape. Ornamental plantings within the development, including the geometry of the lawns at William Mead Homes, add to the uniformity of the property. However, power lines, satellite dishes, garbage cans, and vehicles detract from the overall visual coherency.	Moderate
Overall	The consistent architecture and distinctive colors of the buildings are visually memorable and create integrity and uniformity in the landscape. Ornamental landscaping also adds to the uniformity. However, power lines, satellite dishes, garbage cans, and vehicles detract from the overall vividness, intactness, and unity.	Moderately Low

Figure 4-2. Key View #1a – William Mead Homes
(view looking southwest from corner of Bolero Lane/Bloom Street toward railroad right-of-way)

Figure 4-3. Key View #1b – William Mead Homes
(view looking south from Elmyra Street toward railroad right-of-way)

Figure 4-4. Key View #1c – Care First Village Transitional Housing
(view looking southeast from East College Avenue toward railroad right-of-way)

4.1.2 Visual Assessment Unit #2: Vignes Street Corridor

Key Views

This visual assessment unit represents business owners/employees/patrons, commuters, and visitors/tourists along Vignes Street. Two key views were chosen to determine where visual changes may result from the proposed infrastructure (Figure 4-5 and Figure 4-6). Both key views are of the National Register of Historic Places-eligible Vignes Street Bridge looking north (Key View #2a) and looking south (Key View #2b). These key views were chosen to illustrate views of the new bridge that would support the elevated tracks through the throat segment.

Visual Character

Visual Assessment Unit #2 consists of Vignes Street from Bauchet Street to Alameda Street. This roadway segment has two vehicle lanes in each direction. The street has sidewalks but no bus stops, bicycle lanes, or street parking. The existing Vignes Street Bridge supports the lead tracks that approach the rail yard and a portion of the Gold Line viaduct is visible. These elements are linear in form, with a heavy presence of concrete and minimal diversity. The concrete bridge and adjacent walls on each side of the roadway are the dominant features with a few trees that extend over the walls from the properties to the north.

Land uses in Visual Assessment Unit #2 along the Vignes Street corridor consist of residential institutional, and governmental uses dominated by correctional facilities and some low-scale commercial uses. The visual character of Visual Assessment Unit #2 is that of an urban setting with buildings, sidewalks, limited vegetation, and the use of retaining walls and fences to define properties.

Visual Quality

Table 4-3 summarizes the visual quality in Visual Assessment Unit #2.

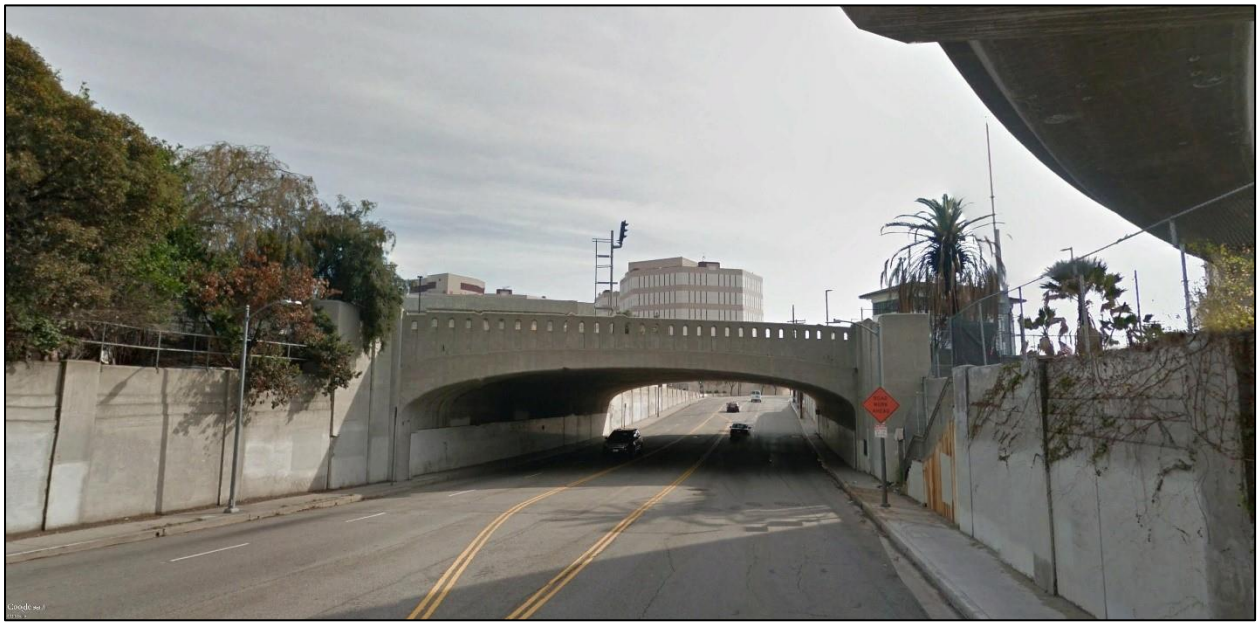
Table 4-3. Visual Quality of Visual Assessment Unit #2 – Vignes Street Corridor

Category	Description	Rating
Vividness	Within Visual Assessment Unit #2, building architecture, streetscape elements, and the Vignes Street Undercrossing draw the eye and provide visual diversity and interest. The street has a fairly eclectic character. However, high traffic levels on the roadways and pedestrian traffic distract from the overall memorability of the landscape.	Low
Intactness	Visual Assessment Unit #2 consists entirely of built elements. The streetscape elements along Vignes Street do not create a sense of an intact consistent visual corridor. There are a number of visual intrusions, including high traffic levels on the roadways, pedestrian traffic, utilities, and signs, which distract from the views.	Low
Unity	Within Visual Assessment Unit #2, the streetscape along Vignes Street does not create uniform patterns within the landscape. The streetscape design varies throughout the entire corridor because of a diversity of uses, scale, materials, and streetscapes. The architecture styles and streetscape reduce the overall coherence of the visual patterns.	Low

Table 4-3. Visual Quality of Visual Assessment Unit #2 – Vignes Street Corridor		
Category	**Description**	**Rating**
Overall	Streetscape elements, architecture, and views within Visual Assessment Unit #2 are urban with generally obscured distant views. The heavy presence of concrete along the roadway does not contribute to visual integrity. In addition, the lack of visual diversity further reduces overall vividness, intactness, and unity, thereby reducing overall visual quality.	Low

Figure 4-5. Key View #2a – Vignes Street
(view looking north from road toward bridge)

Figure 4-6. Key View #2b – Vignes Street
(view looking south from road toward bridge)



4.1.3 Visual Assessment Unit #3: Cesar Chavez Avenue Corridor/Mozaic Apartments

Key Views

This visual assessment unit represents residential viewers, business owners/employees/patrons, commuters, and visitors/tourists along Cesar Chavez Avenue, near the Mozaic Apartments and Metro Headquarters. Two key views were chosen to determine where visual changes may result from proposed infrastructure (Figure 4-7 and Figure 4-8). Both key views are of the historic Cesar Chavez Avenue Bridge looking west (Key View #3a) and looking east (Key View #3b). These key views were chosen to illustrate views of the new bridge that would support the elevated tracks leading to the LAUS rail yard and the proposed canopies, which would be visible from the Mozaic Apartments, as well as other viewpoints in this corridor, including roadway travelers.

Visual Character

Visual Assessment Unit #3 consists of Cesar Chavez Avenue from Alameda Street to Vignes Street. This corridor is characterized by an urban setting consisting of a mix of land uses such as the Metro Headquarters at LAUS, Mozaic Apartments, the historic U.S. Post Office Terminal Annex, and institutional uses. Adjacent to the Mozaic Apartments is a large retaining wall with a sidewalk and street trees, and adjacent to the U.S. Post Office Terminal Annex are large trees, a fence with a sidewalk and street trees. On Cesar Chavez Avenue, there are two travel lanes with a bicycle lane in each direction, but the roadway width is reduced approaching the bridge, with no bicycle lanes on either side of the street under the bridge. Under the bridge, the sidewalk width is

further narrowed. Two different styles of street lighting are located on the north and south sides of the roadway east of the bridge, whereas a consistent style of street lighting is west of the bridge.

On the north side of the roadway corridor and east of the bridge, the retaining wall is consistent in form, color, texture, and scale with minimal diversity. The Metro Headquarters building with a light brown color is the dominant feature east of the bridge and has a greater mass and scale to the rest of surrounding visual setting. East of the bridge, the Mozaic Apartments and U.S. Post Office Terminal Annex Building are consistent in scale and height, although vary in texture and diversity, mainly due to the historic aspects of the U.S. Post Office Terminal Annex building.

Visual Quality

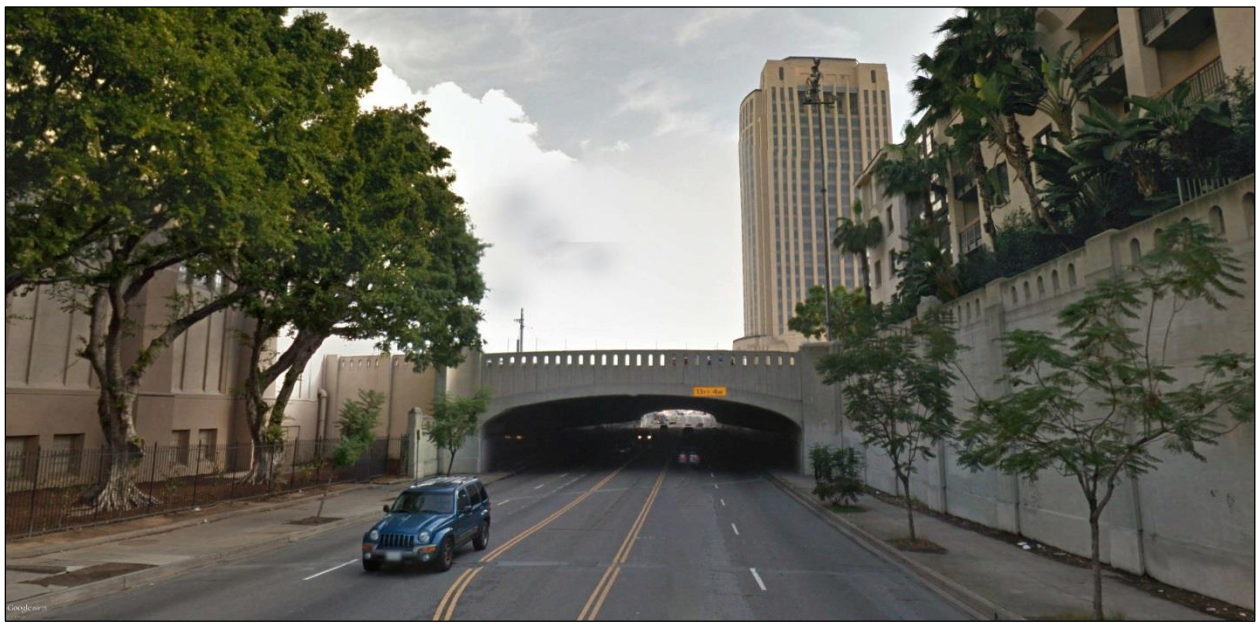
Table 4-4 summarizes the visual quality in Visual Assessment Unit #3.

Table 4-4. Visual Quality of Visual Assessment Unit #3 – Cesar Chavez Avenue Corridor/Mozaic Apartments

Category	Description	Rating
Vividness	Within Visual Assessment Unit #3, building architecture, streetscape elements, the Cesar Chavez Avenue Bridge, and Alameda Street draw the eye and provide visual diversity and interest. East of the Cesar Chavez Avenue Bridge, the character changes to governmental uses and extensive use of retaining walls and concrete. Views of downtown (facing south at Alameda Street) and hills (facing west) add visual interest. However, high traffic levels on the roadways and pedestrian traffic distract from the overall memorability of the landscape.	Moderate
Intactness	Visual Assessment Unit #3 consists entirely of built elements. The streetscape elements along portions of Cesar Chavez Avenue have a visual intactness on each side of the Cesar Chavez Avenue Bridge, but of different character on each side. There are a number of visual intrusions, including high traffic levels on the roadways, pedestrian traffic, utilities, and signs, which distract from the views.	Moderate
Unity	Within Visual Assessment Unit #3, the streetscape along portions of Cesar Chavez Avenue creates a uniform pattern within the landscape on each side of the Cesar Chavez Avenue Bridge. The streetscape design has continuity on each side of the bridge; however, the diversity of architectural styles is complemented by an urban form and building placements, which provide consistency of the visual pattern.	Moderate
Overall	Streetscape elements (street trees and lighting), architecture, and views of the Metro Headquarters, Mozaic Apartments and U.S. Post Office Terminal Annex within Visual Assessment Unit #3 have a vibrant urban appeal. Streetscape elements also provide visual integrity and uniform patterns in the landscape, which lend to intactness in the overall setting.	Moderate

Figure 4-7. Key View #3a – Cesar Chavez Avenue
(view looking west from road toward bridge)

Figure 4-8. Key View #3b – Cesar Chavez Avenue
(view looking east from road toward bridge)



4.1.4 Visual Assessment Unit #4: Alameda Street Corridor/Father Serra Park

Key Views

This visual assessment unit represents business owners/employees/patrons, commuters, and visitors/tourists across Alameda Street from the historic LAUS entrance. Two key views were chosen to determine where visual changes may result from proposed infrastructure (Figure 4-9 and Figure 4-10). Key View #4a is from the sidewalk across from the historic LAUS entrance, and Key View #4b is from Father Serra Park. These key views were chosen to illustrate views of the concourse-related improvements and proposed canopies.

Visual Character

Visual Assessment Unit #4 consists of Alameda Street between Cesar Chavez Avenue and US-101. For this portion of Alameda Street, Alameda Street is three travel lanes in each direction. Land uses in Visual Assessment Unit #4 consist of commercial businesses, retail shops, offices, and warehouses; Father Serra Park; and Olvera Street and the adjacent El Pueblo Historic Park, which includes the plaza with gazebo, the Los Angeles Chinese American Museum, and Los Angeles' first fire station. LAUS interfaces directly with this highly active pedestrian area, which represents the most critical viewshed of the analysis due to the historic context of the LAUS façade facing Alameda Street.

LAUS is the dominant feature in the landscape and offers a distinct form, color, texture, and scale to the surrounding environment due to its historic architecture. There are rows of fan palm trees at the entrance to LAUS adjacent to Alameda Street and along the sidewalks adjacent to the parking lots that provide unity and continuity in line and color and minimal diversity. The Metropolitan Water Disctrict building in the background has variation and adds diversity to the setting of LAUS in terms of form, color, texture, and continuity.

Visual Quality

Table 4-5 summarizes the visual quality in Visual Assessment Unit #4.

Table 4-5. Visual Quality of Visual Assessment Unit #4 – Alameda Street Corridor/Father Serra Park

Category	Description	Rating
Vividness	Visual Assessment Unit #4 is framed by the large scale of the buildings in Downtown Los Angeles and US-101 on the south, and hills to the north. The eye is drawn by the historic LAUS entrance and associated buildings, Father Serra Park and all of its components and associated activities on the west. Beyond El Pueblo is Chinatown and old Little Italy. These features are visually memorable. However, a high level of traffic on the roadways and high pedestrian traffic are distractions. Variability in visual pattern with many distinctive architectural features and destination spots adds to the overall memorability of the landscape.	Moderately High

Table 4-5. Visual Quality of Visual Assessment Unit #4 – Alameda Street Corridor/Father Serra Park

Category	Description	Rating
Intactness	Visual Assessment Unit #4 consists entirely of built elements. The views of LAUS are dominant, while the park area garners attention due to the high activity level. The integrating features in the landscape include tall palm trees on both sides of the corridor. The visual intrusions of this assessment unit include high traffic levels, pedestrian disruptions, and utilities, which distract from the views.	Moderately High
Unity	Within Visual Assessment Unit #4, LAUS, Father Serra Park, and Olvera Street are visually dominant. Though eclectic, the area is unified as a tourist, commuter, and worker hub. There is a clear sense of arrival and place along Alameda Street.	Moderately High
Overall	Visual Assessment Unit #4 is a vivid area with very distinctive memorable features. The unity of the of the historical features and architecture create a high sense of unity with a clear sense of place and arrival. It has unifying features with varying architectural style and ages. The variability in visual elements and patterns does not seem to reduce the overall vividness, intactness, and unity of the views because LAUS has a distinct identity.	Moderately High

Notes:
LAUS=Los Angeles Union Station; US-101=United States Highway 101

Figure 4-9. Key View #4a – LAUS Entrance
(view looking southeast from Alameda Street toward LAUS)

Figure 4-10. Key View #4b – LAUS Entrance
(view looking east from Father Serra Park toward LAUS)

4.1.5 Visual Assessment Unit #5: Commercial Street/United States Highway 101 Corridor

Key Views

Visual Assessment Unit #5 represents business owners/employees/patrons, commuters and visitors/tourists from US-101 and the Commercial Street corridor. Five key views were chosen to illustrate visual changes of the proposed infrastructure (Figure 4-11 through Figure 4-15).

- Key View #5a is from the LAUS rail yard looking southeast toward US-101 and Commercial Street.
- Key View #5b is from Commercial Street looking north toward US-101 and LAUS.
- Key View #5c is from the corner of Commercial Street and Garey Street looking east toward Center Street.

- Key View #5d is from the Alameda Street Bridge looking east toward the Gold Line viaduct over US-101.
- Key View #5e is from US-101 looking toward Downtown Los Angeles.

These key views were chosen to illustrate views of the run-through track structures located south of LAUS. Key View #5b was also chosen to illustrate views of the elevated rail yard and concourse-related improvements, including the proposed canopies that would be visible from south of LAUS.

Visual Character

The visual character of Visual Assessment Unit #5 is that of an urban transportation corridor lined by urban industrial uses to the south. Several existing roadway corridors, including Alameda Street, US-101, Arcadia Street, Aliso Street, Commercial Street, and the El Monte Busway, are all within this assessment unit and they are the dominant visual elements in the area. These roadway corridors are linear features crossing the landscape and are constructed of asphalt and concrete, creating a moderate level of continuity in form, line, color, and texture. Beyond the roadways, there are intermittent buildings associated with Downtown Los Angeles and LAUS that are varied in shape and height but are mainly similar in color to the roadway corridors. Landscaping, including street trees and shrubs, adds some diversity in form, line, color, and texture to the landscape. The streets are relatively wide, and some of the buildings are tall, which creates a more open and grander-scale environment. There are no scenic highways, residential land uses, or other sensitive land uses in this visual assessment unit.

Visual Quality

Table 4-6 summarizes the visual quality in Visual Assessment Unit #5.

Table 4-6. Visual Quality of Visual Assessment Unit #5 – Commercial Street/US-101 Corridor

Category	Description	Rating
Vividness	Within Visual Assessment Unit #5, visual elements are scattered and spread away from the roadway corridor. The absence of distinctive features and variability in visual patterns detracts from the memorability of the landscape.	Low
Intactness	Visual Assessment Unit #5 is comprised entirely of built elements. There are no integrating features, and there are many visual intrusions, including power lines, light poles, and traffic signs, which distract from views.	Low
Unity	Within Visual Assessment Unit #5, there is a high variability in visual elements and no unifying patterns in the landscape.	Low
Overall	Visual elements in Visual Assessment Unit #5, including the industrial and commercial buildings and vacant lots are scattered, and the variability in visual elements and patterns and visual intrusions of transportation and overhead utility infrastructure reduce the overall vividness, intactness, and unity of the views.	Low

Figure 4-11. Key View #5a – US-101/Commercial Street (view looking southeast from LAUS southern platform limit toward US-101/Commercial Street)

Figure 4-12. Key View #5b – Commercial Street (view looking north from Commercial Street toward US-101 and LAUS)

Figure 4-13. Key View #5c – Commercial Street
(view looking east from US-101 on-/off-ramps)

Figure 4-14. Key View #5d – Southbound US-101
(view looking east from Alameda Street)

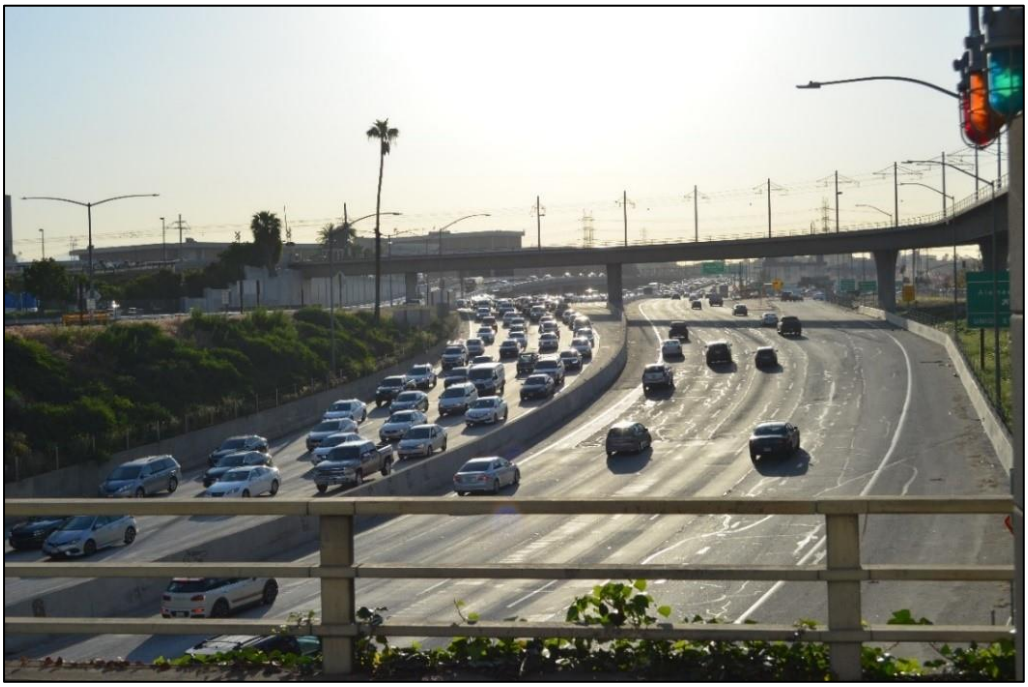


Figure 4-15. Key View #5e – Northbound US-101
(view looking west toward Downtown Los Angeles)

4.1.6 Visual Assessment Unit #6: Los Angeles Union Station

Key Views

This visual assessment unit represents station users, business owners/employees/patrons, commuters, and visitors/tourists at LAUS. For this particular visual assessment unit, three key views were chosen to illustrate the existing conditions of the LAUS rail yard and pedestrian passageway (Figure 4-16, Figure 4-17, and Figure 4-18). Key View #6a is from the parking lot between the baggage handling building and the Gold Line (LAUS Rail Yard Platform 1), facing northeast toward the platforms. Key Views #6b and #6c are located within the 28-foot-wide pedestrian passageway looking toward the ramps to the platforms (Key View #6b) and looking west toward the passageway entrance (Key View #6c).

Visual Character

The visual character of Visual Assessment Unit #6 is that of a multimodal transportation center and tourist destination. The architectural design of LAUS is a combination of Art Deco, Mission

Revival, and Streamline-Moderne styles. LAUS is known as the "Last of the Great Railway Stations" built in the U.S. and was listed in the National Register of Historic Places in 1980. This assessment unit's architectural character is a unique blend of both historic and modern styles, reflecting the historic character of Los Angeles and the evolution of railroad technology from steam to diesel power.

The station platforms, canopies, railroad tracks, overhead lines, and trains are the dominant physical components in this assessment unit. Although these are all linear features, there is a high diversity in color and pattern. There is no landscaping on the platforms and landscaping along the west side of the platforms is minimal and low to the ground. The scale on the platforms is pedestrian oriented, with the platforms defined by the small-scale platform canopies, lighting, and benches. At the Patsaouras Transit Plaza, there are formal rows of palms that provide continuity in form, line, and color. This area also has architectural features, decorative paving, streetscape elements, and sculptures. There is a consistent and formal visual character and scale in the Patsaouras Transit Plaza; however, there is a pedestrian scale, highlighted by the larger scale of the surrounding buildings.

Visual Quality

Table 4-7 summarizes the visual quality in Visual Assessment Unit #6.

Table 4-7. Visual Quality of Visual Assessment Unit #6 – Los Angeles Union Station

Category	Description	Rating
Vividness	Within Visual Assessment Unit #6, the historic station architecture, landscaping, and the scale of the platforms are visually notable and memorable. The design of the Patsaouras Transit Plaza is also visually distinctive. However, the variability in visual pattern surrounding the platforms and station detracts slightly from the memorability of the landscape.	Moderately High
Intactness	Visual Assessment Unit #6 consists entirely of built elements. The architectural and streetscape elements increase visual integrity. However, there are some visual intrusions, including traffic, which distract slightly from the views.	Moderate
Unity	Within Visual Assessment Unit #6, the architectural and streetscape elements at the historic station area and Patsaouras Transit Plaza are unifying features. However, the streetscape is not uniform throughout the entire station and there is a high level of visual diversity in both structures and landscaping that reduces the overall visual coherence.	Moderate
Overall	Streetscape elements in Visual Assessment #6 are visually appealing, provide increased visual integrity, and are unifying features. However, visual diversity within the station and visual intrusions reduce overall vividness, intactness, and unity.	Moderate – Moderately High

Figure 4-16. Key View #6a – LAUS Rail Yard
(view looking northeast toward platform area)

Figure 4-17. Key View #6b – LAUS Platform Access
(view looking north from passageway toward pedestrian ramp)

Figure 4-18. Key View #6c – Los Angeles Union Station Pedestrian Passageway (view looking west from passageway toward passageway entrance)

5.0 Environmental Consequences

5.1 Visual Character and Quality

The visual effects of the proposed infrastructure improvements associated with the Build Alternative are evaluated in the context of Visual Assessment Units #1 through #6 and each of the Key Views discussed below and depicted in Table 5-1. A summary of the resource change and viewer response considered to determine potential visual effects during operation for each of the visual assessment units is summarized in Table 5-1 and discussed below.

5.1.1 Visual Assessment Unit #1: William Mead Homes and Care First Village

Construction

No construction activities would occur within Visual Assessment Unit #1 during the interim condition. Construction vehicles, equipment, and machinery use would be visible from Key Views #1a and #1b at William Mead Homes and Key View #1c at Care First Village in the full build-out condition. Vehicles and equipment and associated staging areas for throat track reconstruction would be contained within the railroad ROW, with some minor encroachment into the William Mead Homes property during the full build-out condition. Construction activities would cease after completion and the effects from these activities are considered a temporary resource change because no permanent changes to Visual Assessment Unit #1 would occur. Viewer response would be temporary because construction activities, vehicles, equipment, and machinery would no longer be visible to viewer groups after construction is complete; thereby eliminating all exposure to these elements after construction is complete. No adverse effect would occur.

Operations

The Build Alternative would cause a resource change at Key Views #1a and #1b (William Mead Homes) and #1c (Care First Village). The resource change at Key View #1a and #1b would consist of a retaining wall to support new lead tracks and a sound wall that would be up to 22 feet in height extending along the rear of the property. The resource change at Key View #1c (Care First Village) would consist of the elevated throat tracks and retaining wall with a 13-foot sound wall between Care First Village and the adjacent tracks.

Direct effects on Key Views #1a, #1b, and #1c would cause a resource change because the retaining and sound walls would change the visual character and quality by introducing new linear infrastructure elements that would expose residential viewer groups to a dominant feature substantially larger in form and scale than any of the current surroundings within the residential communities; thereby resulting in a moderately high resource change.

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Figure 5-1. Key Views and Proposed Infrastructure Improvements

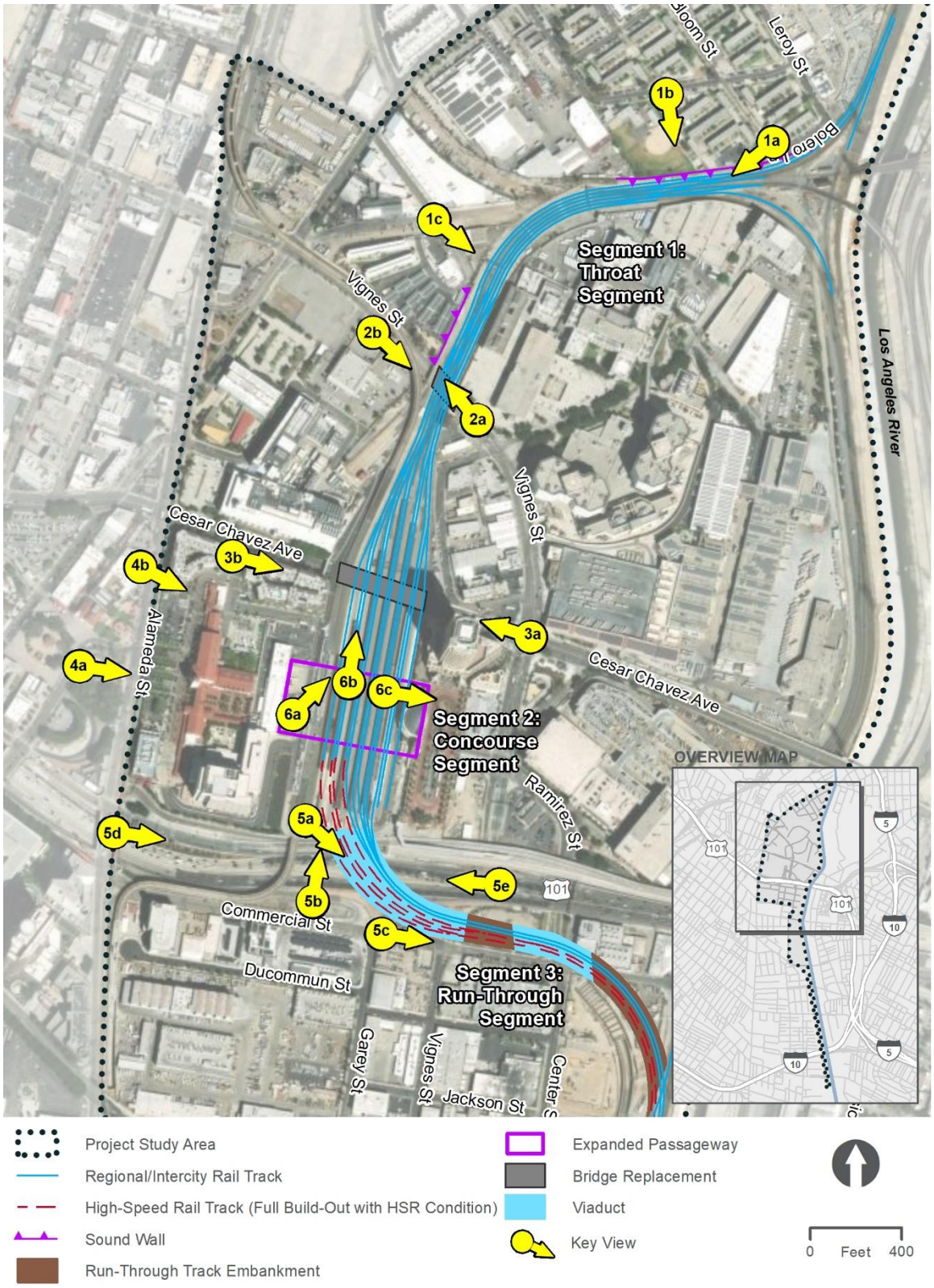

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Table 5-1. Summary of Resource Change, Viewer Response, Impacts, and Effects Determinations

Visual Assessment Unit	Viewer Group Represented	Resource Change	Viewer Response	Visual Impact	Effect Determination
#1 – William Mead Homes and Care First Village	Residents – William Mead Homes	Moderately High	High	High	Adverse
	Residents – Care First Village		High	High	Adverse
#2 – Vignes Street Corridor	Business Owners/Employees/ Patrons and Visitors/Tourists	Low	Low	Low	Not Adverse
	Commuters		Moderate	Moderately Low	Not Adverse
#3 – Cesar Chavez Avenue Corridor/ Mozaic Apartments	Business Owners/Employees/ Patrons	Moderate	Low	Low	Not Adverse
	Commuters		Moderate	Moderately Low	Not Adverse
	Residents – Mozaic Apartments		Moderately High	Moderately High	Adverse
#4 – Alameda Street Corridor/Father Serra Park	Residents, Business Owners/ Employees/Patrons, Commuters, Visitors/Tourists	None	Moderately High	Moderate	Not Adverse
#5 – Commercial Street/US-101 Corridor	Business Owners/Employees/ Patrons	Low	Moderately High	Moderate	Not Adverse
	Commuters and Visitors/Tourists		Moderately Low	Moderately Low	Not Adverse
#6 – LAUS (Business Owners/ Employees/Patrons, Commuters, Visitors/Tourists)	Business Owners/Employees/ Patrons, Visitors/Tourists, Commuters	Moderately High	Moderately High	Moderately High	Beneficial

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Viewer response would be high for residents at William Mead Homes and Care First Village because exposure to visual changes from the retaining and sound walls would be permanent and substantially different than existing views. Some viewers, depending upon their residential unit, would see proposed infrastructure when arriving at and leaving their residential unit and may have views of proposed infrastructure elements from inside their residential unit. As shown in Table 5-1, a moderately-high level of resource change combined with a high level of viewer response would result in a high visual impact, which correlates to an adverse effect during operation.

Mitigation Measure AES-1 (described in Section 6.0) requires Metro to design the retaining wall/ sound wall in consideration of the scale and architectural style of the adjacent William Mead Homes and Care First Village. As part of Mitigation Measure AES-1, Metro will be required to coordinate with the Housing Authority for the City of Los Angeles (HACLA) regarding aesthetic enhancements to the retaining wall/sound wall at William Mead Homes. Materials, color, murals, landscaping, and/or other aesthetic treatments would be integrated into the design of the retaining wall/sound wall to minimize the dominance and scale of the retaining wall/sound wall. Implementation of Mitigation Measure AES-1 would minimize adverse effects of the Build Alternative in Visual Assessment Unit #1 by improving the overall visual quality at the rear of the William Mead Home and Care First Village properties. Upon implementation of Mitigation Measure AES-1, no adverse effect would occur in Visual Assessment #1.

Figure 5-2 through Figure 5-7 depict Key Views #1a and #1b in the existing and proposed conditions with a new retaining wall and sound wall adjacent to the William Mead Homes complex. The visual simulations for Key Views #1a and #1b were prepared to illustrate the potential visual changes resulting from a new retaining wall and sound wall at these locations. Potential visual effects at the Care First Village complex would be similar to the post-project conditions depicted in Figure 5-3.

Figure 5-2. Key View #1a – Existing Conditions at William Mead Homes (view looking southwest toward Railroad ROW)

Figure 5-3. Key View #1a – Post-Project Conditions with Retaining Wall and Sound Wall at William Mead Homes (view looking southwest toward Railroad ROW)

Figure 5-4. Key View #1b – Existing Conditions at William Mead Homes (view looking south toward railroad ROW)

Figure 5-5. Key View #1b – Post-Project Conditions at William Mead Homes with Retaining Wall (view looking south toward railroad ROW)

Figure 5-6. Key View #1b – Existing Conditions

Figure 5-7. Key View #1b – Post-Project Conditions at William Mead Homes with Retaining Wall and Sound Wall (view looking south toward railroad ROW)

5.1.2 Visual Assessment Unit #2: Vignes Street Corridor

Construction

No construction activities would occur within Visual Assessment Unit #2 during the interim condition. Construction vehicles, equipment, and machinery use would be visible by business owners/employees/patrons, commuters, and visitors/tourists from Key Views #2a and #2b during the full build-out condition. Construction activities would extend into the road during construction of the new Vignes Street Bridge abutments and related track and civil work in the throat segment. Construction activities would cease after completion and the effects from these activities are considered a temporary resource change because no permanent changes to Visual Assessment Unit #2 would occur. Viewer response would be temporary because construction activities, vehicles, equipment, and machinery would no longer be visible to viewer groups after construction is complete; thereby eliminating all exposure to these elements after construction is complete. No adverse effect would occur.

Operations

The Build Alternative would cause a resource change at Key Views #2a and #2b that would consist of a new railroad bridge over Vignes Street and retaining walls to support new lead tracks in the throat segment (Figure 5-8 through Figure 5-11). The new railroad bridge would be higher than the existing bridge and would increase the scale of vertical elements in the visual landscape; however, within this visual assessment unit, the resource change would not substantially change visual quality or character in the full build-out condition due to the presence of an existing bridge and associated railroad infrastructure in the same location as the new railroad bridge; thereby resulting in a low resource change.

Viewer response for the viewer groups in this visual assessment unit is described below.

- Viewer response would be low for business owners/employees/patrons and tourists/ visitors because exposure would be short term and their awareness of the visual setting would be more focused on their businesses or preoccupied by traveling through the area. As shown in Table 5-1, a low level of resource change combined with a low level of viewer response would result in a low visual impact.
- Viewer response would be moderate for commuters because exposure would be short term due to their awareness of the visual setting anticipated to be more focused on driving during periods of light roadway congestion, but they may also be able to focus on the surrounding views during periods of heavy roadway congestion when vehicles are moving more slowly. As shown in Table 5-1, a low level of resource change combined with a moderate level of viewer response would result in a moderately low visual impact.

Based on these considerations, no adverse effect would occur in Visual Assessment Unit #2 during operation.

Figure 5-8. Key View #2a – Vignes Street Bridge (view looking west toward bridge) Existing Conditions

Figure 5-9. Key View #2a – Vignes Street Bridge (view looking west toward bridge) Post-Project Conditions with New Bridge

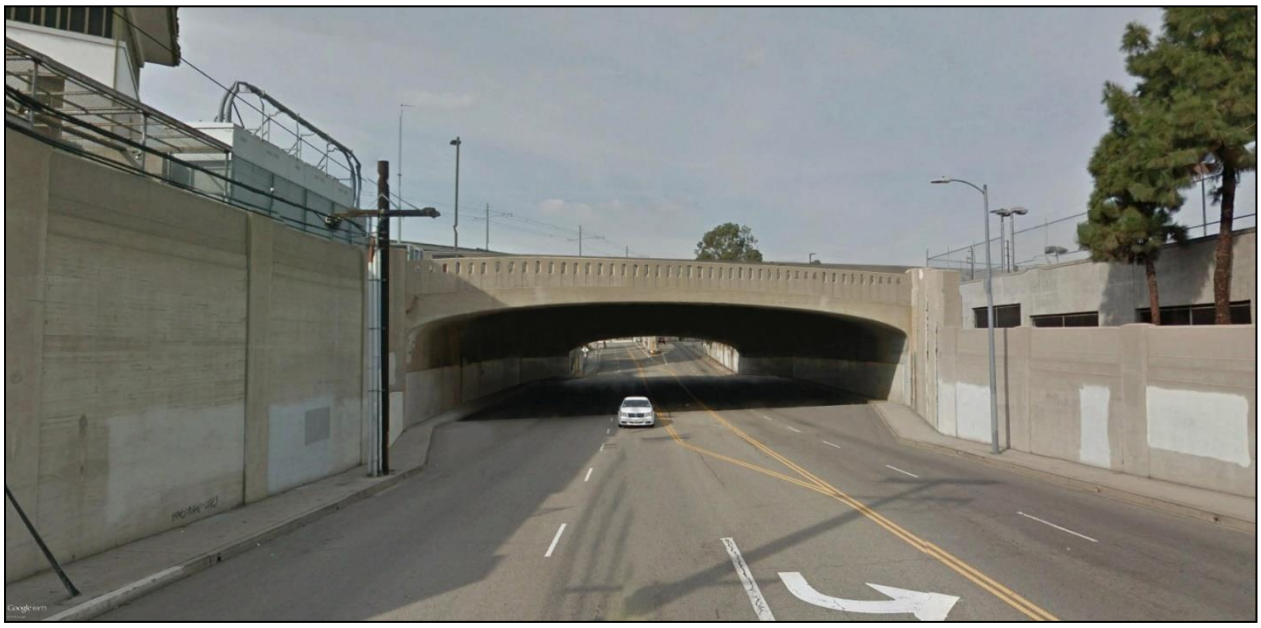


Figure 5-10. Key View #2b – Vignes Street Bridge (view looking east toward bridge) Existing Conditions

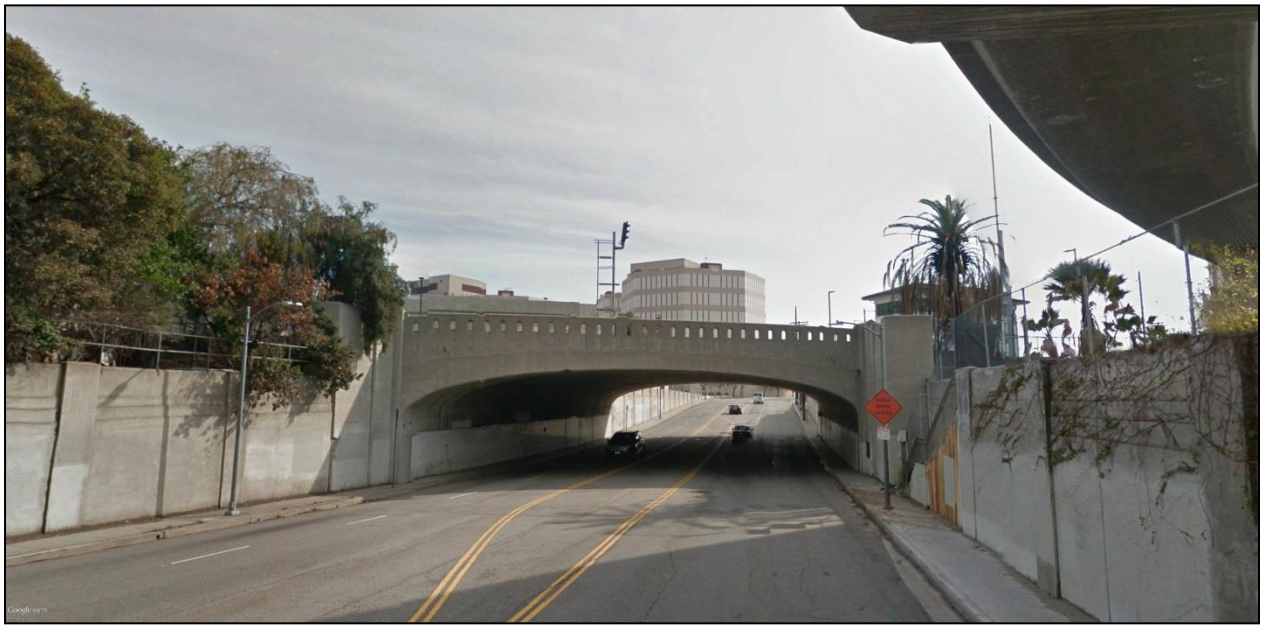


Figure 5-11. Key View #2b – Vignes Street Bridge (view looking east toward bridge) Post-Project Conditions with New Bridge

5.1.3 Visual Assessment Unit #3: Cesar Chavez Avenue Corridor/ Mozaic Apartments

Construction

No construction activities would occur within Visual Assessment Unit #3 during the interim condition. In the full build-out condition, construction vehicles, equipment, and machinery use would be visible from Key Views #3a and #3b. Construction activities would extend into Cesar Chavez Avenue during construction of the new bridge abutments and related track and civil work for the elevated rail yard. Construction activities would cease after completion and the effects from these activities are considered a temporary resource change because no permanent changes to Visual Assessment Unit #3 would occur. Viewer response would be temporary because construction activities, vehicles, equipment, and machinery would no longer be visible to viewer groups after construction is complete; thereby eliminating all exposure to these elements after construction is complete. No adverse effect would occur.

Operations

The Build Alternative would cause a resource change at Key Views #3a and #3b in the full build-out condition that would consist of a new railroad bridge over Cesar Chavez Avenue, retaining walls to support the new lead tracks and elevated rail yard, and canopies over the rail yard (Figure 5-12 through Figure 5-15). The new railroad bridge would be replaced in the same location as the existing bridge to support tracks that would be elevated 10 to 15 feet higher than the existing top-of-rail at this location. The new railroad bridge and retaining walls to support elevated tracks would increase the dominance and scale of vertical and horizontal infrastructure elements in the visual landscape due to the increase in elevation of proposed track and structural improvements. Although the resource change would not be substantially different than existing views due to the presence of similar infrastructure elements at the same location, the dominance and scale of proposed infrastructure resulting from the change in the height of the bridge over Cesar Chavez Avenue, along with the introduction of new retaining walls would be substantially greater than existing conditions; therefore, the resource change is considered moderate.

Viewer response for the viewer groups in this visual assessment unit is described below.

- Viewer response would be low for business owners/employees/patrons and tourists/ visitors because exposure would be short term due to their awareness of the visual setting anticipated to be more focused on their businesses or preoccupied by traveling through the area. As shown in Table 5-1, a moderate level of resource change combined with a low level of viewer response would result in a moderately low visual impact.
- Viewer response would be moderate for commuters because exposure would be short term due to their awareness of the visual setting anticipated to be more focused on driving during periods of light roadway congestion, but they may also be able to focus on the surrounding views during periods of heavy roadway congestion when vehicles are moving

more slowly. As shown in Table 5-1, a moderate level of resource change combined with a moderate level of viewer response would result in a moderate visual impact.

- Viewer response would be moderately high for residents at the Mozaic Apartments because exposure to a larger bridge over Cesar Chavez Avenue, the elevated rail yard, and new retaining walls would diminish current views for some units and degrade the existing visual character. Some viewers, depending upon their residential unit, would see proposed infrastructure when arriving at and leaving their residential unit and may have views of proposed infrastructure elements from inside their residential unit. Residents of the Mozaic Apartments would also have the most prominent views of the canopy option to be implemented, particularly those residents with units facing south or east. These residents would have a full view of the new structural elements for extended periods of time. The view toward LAUS and the associated canopies would be to the southeast, which currently is an open-air view of the existing rail yard. As shown in Table 5-1, a moderate level of resource change combined with a moderately high level of viewer response would result in a moderately high visual impact.

Based on these considerations, an adverse effect would occur for residents at the Mozaic Apartments within Visual Assessment Unit #3 during operation.

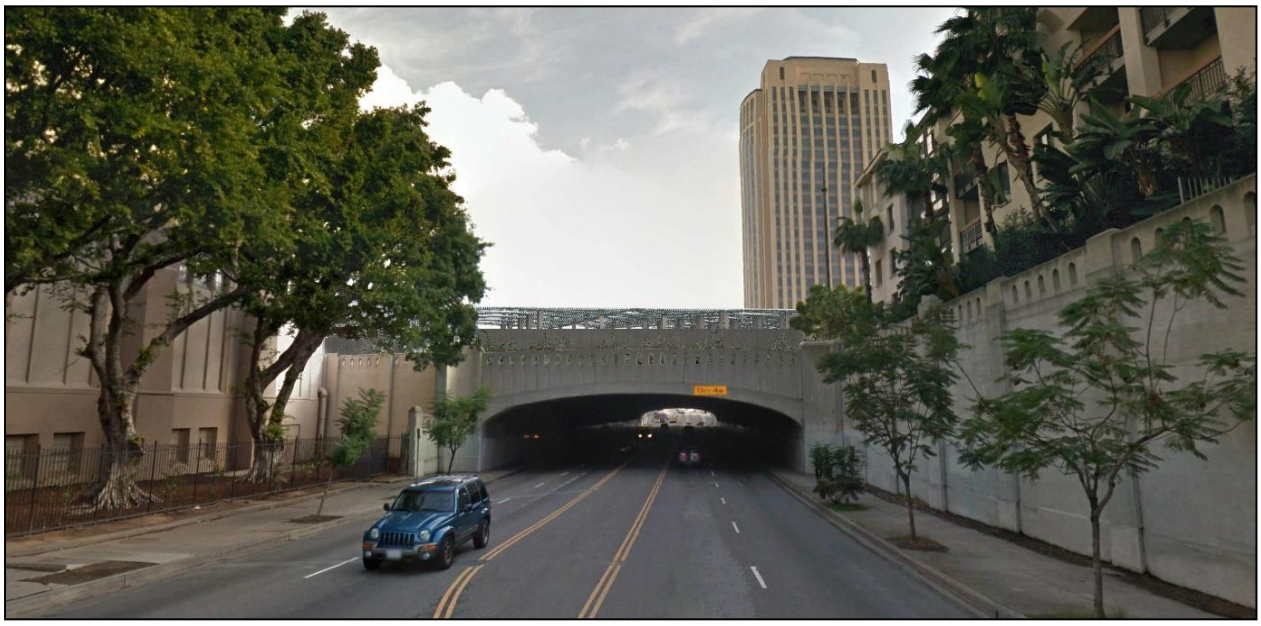
Mitigation Measure AES-1 (described in Section 6.0) requires Metro to design the retaining walls in consideration of the scale and architectural style of the adjacent Mozaic Apartments. As part of Mitigation Measure AES-1, Metro will be required to integrate materials, color, murals, landscaping, and/or other aesthetic treatments into the design of the retaining walls to minimize the dominance and scale. The design and façade of the Cesar Chavez Avenue Bridge would also be coordinated with the State Historical Preservation Officer as it is a historic property. Implementation of Mitigation Measure AES-1 would minimize adverse effects of the Build Alternative in Visual Assessment Unit #3 by improving the overall visual quality at the Mozaic Apartments. Upon implementation of Mitigation Measure AES-1, no adverse effect would occur in Visual Assessment Unit #3.

Figure 5-12. Key View #3a – Cesar Chavez Avenue Bridge (view looking west toward bridge) Existing Conditions

Figure 5-13. Key View #3a – Cesar Chavez Avenue Bridge (view looking west toward bridge) Post-Project Conditions with New Bridge and Grand Canopy (Design Option 2)

Figure 5-14. Key View #3b – Cesar Chavez Avenue Bridge (view looking east toward bridge) Existing Conditions

Figure 5-15. Key View #3b – Cesar Chavez Avenue Bridge (view looking east toward bridge) Post-Project Conditions with New Bridge and Grand Canopy (Design Option 2)



5.1.4 Visual Assessment Unit #4: Alameda Street Corridor/Father Serra Park

Construction

No construction activities would occur within Visual Assessment Unit #4 during the interim condition. In the full build-out condition, construction vehicles, equipment, and machinery use would be visible from Key Views #4a and #4b. Construction activities would require use of cranes and other heavy equipment during construction of the elevated rail yard and concourse-related improvements. With the exception of the cranes required to construct either rail yard canopy design option, no other construction-related equipment is expected to be visible from Key Views #4a and #4b because no work is proposed on the western extent of the LAUS campus. Construction activities would be temporary and would not be visible for prolonged periods of time because of the distance from the key views. Construction activities would cease after completion and the effects from these activities are considered a temporary resource change because no permanent changes to Visual Assessment Unit #4 would occur. No adverse effect would occur.

Operations

The Build Alternative would cause a resource change at Key Views #4a and #4b, which would consist of a small segment of the Rail Yard Canopy Design Option 2 Grand Canopy. The new canopy would introduce a new modern infrastructure element behind the historic LAUS entrance that would include design elements consistent with other transportation-related infrastructure and development in the Project study area, but the form and scale do not substantially alter the visual quality. Rail Canopy Design Option 1, individual canopies over platforms, would not cause a resource change because individual canopies would not be visible behind LAUS from Key Views #4a and #4b. The Build Alternative would result in no changes to the visual quality or character of the LAUS frontage within Visual Assessment Unit #4 due to the preservation of the historic main building (e.g., tile roof, stucco wall cladding, arched main entrance, decorated beams, and tile floors) and other features, such as the ticketing halls, arcades, clock tower, and patios; therefore, the resource change is considered low.

Viewer response would be low for residents, business owners/employees/patrons, commuters, and visitors/tourists because views looking east from Key Views #4a and #4b have changed substantially over time and the visual landscape has changed dramatically over the last eight decades due to construction of LAUS, modernization of Alameda and Los Angeles Streets, and construction of US-101 and the El Monte Busway, high rise condominium buildings, Gateway Plaza, and the Metropolitan Water District Headquarters; thereby reducing overall viewer sensitivity. Exposure would be limited due to the topography and existing development within the Project study area and views of the canopies are expected to take place intermittently for short durations of time as viewers pass LAUS along Alameda Street or utilize the public spaces in the vicinity. As shown in Table 5-1, a low level of resource change combined with a low level of viewer response would result in a low visual impact. Based on these considerations, no adverse effect would occur in Visual Assessment Unit #4 during operation.

Figure 5-16 and Figure 5-18 depict the existing conditions from Key View #4a and #4b, and Figure 5-17 and Figure 5-19 depict the grand canopy that would be partially visible to primary viewers in this visual assessment unit.

Figure 5-16. Key View #4a – LAUS Entrance (view looking southeast toward LAUS) Existing Conditions

Figure 5-17. Key View #4a – LAUS Entrance (view looking southeast from Alameda Street toward LAUS) Post-Project Conditions with Grand Canopy (Design Option 2)

Figure 5-18. Key View #4b – LAUS Entrance (view looking toward LAUS) Existing Conditions

Figure 5-19. Key View #4b – LAUS Entrance (view looking east from Father Serra Park toward LAUS) Post-Project Conditions with Grand Canopy (Design Option 2)

5.1.5 Visual Assessment Unit #5: Commercial Street/United States Highway 101 Corridor

Construction

Construction vehicles, equipment, and machinery use would be visible from travelers on US-101, Alameda Street, Commercial Street, Center Street, and other roadways in the run-through segment during the interim and full build-out conditions. Construction activities would occur in staging areas along Commercial Street directly adjacent to industrial and commercial land uses. Construction activities would cease after completion and the effects from these activities are considered a temporary resource change because no permanent changes to Visual Assessment Unit #5 would occur. Viewer response would be temporary because construction activities, vehicles, equipment, and machinery would no longer be visible to viewer groups after construction is complete, and all staging areas would be restored to pre-Project conditions; thereby eliminating all exposure to these elements after construction is complete. No adverse effect would occur.

Operations

The Build Alternative would cause a resource change at Key Views #5a through #5e, which would consist of new run-through track structures south of LAUS, including the common viaduct/deck that would cross over US-101 and common run-through track embankments and bridges that would be constructed north of Commercial Street in the interim condition (Figure 5-20 through Figure 5-29).

The US-101 Viaduct within Caltrans ROW would be approximately 205 feet wide, 700 feet long, with a deck elevation that varies between 307 feet and 314 above mean sea level. The height of the structure would vary from 25 feet to 35 feet, depending on location when measured from the roadway below to the highest point of the viaduct structure. The US-101 Viaduct would be supported by two abutments and on seven bents located at the south end of LAUS, between the El Monte Busway and US-101, at the freeway median, and on the south side of the US-101 ROW. The US-101 Viaduct would be constructed of materials similar to those used in the Alameda Street overhead crossing and the Gold Line viaduct; however, it would be a more prominent structure than the existing Gold Line viaduct over US-101 due to the width of the structure required to accommodate up to 10 run-through tracks.

- The Build Alternative would result in a substantial addition of new transportation infrastructure elements to the existing visual environment south of LAUS, but the run-through track infrastructure would be similar in context form and scale to the existing transportation infrastructure in this visual assessment unit, as it is primarily a transportation corridor with multiple highway and railroad-oriented uses. The scale of the run-through track infrastructure may generate shadows on US-101 and Commercial Street given the time of day and time of year for both the interim and full build-out conditions; however, there are no residential land uses or other sensitive land uses that would be affected by shadow impacts and the scale of the highway corridor and surrounding development is linear and large. Therefore, the addition of run-through track infrastructure

would not change the low visual character of this visual assessment unit. Metro may also implement aesthetic treatments to the US-101 Viaduct and run-through structures south of LAUS, in coordination with the City of Los Angeles and Caltrans.

- The resource change within Visual Assessment Unit #5 would be low due to the context with the surrounding transportation infrastructure and industrial land uses. A summary of the resource change for each of the key views in Visual Assessment Unit #5 is provided below.
- From Key View #5a, looking southeast from LAUS toward Commercial Street, the run-through track structures would present a new, dominant feature in the foreground landscape and reduce the visibility of aging industrial buildings and overhead power lines in the background (Figure 5-20 and Figure 5-21).
    - From Key View #5b, looking north from Commercial Street toward US-101 and LAUS, the run-through track structure over US-101 would dominate views looking toward LAUS, the Metropolitan Water District headquarters, and Metro Headquarters (Figure 5-22 and Figure 5-23).
    - From Key Views #5c, #5d, and #5e, the run-through track structure and embankment would present a new infrastructure feature that would be similar in form, scale, color, and mass to overhead bridges with associated bents and abutments within public ROW and at freeway on- and off-ramp locations because these are a common infrastructure element within and adjacent to Caltrans ROW. Placement of outrigger bents over the intersection of Commercial Street and the US-101 on- and off-ramps would not be required, thereby avoiding potential shadow effects on Commercial Street (Figures 5-24 through Figure 5-29).
- Examples of potential aesthetic treatment concepts that could be applied to the US-101 Viaduct and run-through tracks structures, provided that additional funding is made available, are depicted in Figure 5-30 and Figure 5-31. These aesthetic treatments would contribute to the resource change and are conceptual and subject to change. Figure 5-30 and Figure 5-31 also depict the bicycle lanes along Commercial Street, in addition to other future urban design enhancements that would further contribute to the resource change, provided that additional funding is identified in coordination with City of Los Angeles and Caltrans.

Viewer response for the viewer groups in this visual assessment unit is described below.

- Viewer response would be moderately low for commuters and visitors/tourists on US-101 (northbound and southbound travelers) as there would be minimal disruption to their visual expectations. Travelers along northbound and southbound US-101 would be subject to the greatest duration of views of the US-101 Viaduct primarily because they would be traveling toward and under the viaduct and, in some cases, slowly during heavy traffic. Views are anticipated to be no different than any other overhead crossings within Caltrans ROW. Although travelers along US-101 may be subject to a visual change with introduction of new run-through track infrastructure, the aesthetics of the proposed

abutments and bents to support the US-101 Viaduct would be designed consistent with other overhead crossings within Caltrans ROW. As shown in Table 5-1, a low level of resource change combined with a moderately low level of viewer response would result in a moderately low visual impact.

- Viewer response would be moderately high for business owners/employees/patrons because these viewer groups would be exposed to new, large structures where none currently exist. As shown in Table 5-1, a low level of resource change combined with a moderately high level of viewer response would result in a moderate visual impact.

Based on these considerations, no adverse effect would occur within Visual Assessment Unit #5 during operation.

Figure 5-20. Key View #5a – US-101/Commercial Street Corridor (view looking southeast toward US-101/Commercial Street) Existing Conditions

Figure 5-21. Key View #5a – US-101/Commercial Street Corridor (view looking southeast toward US-101/Commercial Street) Post-Project Condition with Run-Through Track Infrastructure

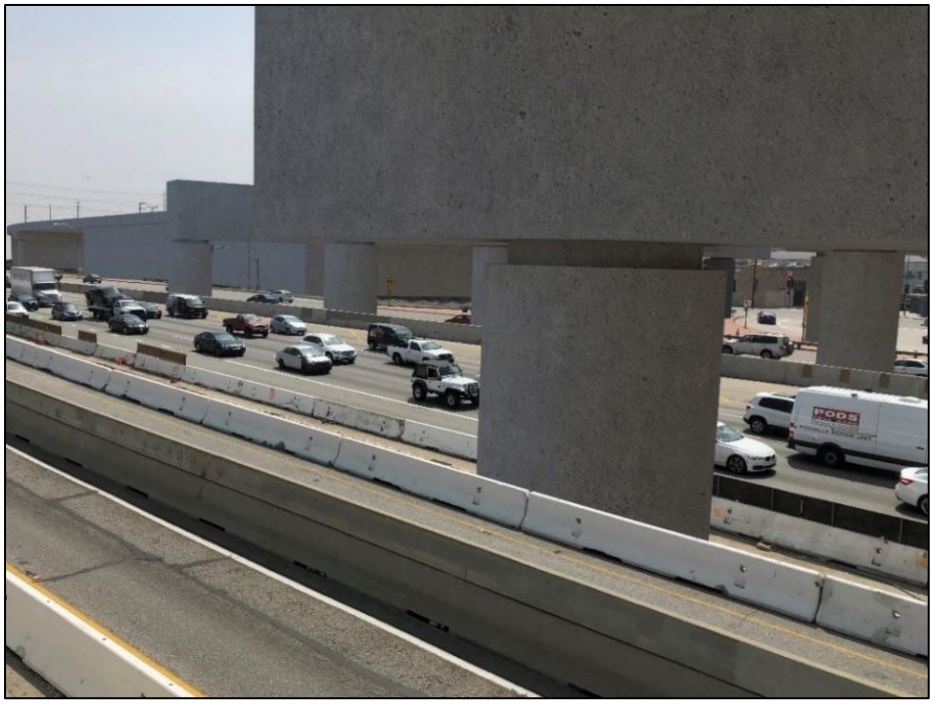


Figure 5-22. Key View #5b – Commercial Street Corridor (view looking north toward US-01 and LAUS) Existing Conditions

Figure 5-23. Key View #5b – Commercial Street Corridor (view looking north toward US-101 and LAUS) Post-Project Condition with Run-Through Tracks and Grand Canopy (Design Option 2)

Figures 5-24. Key View #5c – Commercial Street Corridor (view looking east toward Center Street) Existing Conditions

Figure 5-25. Key View #5c – Commercial Street Corridor (view looking east toward Center Street) Post-Project Condition with Run-Through Tracks

Figure 5-26. Key View #5d – US-101 (view looking north toward LAUS) Existing Conditions

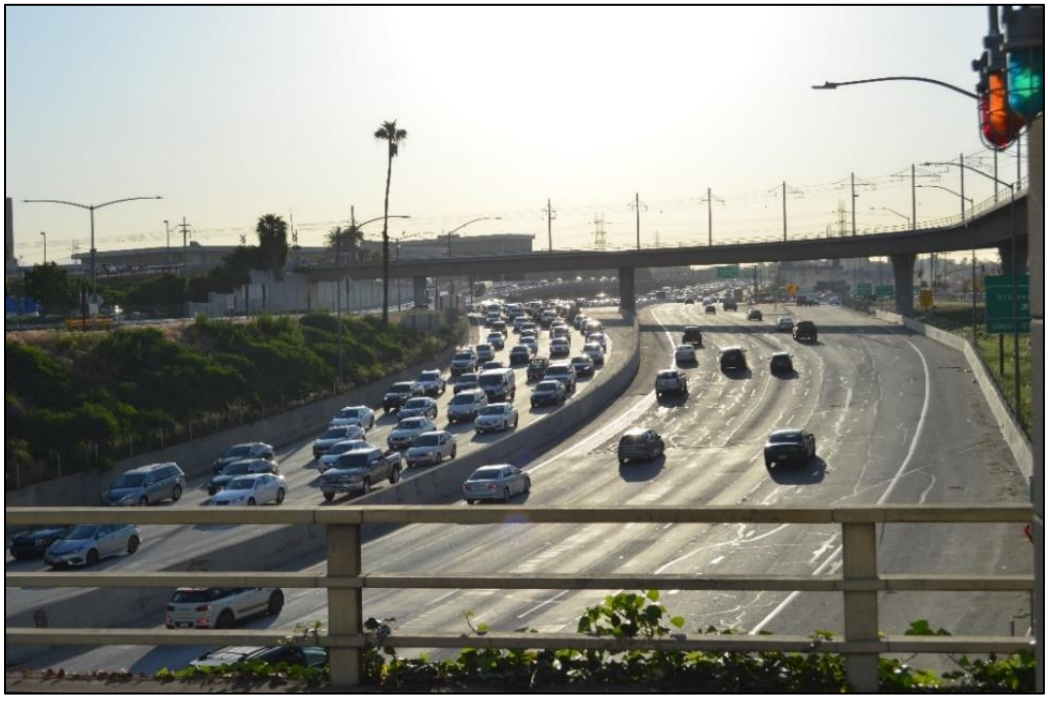


Figure 5-27. Key View #5d – US-101 (view looking north toward LAUS) Post-Project Condition with Run-Through Tracks

Figure 5-28. Key View #5e – US-101 (view looking north toward Downtown Los Angeles) Existing Conditions

Figure 5-29. Key View #5e – US-101 (view looking north toward Downtown Los Angeles) Post-Project Condition with Run-Through Tracks

Figure 5-30. Potential Aesthetic Treatments and Urban Design Enhancements on Commercial Street

Figure 5-31. Potential Aesthetic Treatments and Urban Design Enhancements at Center Street/Commercial Street Intersection

5.1.6 Visual Assessment Unit #6: Los Angeles Union Station

Construction

No construction activities would occur below the rail yard within Visual Assessment Unit #6 during the interim condition, although construction activities would occur on Platform 4 on the rail yard. In the full build-out condition, within Visual Assessment Unit #6, the Build Alternative would include construction of concourse-related improvements below the rail yard and in the East and West Plazas. Construction activities would cease after completion and the effects from these activities are considered a temporary resource change because no permanent changes to Visual Assessment Unit #6 would occur. Viewer response would be temporary because construction activities, vehicles, equipment, and machinery would no longer be visible to viewer groups after construction is complete; thereby eliminating all exposure to these elements after construction is complete. No adverse effect would occur.

Operations

The Build Alternative would cause a resource change at Key Views #6a, #6b, and #6b, which would consist of concourse-related improvements including a 140-foot-wide expanded passageway below the LAUS rail yard in conjunction with new plazas east and west of the elevated rail yard (East and West Plazas).

Two rail yard canopy design options that would contribute the resource change are described below.

- **Rail Yard Canopy Design Option 1:** Individual canopies over each platform would introduce new, noticeable visual elements in the rail yard that would be larger in scale with a more modern design than the existing butterfly canopies. Individual canopies would include glass architectural elements to cover the size of the expanded platforms.
- **Rail Yard Canopy Design Option 2:** A grand canopy over the rail yard would introduce new, noticeable visual elements in the rail yard that would be larger in scale than the individual canopies because it would extend up to 75 feet above the elevated rail yard platforms and would also include modernized glass architectural elements. The grand canopy would present a new, dominant feature in the landscape and introduce new vertical building elements above the rail yard that would provide prominent views within and outside of LAUS.

New VCEs and standard amenities, benches, variable message signs, new lighting, closed-circuit television security cameras, ticket vending machines, passenger waiting areas, and trash receptacles would also contribute to the resource change. The resource change for the portion of the concourse-related improvements below the rail yard would be visible from Key Views #6b and #6c. Similar to the existing conditions and visual character, the rail yard would be situated within an exterior environment, although it would be elevated approximately 15 feet within this visual assessment unit. This resource change to the rail yard would be most visible from Key View #6a. The grand canopy or individual canopies would be visible above the tracks (visible from Key View #6a). The design of the proposed improvements would be compatible with the surrounding visual landscape in Downtown Los Angeles, include sustainable design features consistent with the vision for LAUS, and improve upon the aesthetic conditions at LAUS. The scale and modern architectural style of the concourse-related improvements in Visual Assessment Unit #6 and overall enhancements to the visual quality of the LAUS campus that would result from implementation of the expanded passageway, plazas, and elevated rail yard would result in a moderately high resource change.

Viewer response would be moderately high for business owners/employees/patrons and visitors/tourists and commuters because exposure to the resource change would be short term when business owners/employees/patrons arrive and/or leave businesses; however, exposure would be often, potentially daily. Visitors/tourists and commuters would also be exposed to the resource change on a frequent basis, although for shorter duration of time. These viewer groups are anticipated have a positive response to the resource change as they would be users of the facility and exposed to an environment with more space and modern amenities, thereby enhancing the visual quality and aesthetics at LAUS. Concourse-related improvements would also provide opportunities for murals to display the local importance and history of the area/LAUS. As shown in Table 5-1, a moderately high level of resource change combined with a moderately high level of viewer response would result in a moderately high visual impact. Based on these considerations, a beneficial effect would occur during operations.

Architectural representations depicting the interior and exterior views of the expanded passageway from within Visual Assessment Unit #6 were prepared. The renderings are conceptual, subject to change, and provided to illustrate the extent of architectural expansion and renovation proposed for LAUS.

5.2 Light and Glare

5.2.1 Visual Assessment Unit #1: William Mead Homes and Care First Village

Construction

Some nighttime construction may be required for safety and to maintain optimal train operations during construction. During nighttime construction activities, temporary lighting may be used at discrete locations for certain construction activities. The Project study area is currently an urban area with multiple sources and types of lighting typically associated with a large, metropolitan city. The use of construction lighting during nighttime hours would be temporary and would be placed in select locations where work is occurring. Direct lighting on nearby residences in proximity to the construction work zone within Visual Assessment Unit #1 would potentially expose residential viewers to higher levels of lighting during the nighttime hours, which could disrupt normal activities for residents of William Mead Homes and Care First Village. Mitigation Measure AES-2 (described in Section 6.0) requires the construction contractor to install temporary lighting in a manner that directs light toward the construction area and to install temporary shields as necessary so that light spill does not occur into residential areas. Implementation of Mitigation Measure AES-2 would minimize adverse effects by reducing the amount of direct light exposed to residential areas in Visual Assessment Unit #1. Upon implementation of Mitigation Measure AES-2, no adverse effect would occur in Visual Assessment Unit #1 during construction.

Operations

The Build Alternative would result in an increased number of trains and signals in the throat segment, which would result in an increase in lighting from additional train movements; however, within Visual Assessment Unit #1, some of this lighting may be blocked by the sound wall along William Mead Homes required as part of Mitigation Measure NV-1 (as described in the *Link US Noise and Vibration Report,* Appendix H of the EIS/SEIR). Any new light poles that may be required for safety purposes are also anticipated to be blocked by the sound wall. No new sources of lighting or glare would be directed at residential land uses at William Mead Homes.

Figure 5-32 includes the viewpoint locations that were selected to depict the concourse-related improvements, including the 140-foot-wide expanded passageway below the LAUS rail yard, new plazas east and west of the elevated rail yard, and the elevated railyard as part of the Build Alternative. Figure 5-33 through Figure 5-38 depict views of the concourse-related improvements associated with the Build Alternative and, specifically, the West Plaza, East Plaza, ingress/egress areas, waiting areas, VCEs, platforms areas, and interior of the new expanded passageway (Views A through F).

Figure 5-32. Viewpoint Locations of the Build Alternative with Expanded Passageway

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Figure 5-33. View A – Expanded Passageway from West Plaza Looking East with Grand Canopy (Design Option 2)

Figure 5-34. View B – Expanded Passageway under Gold Line Platforms Looking West

Figure 5-35. View C – New Platforms and Vertical Circulation Elements Looking North with Grand Canopy (Design Option 2)

Figure 5-36. View D – New Passageway with Retail Space and Waiting Areas Looking Southwest

Figure 5-37. View E – Modified Expanded Passenger Concourse Looking West

Figure 5-38. View F – New Passageway from East Plaza Looking West

At Care First Village, the increase in lighting would occur on the elevated portion of the throat tracks and is not expected to add new direct sources of lighting or glare to the residential units due to the height of the elevated throat tracks that would be located at a higher elevation than the residential units.

The additional lighting within Visual Assessment Unit #1 would occur within an existing railroad ROW in an area heavily utilized by transportation uses and is not expected to disrupt normal activities for the surrounding residential land uses. No adverse effect would occur during operation.

5.2.2 Visual Assessment Unit #2: Vignes Street Corridor

Construction

Construction activities in Visual Assessment Unit #2 associated with the Build Alternative may occur at night during the full build-out condition, although construction activities during nighttime hours would not expose residents or other sensitive receptors to higher levels of light during those hours. No adverse effect would occur.

Operations

Views from Key Views #2a and #2b within Visual Assessment Unit #2 would be oriented toward the new railroad bridge that would support new lead tracks over Vignes Street in the full build-out condition. The new railroad bridge would be elevated over Vignes Street; however, the presence of lighting on the bridge or in the railroad ROW would not be substantially different than existing conditions and any additional light from increased train movements would not be directed toward residential land uses or drivers from Key Views #2a and #2b. No effect would occur during operation.

5.2.3 Visual Assessment Unit #3: Cesar Chavez Avenue Corridor/Mozaic Apartments

Construction

Construction activities adjacent to the Mozaic Apartments could occur during nighttime hours during the full build-out condition. The use of construction lighting during nighttime hours would be temporary and placed in select locations where work is occurring. Direct lighting on nearby residences in proximity to the construction work zone within Visual Assessment Unit #3 would potentially expose residential viewers to higher levels of lighting during the nighttime hours, which could disrupt normal activities for residents at the Mozaic Apartments. Mitigation Measure AES-2 (described in Section 6.0) requires the construction contractor to install temporary lighting in a manner that directs light toward the construction area and to install temporary shields as necessary so that light spill does not occur into residential areas. Implementation of Mitigation Measure AES-2 would minimize adverse effects by reducing the amount of direct light exposed

to residential areas in Visual Assessment Unit #3. Upon implementation of Mitigation Measure AES-2, no adverse effect would occur in Visual Assessment Unit #3 during construction.

Operations

Views from Key Views #3a and #3b within Visual Assessment Unit #3 would be oriented toward where the resource change would occur (new railroad bridge that would support new lead tracks over Cesar Chavez Avenue and the new platform canopies - Rail Yard Canopy Designs Option 1 or 2). The new railroad bridge would be elevated, and lights would be incorporated into the design of the elevated rail yard and canopies to meet current applicable safety standards in the full build-out condition. If not properly designed and installed, light emissions and potential glare from proposed infrastructure may cause undesired exposure or disrupt normal activities for some of the units in the Mozaic Apartments. The new platform canopies also have the potential to result in additional daytime glare. Currently, there is a large amount of illumination in this visual assessment unit from the existing station; however, for residents in the Mozaic Apartment units nearest to the station, direct effects in the full build-out condition would be considered adverse. Mitigation Measure AES-3 requires Metro to design all Project lighting to comply with applicable rules, standards, and guidelines including *Metro Rail Design Criteria* (Metro 2013), SCRRA *Design Criteria Manual* (SCRRA 2014), Illuminating Engineering Society standards (Illuminating Engineering Society 2011a, 2011b, 2014), California Building Standards Code 2013 (Title 24), and Leadership in Energy and Environmental Design® (LEED®) standards for new construction. These guidelines include requirements for lighting pollution reduction to minimize any undesired exposure on viewers and nearby residents of Mozaic Apartments. Upon implementation of Mitigation Measure AES-3, no adverse effect would occur in Visual Assessment Unit #3 during operation.

5.2.4 Visual Assessment Unit #4: Alameda Street Corridor/Father Serra Park

Construction

The minor construction equipment and activities that would be visible from key views during the full build-out condition of the Build Alternative when the concourse elements are constructed in this visual assessment unit would not subject viewers to greater amounts of light or glare. No effect would occur.

Operations

Views from Key Views #4a and #4b within Visual Assessment Unit #4 would be oriented toward the LAUS and the new canopies above the elevated platforms during operation. In Visual Assessment Unit #4, viewers would experience some change resulting from nighttime illumination; however, light levels would not be substantially different than under existing conditions. Individual canopies (Rail Yard Canopy Design Option 1) would not be visible from the key views considered within this visual assessment unit, although the grand canopy (Rail Yard Canopy Design Option 2) would be visible. Operational effects of lighting and glare in Visual

Assessment Unit #4 would not result in undesired exposure to residents or drivers or disrupt any normal activities for other viewer groups. No adverse effect would occur.

5.2.5 Visual Assessment Unit #5: Commercial Street/United States Highway 101 Corridor

Construction

The construction equipment and activities that would be visible from key views in this visual assessment unit would not be subject to greater amounts of light or glare that would cause visual effects along US-101 or Commercial Street during the interim condition. Freeway users on US-101 could be exposed to greater amounts of nighttime lighting depending on construction schedules. Commercial Street contains numerous vacant and undeveloped lots in addition to commercial and industrial uses that would not be sensitive to additional lighting for construction purposes. Construction effects of the Build Alternative on lighting and glare in Visual Assessment Unit #5 would be minor. No adverse effects would occur.

Operations

Views from Key Views #5a through #5e within Visual Assessment Unit #5 would be oriented toward run-through track infrastructure south of LAUS. Lighting would be installed within the soffit of the US-101 Viaduct for safety purposes and would be designed in accordance with American National Standards Institute/Illuminating Engineering Society of North America Recommended Practice for Tunnel Lighting (Illuminating Engineering Society 2011c). The Build Alternative would facilitate an increased number of trains, adding a new light source through this portion of the Project study area; however, there is currently a large amount of lighting in this visual assessment unit from transportation, commercial, and industrial uses, and the amount of lighting added by the run-through tracks or increased train movements would not be substantially noticeable. The Build Alternative is not expected to result in additional daytime glare in this visual assessment unit because the proposed run-through structures south of LAUS would be constructed of concrete non-reflective building materials, similar to other bridges and overcrossings (i.e., Gold Line Viaduct) in the Project study area. Because Visual Assessment Unit #5 is within a developed urban area and additional lighting would not result in undesired exposure to residents or drivers, effects related to lighting are not expected to be substantially different from the surrounding area. No adverse effect would occur during operation.

5.2.6 Visual Assessment Unit #6: Los Angeles Union Station

Construction

Construction activities in Visual Assessment Unit #6 would include the reconstruction and raising of the rail yard during the full build-out condition of the Build Alternative. These activities could occur at night. During nighttime construction activities, temporary lighting may be used at discrete locations for certain construction activities. The use of construction lighting during nighttime hours would not change the visual character of the area or degrade the visual quality because lighting

would only be temporary and placed in select locations where work is occurring. However, views within this visual assessment unit are limited, primarily to the concourse-related improvements (including the canopies), rail yard tracks and platforms, and, to a lesser degree, the run-through structures. Construction effects of the Build Alternative on lighting and glare in Visual Assessment Unit #6 would have direct effects on nearby residences in proximity to the construction work zone and would be considered adverse because residences of Mozaic Apartments would be exposed to higher levels of lighting during the nighttime hours. Implementation of Mitigation Measure AES-2 (described in Section 6.0), which includes provisions for alternative work schedules and visual screening, would avoid or minimize the potential for adverse effects.

Operations

Views from Key Views #6a through #6c within Visual Assessment Unit #6 would be oriented toward the elevated railyard and new concourse-related improvements. At night, the elevated rail yard would be an illuminated feature, similar to other nearby transit facilities. Additional light at the station would result from increased train movements in the rail yard and the new canopies. There is already a large amount of existing lighting in this visual assessment unit from transportation, commercial, and industrial uses, and the existing station currently has a large amount of lighting spilling out into this visual assessment unit. Therefore, the amount of lighting would not be substantially different relative to existing conditions. No adverse effect would occur.

As discussed above for Visual Assessment Unit #3, glare effects would result from implementation of the canopies above the elevated platforms. See discussion above for an evaluation of potential effects and applicable mitigation at Mozaic Apartments.

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6.0 Mitigation Measures

The following mitigation measures would avoid or minimize the potential for adverse effects of the Build Alternative on visual quality, aesthetics, lighting, and glare.

AES-1 **Aesthetic Treatments:** Retaining walls in Segments 1 and 2 and the sound walls in Segment 1 of the Project study area shall be designed in consideration of the scale and architectural style of the adjacent William Mead Homes, Care First Village, and Mozaic Apartments. Based on feedback received during Project development from residents of the William Mead Homes property, Metro shall coordinate with the Housing Authority of the City of Los Angeles regarding aesthetic enhancements to the retaining wall/sound wall at that location. Materials, color, murals, landscaping, and/or other aesthetic treatments shall be integrated into the design of the retaining walls/sound walls to minimize the dominance and scale of the retaining walls/sound walls.

AES-2 **Minimize Nighttime Work and Screen Direct Lighting:** Nighttime construction activities near residential areas shall be avoided to the extent feasible. If nighttime work is required, the construction contractor shall install temporary lighting in a manner that directs light toward the construction area and shall install temporary shields as necessary so that light does not spill over into residential areas.

AES-3 **Screen Direct Lighting and Glare:** During final design, all new or replacement lighting shall comply with *Metro Rail Design Criteria* (Metro 2013), SCRRA *Design Criteria Manual* (SCRRA 2014), Illuminating Engineering Society standards (Illuminating Engineering Society 2011a, 2011b, 2014), maximum allowable CALGreen glare ratings (California Building Standards Code 2013 – Title 24, Part 11), and Leadership in Energy and Environmental Design® (LEED®) standards for new construction. In addition, all permanent lighting shall be designed to be directed away from residential units. Screening elements, including landscaping, shall also be incorporated into the design, where feasible. Low-reflective glass and materials shall also be incorporated into the design of the new canopies to reduce daytime glare impacts.

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