APPENDIX K2:
EBPSP VMT MEMO



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Fehr & Peers

Memorandum

Date: January 16, 2026

To: Jay Bautista, P.E., T.E.

From: Paul Herrmann, T.E.
Trevor Lien

Subject: Ontario Sares Regis Eucalyptus Business Park Specific Plan Project-Level VMT Assessment

Fehr & Peers completed a Vehicle Miles Traveled (VMT) assessment for the proposed Eucalyptus Business Park Specific Plan (EBPSP) located in Ontario, California. This VMT analysis is consistent with requirements of Senate Bill 743 (SB 743), the California Governor's Office of Land Use and Climate Innovation's[1] (LCI's) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018), and City of Ontario's adopted VMT Impact Analysis Resolution (No. 2020-071) (City's Guidelines).

Project Description

The EBPSP is primarily a business park and includes some mixed-use retail, a public animal shelter, and park use located north of Eucalyptus Avenue between Campus Avenue and Walker Avenue in the City of Ontario. The EBPSP site plan is provided in **Figure 1**. The proposed land use mix is shown in **Table 1**, while **Table 2** shows the EBPSP forecasted households, residents, and employment buildout. The EBPSP is separated into nine Planning Areas (PAs), each with at least two access roads and at least two access driveways. The EBPSP is proposed to be developed in three phases; Phase 1 is located east of Grove Avenue, Phase 2 is located between Bon View Avenue and Grove Avenue, and Phase 3 is located west of Bon View Avenue. The EBPSP is described in greater detail in the *Eucalyptus Business Park Specific Plan Traffic Study Scoping Agreement* (2025) (**Attachment A**).

The EBPSP is being considered concurrently with TOP 2050 Policy Plan Amendment. TOP 2050 is the City's general plan. Because the EBPSP would replace areas planned for residential use with nonresidential uses, the loss in residential capacity must be offset by increasing the residential capacity by an equal amount elsewhere in the City to comply with Senate Bill (SB) 330, which mandates no net loss of residential capacity citywide. The Policy Plan Amendment includes revisions to the City's TOP land use plan to address the requirements of SB 330. Areas of change are outlined in black in **Figure 2**. The current TOP 2050 is the baseline for the Supplemental Environmental Impact Report (**Attachment B**). The total change in forecasted households, residents, and employment of the Policy Plan Amendment to the baseline are shown in **Table 3**. Projections for households, residents and employment estimates were prepared by Placeworks and the City of Ontario.

[1] This office was previously known as the California Governor's Office of Planning and Research.

A collateral component of the Policy Plan Amendment, attentive to state legislation Assembly Bill 98 (AB 98) and Senate Bill 415 (SB 415), is the inclusion of updated truck routing within the city that limits exposure to sensitive receptors and accesses Surface Transportation Assistance Act of 1982 (STAA) routes efficiently. Four truck routing scenarios were developed, each with varying levels of truck exposure to sensitive receptors and varying traffic efficiency metrics/standards/access. The preferred scenario selected by the City of Ontario is shown in **Figure 3**, reflecting where truck routes would be added and prohibitions would be enacted. **Attachment C** shows the existing truck route map.

This project-level assessment for the Specific Plan evaluates the potential transportation impact associated with the EBPSP land uses. The cumulative "with Project" condition assumes that the improvements implemented as part of the Policy Plan Amendment project, which is being evaluated concurrently with the EBPSP project; and therefore, the revision to housing/zoning (SB 330 and SB 166) and truck routing (AB 98 | SB 415) are included but not considered part of the EBPSP project.

Table 1: Eucalyptus Business Park Specific Plan (Project) Land Use Mix

Land Use Type	Quantity	Unit
Fast-Food Restaurant with Drive-Thru	5	TSF
High-Cube Fulfillment Center (Sort)	635	TSF
Industrial Park	776	TSF
Manufacturing	212	TSF
Park	93	AC
Public Animal Shelter	35	TSF
Retail	5	TSF
Warehousing	1,270	TSF

Source: Eucalyptus Business Park Specific Plan Traffic Study Scoping Agreement, 2025.

Table 2: EBPSP Project Site Buildout

Metric	Current TOP 2050 Buildout for the EBPSP Project Site	EBPSP Buildout	Change
Households	2,107	0	*-2,107*
Residents	6,335	0	*-6,335*
Employment	3,126	1,590	*-1,536*
Service Population	9,461	1,590	*-7,841*

Sources:
1. The Ontario Plan, 2022.
2. Placeworks, 2025.
3. City of Ontario, 2025.

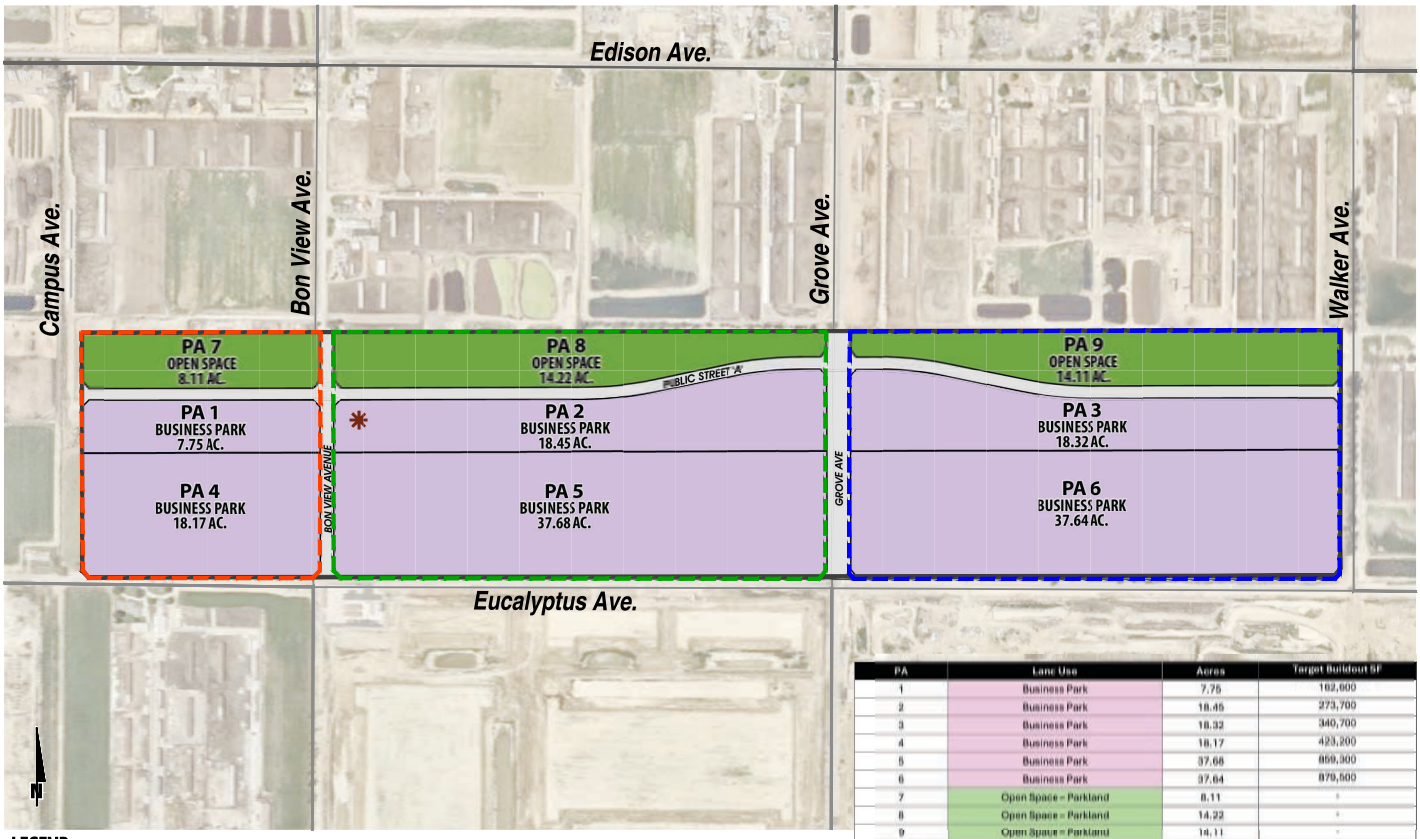
Table 3: Policy Plan Amendment Project Buildout

Metric	Current TOP 2050 Buildout	TOP 2050 Policy Plan Amendment	Change
Households	124,753	131,690	*6,937*
Residents	411,268	427,741	*16,473*
Employment	299,204	301,035	*1,831*
Service Population	710,472	728,776	*18,304*

Sources:
1. The Ontario Plan, 2022.
2. Placeworks, 2025.
3. City of Ontario, 2025.

Figure 1 Site Plan

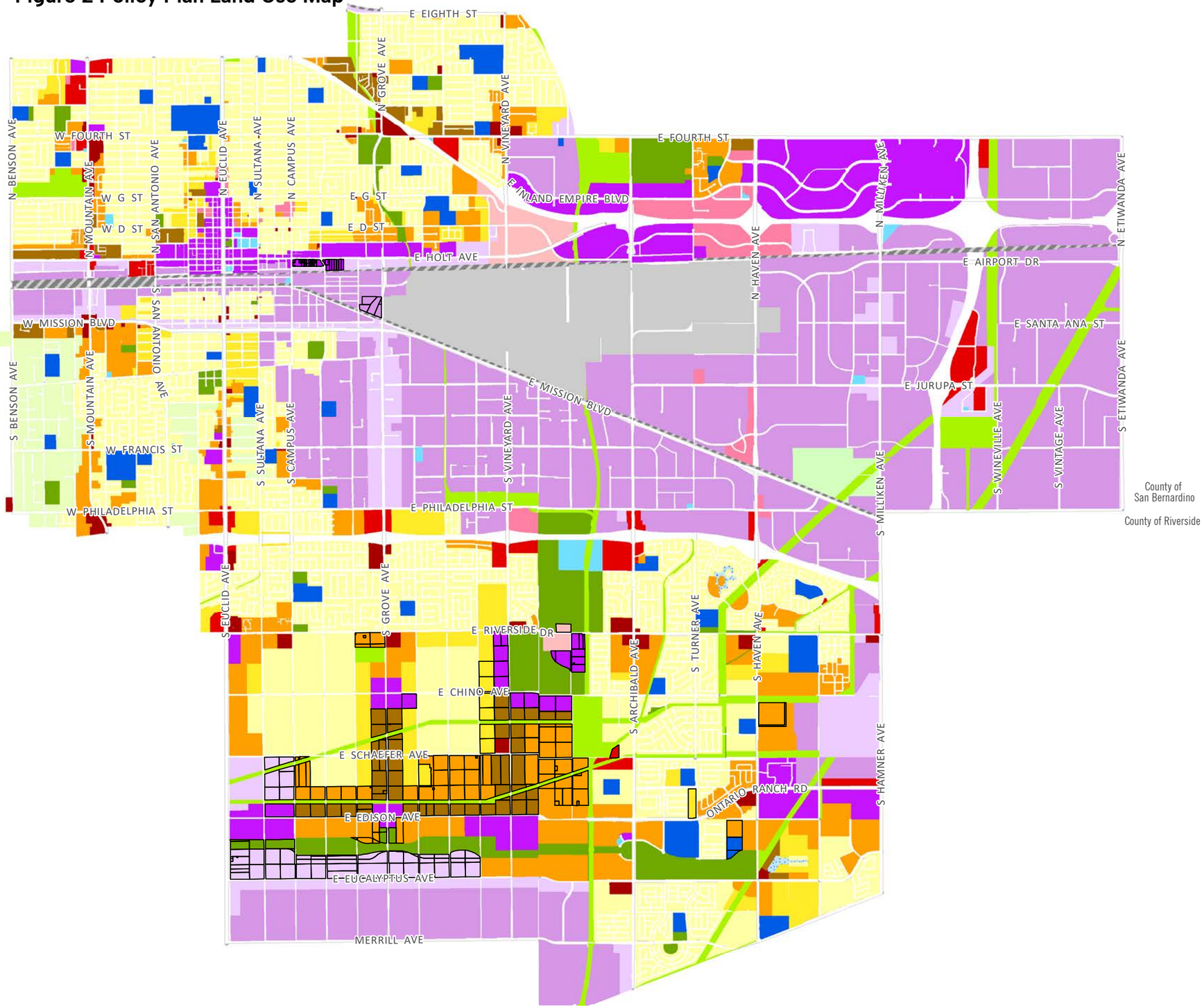
EXHIBIT 1: PRELIMINARY LAND USE PLAN



PA	Land Use	Acres	Target Buildout SF
1	Business Park	7.75	162,800
2	Business Park	18.45	273,700
3	Business Park	18.32	340,700
4	Business Park	18.17	423,200
5	Business Park	37.68	859,300
6	Business Park	37.64	879,500
7	Open Space - Parkland	8.11	-
8	Open Space - Parkland	14.22	-
9	Open Space - Parkland	14.11	-
--	Roadway	14.50	-
	Total	189.0	2,939,000

Notes:
1) A maximum of 10,000 s.f. of Commercial uses may be provided within Business Park planning areas 1, 2, 3, 4, 5, or 6. This square footage is included within the total listed above.
2) A publicly operated animal resource center may be provided within any of the Business Park planning areas. The animal resource center shall not exceed 35,000 s.f.
3) Buildout square footage within the Business Park planning areas is transferable, so long as the maximum FAR of 0.55 is not exceeded for the entire Business Park.
4) Total acreage of 189.0 is rounded up to the nearest one-tenth of an acre.

Figure 2 Policy Plan Land Use Map



LAND USE

DRAFT FIGURE

DRAFT Land Use Plan
9/5/25 (revised v.2)

Areas of Change Prop Land Use Plan (Sept 2025)

Residential
- RR Rural Residential
- LDR Low Density Residential
- LMDR Low Medium Density Residential
- MDR Medium Density Residential
- HDR High Density Residential

Mixed-Use
- MU Mixed Use

Commercial
- NC Neighborhood Commercial
- GC General Commercial
- OC Office Commercial
- HOS Hospitality

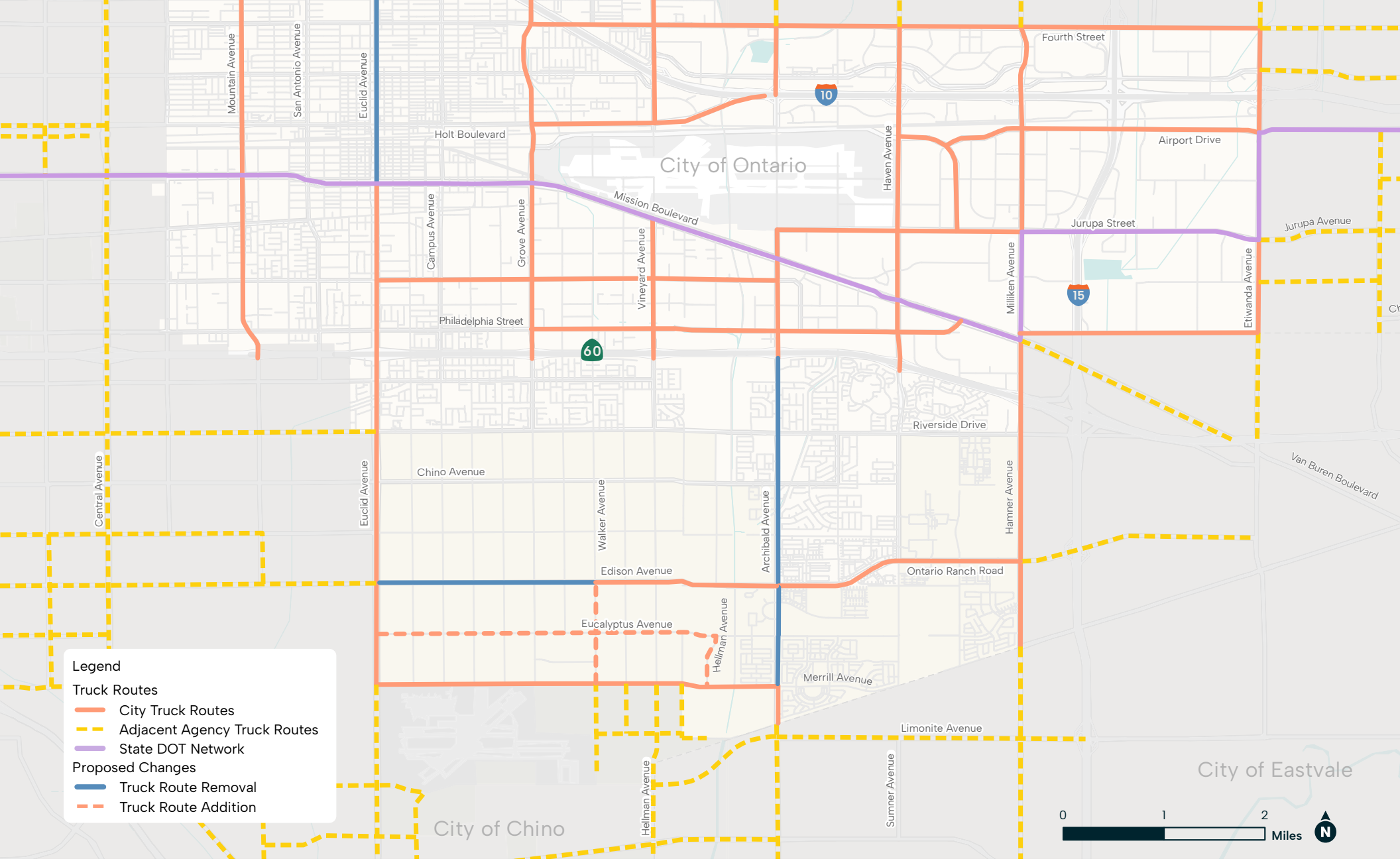
Employment
- BP Business Park
- IND Industrial

Other
- OS-NR Open Space - Non-Rec
- OS-R Open Space - Recreation
- OS-W Open Space - Water
- PF Public Facility
- ROW; ROW-bp
- PS Public School
- ARPT Airport
- LF Landfill
- Rail

2·0·5·0 THE ONTARIO PLAN

0 1,250 2,500 5,000 FT

Source: The City of Ontario September 2025 Date: 9/5/25



Proposed Changes to the TOP 2050 Truck Route Map

Figure 3 Project Truck Route Map

Fehr & Peers

Transportation Impact Analysis

This assessment answers the following four questions from the CEQA Guidelines Appendix G. A project would normally have a significant effect on the environment if the project would:

> T-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
>
> T-2 Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b) regarding policies to reduce vehicle miles travelled (VMT).
>
> T-3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
>
> T-4 Result in inadequate emergency access.

T-1 Assessment

Ontario Goals, Policies, and Actions related to VMT Reduction

Under CEQA, a project's inconsistency with programs, plans, ordinances, or policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities aimed at reducing environmental impacts can itself signal a significant cumulative impact. In this case, the relevant plan is the Ontario Plan Update, which integrates land use and transportation to curb VMT and emissions. The Project is broadly consistent with the spirit of this plan. The EBPSP does not conflict with the City of Ontario's goals and policies. Key goals and policies of the plan related to transportation were reviewed to verify consistency:

- LU 1-1 Strategic Growth. We concentrate growth in strategic locations that help create place and identify, maximize available and planned infrastructure, and foster the development of transit.
- LU 1-2 Sustainable Community Strategy. We integrate state, regional and local Sustainable Community/Smart Growth principles into the development and entitlement process.
- LU 1-4 Mobility. We require development and urban design, where appropriate, that reduces reliance on the automobile and capitalizes on multi-modal transportation opportunities. (Refer to Mobility Element Policy M3-3)
- CD 2-5 Streetscapes. We design new and, when necessary, retrofit existing streets to improve walkability, bicycling, and transit integration, to strengthen connectivity, and enhance community identity through improvements to the public right of way such as sidewalks, street trees, parkways, curbs, street lighting, and street furniture.
- CD 2-6 Connectivity. We promote development of street patterns and pedestrian networks that create and unify neighborhoods, rather than divide them, and create cohesive and continuous corridors, rather than independent "islands" through the following means (Link to Mobility): 1) Local street patterns that provide access between subdivisions, within a neighborhood and discourage through traffic; 2) A local street system that is logical and understandable for the user. A grid system is preferred to avoid circuitous and confusing travel paths between internal neighborhood areas and adjacent arterials; and 3) Neighborhoods, centers, public schools, and parks that are linked by pedestrian greenways/open space networks. These may also be used to establish clear boundaries between distinct neighborhoods and/or centers.

- CD 3-1 Design. We require that pedestrian, vehicular, bicycle, and equestrian circulation on both public and private property be coordinated and designed to maximize safety, comfort, and aesthetics.
- CD 3-2 Connectivity Between Streets, Sidewalks, Walkways, and Plazas. We require landscaping and paving to be used to optimize visual connectivity between streets, sidewalks, walkways, and plazas for pedestrians.
- CD 3-4 Ground Floor Usage of Commercial Buildings. We create lively pedestrian streetscapes by requiring the location of uses, such as shopping, galleries, restaurants, etc., on ground floors adjacent to sidewalks.
- CD 3-7 Transit Stops. We require transit stops be well lit, safe, appealing to, and accessible by pedestrians.
- CE 1-12 Circulation. We continuously plan and improve public transit and non-vehicular circulation for the mobility of all, including those with limited or no access to private automobiles. (Refer to Mobility Public Transit)
- M 1-4 Complete Streets. We work to provide a balanced context sensitive, multimodal transportation network that meets the needs of all users of streets, roads, and highways, including motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods and users of public transportation. We prioritize implementation of complete streets improvements in environmental justice areas to facilitate opportunities for residents to use active transportation systems.
- M 1-6 Reduce Vehicle Miles Traveled. We will strive to reduce VMT through a combination of land use, transportation projects, and travel demand management strategies in coordination with development projects and public capital improvement projects.
- M 2-1 Active Transportation. We maintain our Active Transportation Master Plan to create a comprehensive system of on-and off-street bikeways and pedestrian facilities that is safe, comfortable, accessible, and connect residential areas, businesses, schools, parks, and other key destination points.
- M 2-2 Bicycle System. We provide off-street multipurpose trails and Class II bikeways as our primary paths of travel and use the Class III for connectivity in constrained circumstances. When truck routes and bicycle facilities share a right of way we prefer Class I or Class IV bicycle facilities. We require new development to include bicycle facilities, such as bicycle parking and secure storage areas.
- M 2-3 Pedestrian Walkways. We require streets to include sidewalks and visible crosswalks to promote safe and comfortable mobility between residential areas, businesses, schools, parks, recreation areas, and other key destination points. (Link to Community Design CD3-1)
- M 2-4 Network Opportunities. We use public rights of way and easements such as, utility easements, levees, drainage corridors, road rights-of-way, medians, and other potential options to maintain and expand our bicycle and pedestrian network.
- M 3-1 Transit Partners. We maintain a proactive working partnership with transit providers to ensure that adequate public transit service is available, cost-efficient, and convenient, particularly for residents in environmental justice areas.
- M 3-2 Alternative Transit Facilities at New Development. We require new development adjacent to an existing or planned transit stop to contribute to the creation of transit facilities, such as bus shelters, transit bays and turnouts, and bicycle facilities, such as secure storage areas.
- M 3-3 Transit-Oriented Development. We may provide additional development-related incentives to those inherent in the Land Use Plan for projects that promote transit use and reduce vehicle miles traveled.

- M 3-4 Bus Rapid Transit (BRT) Corridors. We work with regional transit agencies to implement BRT service and reduce vehicle miles traveled by targeting destinations and corridors with the highest number of potential riders.
- M 3-5 Light Rail. We support the extension of the Metro Rail Gold Line to Ontario and will work to secure station locations adjacent to the Meredith site and at the proposed multimodal transit center.
- M 3-6 Metrolink Expansion. We advocate expansion of Metrolink service to include the Downtown and the multimodal transit center.
- M 3-7 High-Speed Rail. We encourage the development of high-speed rail systems that would enhance regional mobility in southern California and serve the City of Ontario.
- M 3-8 Feeder Systems. We work with regional transit agencies to secure convenient feeder service from the Metrolink station and the proposed multimodal transit center to employment centers in Ontario.
- M 3-9 Ontario Airport Metro Center Circulator. We will explore the development of a convenient mobility system, including but not limited to shuttle service, people mover, and shared car system for the Ontario Airport Metro Center.
- M 3-10 Multimodal Transit Center. We intend to ensure the development of a multimodal transit center near ONT airport to serve as a transit hub with amenities for transit riders, pedestrians, and bicyclists transitioning to local buses, BRT, the Gold Line, high-speed rail, the proposed Ontario Airport Metro Center circulator, and other future transit modes. We support locations for the multimodal transportation center that are within the Ontario Airport Metro Center Growth Area.
- M 3-11 Transit and Community Facilities. We require the future development of community-wide serving facilities to be sited in transit-ready areas that can be served and made accessible by public transit. Conversely, we plan (and coordinate with other transit agencies to plan) future transit routes to serve existing community facilities.

While these policies and measures could help reduce VMT in the City, the applicability of these mitigations would be dependent on the significance and context of the impact. Additional analysis would need to be conducted to determine how and where the mitigation measures would need to be implemented to mitigate the impact. As the VMT impact would be citywide, the mitigation measures would be focused on changing or improving the citywide travel patterns, transportation network, or infrastructure. The cost of implementing these measures is unknown and could vary substantially.

General Plan Non-Automotive Consistency

The EBPSP is consistent with all goals and policies outlined in the Mobility Element of The Ontario Plan (TOP); e.g. M2-1 (Active Transportation), M2-2 (Bicycle System), M2-3 (Pedestrian Walkways), M3-1 (Transit Partners, and M3-2 (Alternative Transit Facilities at New Development). The EBPSP will furthermore be in alignment with the City-wide Active Transportation Master Plan, attentive to planned pedestrian and bicycle facilities relative to the Project extents, where in accordance with City design standards those facilities would be built out. There are little to no existing pedestrian and bicycle facilities relative to the Project site, due to the low density and underdeveloped land use currently in the Ontario Ranch area. The Project will not overlap with existing Omnitrans public transit services (since the Ontario Ranch area is largely undeveloped relative to the Project site); the Project would be located adjacent to planned transit services along Euclid Avenue and along Edison Avenue. The Project is consistent with General Plan goals and policies regarding public transit.

T-2 Assessment

The EBPSP may be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) regarding policies to reduce VMT.

VMT Analysis

Per the City's TIA Guidelines, "for purposes of SB 743 compliance, a VMT analysis should be conducted for land use projects as deemed necessary by the Traffic Engineering Department and would apply to projects that have the potential to increase the average VMT per capita/employee compared to the City's threshold. Normalizing VMT per capita/employee provides a transportation efficiency metric that allows the city to compare the project to the remainder of the incorporated area for purposes of identifying transportation impacts."

Project VMT Screening

According to the City's TIA Guidelines, various project types or sizes, or projects that fall within a Transit Priority Area (TPA) or Low VMT Area can be screened from VMT analysis under the presumption that they would result in a less-than-significant transportation impact. Projects that are ineligible for any screening criteria are required to complete a VMT forecasting and analysis through the SBTAM+ travel demand forecasting model to determine if they would result in a significant transportation impact related to VMT.

The City's TIA Guidelines state the following criteria can be applied to effectively screen projects from project-level VMT assessment under the presumption that they would result in a less-than-significant transportation impact:

- Transit Priority Area (TPA) Screening
- Low VMT Area Screening
- Project Type Screening

Fehr & Peers utilized the SBCTA Screening Tool[2] to review the potential for Project screening. The tool provides information related to TPAs and for Low-VMT areas. Based on the SBCTA Screening Tool and City's TIA Guidelines, the Project site is not in TPA nor Low VMT Area.

The following land uses within the EBPSP are eligible for Project Type Screening:

- Local-serving retail less than 50,000 square feet (SF)
- Local parks

However, since the industrial park, manufacturing, warehousing, high-cube fulfillment center (sort), animal shelter, and fast-food restaurant components of the EBPSP are too large to be screened for Project Type Screening, the full Project is not eligible for screening. Therefore, the VMT modeling and forecasting assessment below was completed to determine the Project effect on VMT.

[2] SBCTA Screening Tool

Terminology

The following are definitions for terms used throughout this document:

- **Vehicles Miles Traveled (VMT).** VMT measures the number of trips and the lengths of those trips for the total number of miles that vehicles will travel on a roadway system. It is used to assess transportation impacts on greenhouse gas emissions, air quality, and energy. The number of miles of vehicle travel represents the amount of motor vehicles on the roadway system.
- **Total (Daily/Weekday) VMT.** Total VMT represents all VMT generated by a project or in a defined area, such as a Traffic Analysis Zone (TAZ) or City boundary, on a typical weekday.
- **Service Population.** Service population (SP) counts residents and employees. VMT/SP measures the transportation "efficiency" of a project or plan and is defined as VMT generated on a typical weekday per person who lives and/or works in a designated area.
- **Home-Based-Work (HBW) VMT**. HBW VMT is employee VMT attracted by workplaces, also referred to as commute VMT.
- **Origin-Destination (OD) VMT Method.** The OD method for calculating VMT sums all VMT generated by trips with at least one trip end in the study area and tracks those trips from their estimated origins to their estimated destinations. Origins are all vehicle trips that start in a defined area, and destinations are all vehicle trips that end in that defined area. The OD method accounts for special generator trips and truck trips and provides a complete estimate of all VMT within the study area and includes internal-external model VMT. The OD method is estimated following the modeling traffic assignment step and aggregates all trip types and VMT as a single metric. The assessment below compares the Citywide OD VMT/SP between the with and without project land use and policy changes to assess potential project-level VMT impacts.
- **Production-Attraction (PA) VMT Method.** The PA method for calculating VMT sums all weekday VMT generated by trips with at least one trip end in the study area by trip purpose. The PA method tracks these trips to/from their ultimate destination unless that destination is outside of the model boundary area. Productions are land use types that generate trips (residences) and attractions are land use types that attract trips (employment). Productions and attractions are converted from person trips to vehicle trips for the purposes of calculating VMT. The assessment below presents HB VMT and HBW VMT using the PA Method for informational purposes only.
- **Boundary VMT Method.** The boundary method for calculating VMT sums all VMT on a roadway network within a designated boundary. Boundary method VMT estimates VMT by multiplying the number of trips on each roadway segment by the length of that segment. This approach includes all trips, including those trips that do not begin or end in the designated boundary and therefore captures the effect of cut-through and/or displaced traffic. The boundary utilized in the assessment below is the Ontario City Limits Boundary. The assessment below compares Citywide Boundary VMT with and without the Project to assess potential effect on VMT impacts.

City of Ontario Thresholds of Significance

The City's TIA Guidelines identify Transportation Impact Thresholds related to VMT to be assessed for Land Use Plans (such as General Plans and Specific Plans), shown in **Table 4**.

Table 4: City of Ontario VMT Impact Thresholds

Methods	Project Threshold	Cumulative Threshold
VMT analysis using SBTAM+ forecast of total daily VMT/SP.	A significant impact would occur if the project VMT/SP exceeds the Citywide average for Service Population under General Plan Buildout Conditions.	A significant impact would occur if the project causes total daily VMT within the City to be higher than the no project alternative under cumulative conditions. This analysis should be performed using the 'project effect' or 'boundary' method.
Consistency check with SCAG RTP/SCS. Is the proposed project within the growth projections in the RTP/SCS?	NA	A significant impact would occur if the project is determined to be inconsistent with the RTP/SCS.

Source: City of Ontario's adopted VMT Impact Analysis Resolution (No. 2020-071).

Therefore, the following three thresholds were evaluated in this VMT assessment:

1. **Project Threshold**: A significant impact would occur if the project VMT/SP exceeds the Citywide average for Service Population under the current TOP Buildout Conditions.
2. **Cumulative Threshold**: A significant impact would occur if the project caused total daily VMT within the City to be higher than the no project alternative under cumulative conditions.
3. **Consistency check with SCAG RTP/SCS**. A significant impact would occur if the project is determined to be inconsistent with the RTP/ SCS.
    a. This is reviewed in the T-1 Assessment.

Traffic Modeling and VMT Forecasting Methodology

The traffic modeling and forecasting was performed following the City's TIA Guidelines. The San Bernardino Traffic Analysis Model (SBTAM+) was utilized to estimate VMT for the analysis scenarios.

SBTAM+ began as the Southern California Association of Governments (SCAG) regional travel demand forecasting model and underwent a subarea model development to add detail and refinement within San Bernardino County. The SBTAM+ roadway network and socio-economic data within the City of Ontario were updated to be consistent with The Ontario Plan (TOP), for the horizon year 2050. Outside of the City of Ontario, this model assumes datasets consistent with the 2024 SCAG Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) with a base year of 2019 and future year of 2050.

PROJECT SOCIO-ECONOMIC ASSUMPTIONS

The EBPSP site spans the southern half of two separate TAZs (53653201 and 53669101). **Table 5** below summarizes the SBTAM Socio-Economic Data (SED) inputs that represent the Project. The Project SED was isolated into one TAZ (53653201) to ensure the overlapping residential-based uses (isolated into the other TAZ [53669101]) would not influence the Project-level VMT assessments.

Furthermore, the Policy Plan Amendment land use changes were also coded in the model to represent With Project conditions. **Table 3** summarizes the SBTAM+ Socio-Economic Data (SED) inputs (i.e. total change in forecasted households, residents, and employment) that represent the No

Project and With Project conditions. Projections for households, residents and employment estimates were prepared by Placeworks and the City of Ontario.

Table 5: Project SED Input Assumptions

Input	Value
Single Family Households	0
Multi-Family Households	0
Total Households	***0***
Agriculture & Mining Employment	17
Construction Employment	109
Manufacturing Employment	75
Wholesale Trade Employment	122
Retail Employment	8
Transportation, Warehousing, and Utility Employment	1,250
Public Administration Employment	8
Total Employment	***1,590***
Total K-12 Students	***0***

Fehr & Peers, 2025. Placeworks, 2025.

TRUCK FORECASTING AND MODEL POST-PROCESSING

While SBTAM+ is identified as the preferred tool to forecast VMT for transportation impact analyses, there are some limitations of the model that were accounted for following the model runs to improve accuracy and best reflect the Project description. Specifically, the truck model within SBTAM+ was overwritten to best reflect the detailed truck trip generation, distribution and assignment forecast that was prepared as part of the *Eucalyptus Business Park Specific Plan Traffic Study Scoping Agreement* (2025), which was determined as the most appropriate representation of the Eucalyptus Business Park.

In addition to the truck assignment, Project truck VMT from SBTAM+ was reviewed to ensure that truck trip lengths accurately reflect the heavy vehicle distribution origins and destinations. Project truck trip lengths estimated in SBTAM+ were compared against statewide averages and were found to be underrepresenting truck VMT. Therefore, truck trip lengths were overwritten with City average truck trip length data extracted from the California Statewide Freight model to best estimate truck VMT, shown in **Table 6**.

Table 6: Project Truck Trip and Trip Length Inputs

Metric	Value
Truck Trips	1,430
2-Axle Truck Trips	238
3-Axle Truck Trips	298
4+ Axle Truck Trips	894
Light-Heavy Truck Trip Length (miles)	22.60
Medium-Heavy Truck Trip Length (miles)	56.06
Heavy-Heavy Truck Trip Length (miles)	67.77

Sources:
1. Eucalyptus Business Park Specific Plan Traffic Study Scoping Agreement, 2025.
2. State of California Freight Model, 2025.

As the EBPSP truck assignment was applied during post-processing, so was the accounting of the new truck routes proposed as part of the EBPSP. The net change in VMT was adjusted for trucks and autos between the future year no project truck routes and future year plus project truck routes. Since the latter prohibits trucks from operating along segments (i.e. Archibald Avenue between Merrill Avenue and SR-60, and Edison Avenue between Euclid Avenue and Walker Avenue) trucks were rerouted, adding mileage to their journey. To calculate the net truck VMT increase, the total net increase in truck trips was multiplied by the average route net mileage increase for each route that would be impacted by the truck route prohibition. The auto backfill effect was calculated assuming one truck represents three Passenger Car Equivalents (PCE) at a 50% elasticity (for every truck that is removed / re-routed, 1.5 cars are backfilled into the trucks place based on the reduction in congestion). Thus, auto trips would backfill onto more direct routes, now not allowable to trucks. This relationship in backfill is similar to what is observed in SBTAM+ model runs with varying capacity. These modifications were applied during post-processing off-model, calculations are provided in Appendix D; reasonable variation in these assumptions does not change the conclusion that the City's thresholds are exceeded.

VMT Forecasts

OD, PA, and Boundary VMT forecasts for the No Project and With Project conditions are presented in **Table 7** for use in the transportation impact assessment. Baseline Project (year 2025) VMT was estimated by interpolating between VMT forecasted between the SBTAM+ base year model (year 2019) and future year model (year 2050).

As shown, with the increase in transportation/logistics related employment and truck usage, VMT is projected to increase across OD VMT per SP and Boundary VMT metrics. Data is presented below for Home-Based-Work (HBW) VMT, OD Truck VMT, Auto VMT, Total OD VMT, and Boundary VMT. Project level and Cumulative Level impact thresholds were then applied to appropriate metrics to understand the Project effect on VMT.

Table 7: Project-Level VMT Summary

Project (Eucalyptus Business Park)	Citywide Future Year No Project (Threshold)	Baseline Year Plus Project (2025)	Future Year Plus Project (2050)
HBW VMT A	6,551,999	34,606	32,603
HBW VMT/Emp	21.90	21.77	20.51
OD Truck VMT	3,167,974	82,670	82,670
OD Auto VMT	24,358,324	51,552	49,895
OD VMT (Truck + Auto)	27,526,298	134,223	132,565
Service Population[3]	710,472	396,564	728,776
OD VMT / SP	38.74	**84.43**	**83.39**
Boundary VMT	11,416,710	8,686,543	**11,758,292**
Boundary VMT / SP	16.07	**21.90**	**16.13**

Sources:
1. Fehr & Peers, 2025. Values in **BOLD** denote an impact.
2. SBTAM+, 2025.
3. OD VMT / SP for the Baseline Year Plus Project and Future Year Plus Project used the SP from Table 2 (1,590); while the Boundary VMT / SP used the Citywide SP (shown in the table).

PROJECT THRESHOLD

Table 8 shows the results of the project assessment. A significant impact would occur if the EBPSP VMT/SP (for the land use plan) exceeds the Citywide average for Service Population under General Plan Buildout Conditions; the project increases OD VMT/SP.

Table 8: Project Threshold Assessment

Metric	Citywide Future Year No Project (Threshold)	Base Year Plus Project (2025)	Future Year Plus Project (2050)
OD VMT / SP	*38.74*	**84.43**	**83.39**
Project exceeds threshold?		**Yes**	**Yes**

Fehr & Peers, 2025. Values in **BOLD** denote VMT exceeds threshold.

CUMULATIVE THRESHOLD

Table 9 shows the results of the cumulative assessment. A significant impact would occur if the EBPSP caused total daily VMT within the City to be higher than the no project alternative under cumulative conditions; the total daily Citywide boundary VMT increases with the EBPSP.

Table 9: Cumulative Project Assessment

Metric	Citywide Future Year No Project (Threshold)	Base Year Plus Project (2025)	Future Year Plus Project (2050)
Boundary VMT	*11,416,710*	8,686,543	**11,758,292**
	Project exceeds threshold?	No	**Yes**
Boundary VMT / SP	*16.07*	**21.90**	**16.13**
	Project exceeds threshold?	**Yes**	**Yes**

Fehr & Peers, 2025. Values in **BOLD** denote VMT exceeds threshold.

T-3 Assessment

The City of Ontario has adopted engineering standards to ensure consistency in the geometric design of their mobility facilities. All plans undergo an extensive review process at the City to ensure consistency with these adopted standards. The EBPSP would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Given that all future projects will be subject to these reviews, the EBPSP would be consistent with the City design standards.

T-4 Assessment

The City of Ontario has adopted standards related to emergency accessibility. Additionally, the fire department reviews all development applications to ensure that adequate emergency accessibility is provided based on local and state guidance. Since all future projects will undergo such reviews and requirements, the EBPSP would not result in inadequate emergency access.

Conclusion

The proposed EBPSP would increase City resident, employee, and truck travel. Per the City's guidelines, the EBPSP would increase Project-Level VMT and Cumulative VMT above City thresholds. It was found that the EBPSP would, in concept, support Connect SoCal 2024's goals. Even with the additional goals, policies and actions related to VMT reduction identified as part of the Policy Plan Amendment Project, which are not reflected in the traffic modeling, the EBPSP is not anticipated to reduce the impact of increased total VMT.

Attachment A – Eucalyptus Business Park Specific Plan Traffic Study Scoping Agreement (2025)

TECHNICAL MEMORANDUM

APPROVED

DATE: October 8, 2025
TO: Rafael Torres, City of Ontario
FROM: Jared Brawner, Urban Crossroads, Inc.
Charlene So, Urban Crossroads, Inc.
JOB NO: 16285-07 TA Scope

SUBJECT: EUCALYPTUS BUSINESS PARK SPECIFIC PLAN TRAFFIC STUDY SCOPING AGREEMENT

Urban Crossroads, Inc. has prepared the following Traffic Study Scoping Agreement for the Eucalyptus Business Park Specific Plan (Project), which is located south of Edison Avenue, west of Walker Avenue, east of Campus Avenue and north of Eucalyptus Avenue in the City of Ontario. This letter describes the proposed Project trip generation, trip distribution, and analysis methodology, which have been used to establish the draft proposed Project study area and analysis locations. The proposed analysis methodology and assumptions are in accordance with the County of San Bernardino's Transportation Impact Study Guidelines (dated July 9, 2019) (County Guidelines) and the San Bernardino County Transportation Authority (SBCTA) Guidelines (SBCTA Guidelines) as the City does not have their own guidelines.

PROJECT DESCRIPTION

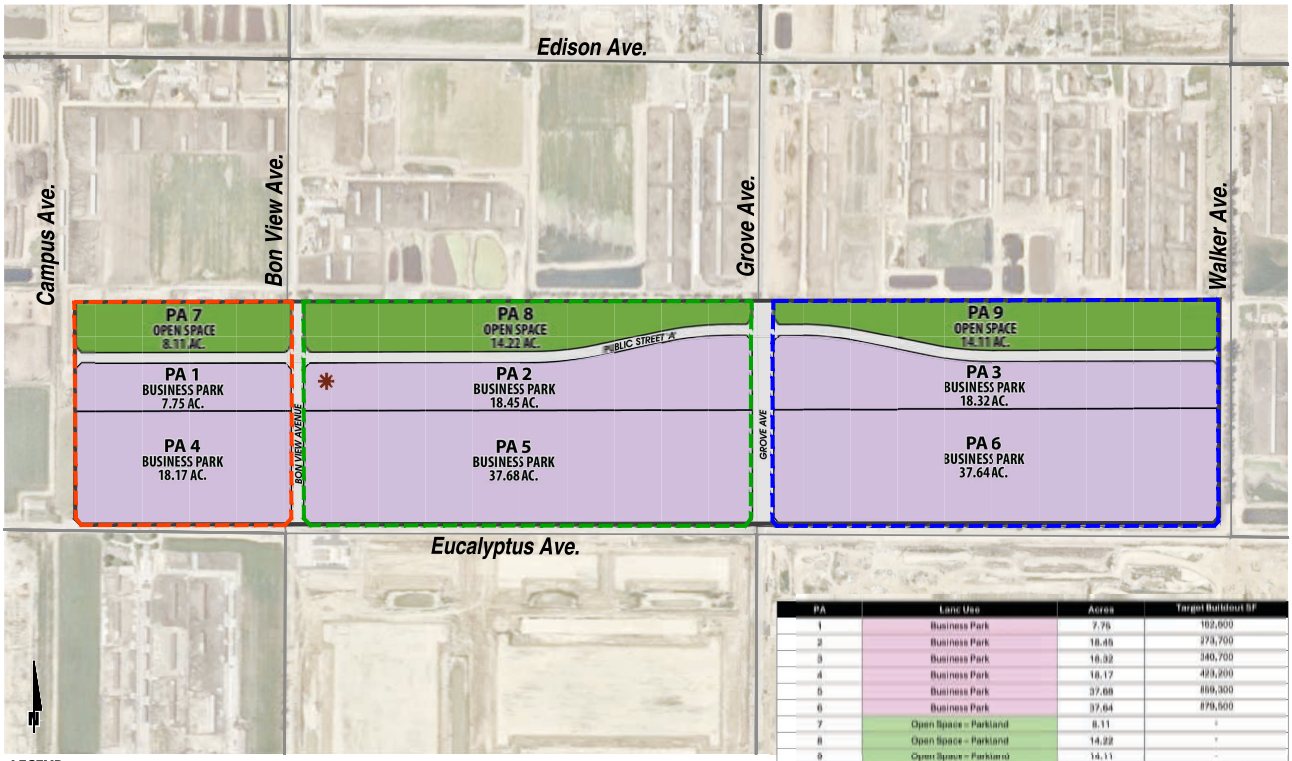
Exhibit 1 shows the preliminary land use plan. It is our understanding that the Project is to consist of a business park with some mixed-use retail, a public animal shelter, and park use on approximately 189.0 acres and a total building footprint of 2,939,000 square feet (SF).

The Project is proposing to develop in three phases. Phase 1 is located east of Grove Avenue, Phase 2 is located between Bon View Avenue and Grove Avenue, and Phase 3 is located west of Bon View Avenue. For the purposes of the traffic study, the mix of uses by Phase and each Phase's respective opening year is summarized in Table 1. The assumed mix of uses represents a conservative and reasonable estimate based on the applicant's current expectations for future tenants.

It should be noted that the Center Park Specific Plan (CPSP), located north of the Project site, proposes approximately 56.14 acres of open space adjacent to the Project's 36.44 acres of open space, which is shown in Exhibit 1. Although the CPSP open space is not part of the Project, the full 92.58 acres of open space has been included in Table 1 for the purposes of this traffic study.

Access to the proposed Project would be provided to the surrounding roadways of Campus Avenue, Eucalyptus Avenue, Bon View Avenue, Grove Avenue, and Walker Avenue.

EXHIBIT 1: PRELIMINARY LAND USE PLAN



PA	Land Use	Acres	Target Buildout SF
1	Business Park	7.75	102,900
2	Business Park	18.45	273,700
3	Business Park	18.32	340,700
4	Business Park	18.17	423,200
5	Business Park	37.68	859,300
6	Business Park	37.64	879,500
7	Open Space – Parkland	8.11	-
8	Open Space – Parkland	14.22	-
9	Open Space – Parkland	14.11	-
--	Roadway	14.50	-
	Total	189.0	2,939,000

Notes:
1) A maximum of 10,000 s.f. of Commercial uses may be provided within Business Park planning areas 1, 2, 3, 4, 5, or 6. This square footage is included within the total listed above.
2) A publicly operated animal resource center may be provided within any of the Business Park planning areas. The animal resource center shall not exceed 35,000 s.f.
3) Buildout square footage within the Business Park planning areas is transferable, so long as the maximum FAR of 0.55 is not exceeded for the entire Business Park.
4) Total acreage of 189.0 is rounded up to the nearest one-tenth of an acre.

TABLE 1: LAND USE SUMMARY

Phase	Opening Year	Land Use	Quantity	Unit[1]
1	2028	Industrial Park	340.700	TSF
		Warehousing	553.300	TSF
		High-Cube Fulfillment Center (Sort)	326.200	TSF
		Park	33.8	AC
2	2029	Industrial Park	273.700	TSF
		Warehousing	553.300	TSF
		High-Cube Fulfillment Center (Sort)	261.000	TSF
		Retail	5.000	TSF
		Fast-Food Restaurant With Drive-Thru	5.000	TSF
		Public Animal Shelter	35.000	TSF
		Park	37.7	AC
3	2031	Industrial Park	162.600	TSF
		Manufacturing	211.700	TSF
		Warehousing	163.600	TSF
		High-Cube Fulfillment Center (Sort)	47.900	TSF
		Park	21.0	AC

[1] AC = Acres; TSF = Thousand Square Feet

TRIP GENERATION

Trip generation represents the amount of traffic, which is both attracted to, and produced by, a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development. The proposed Project trip generation will be based upon information collected by the Institute of Transportation Engineers (ITE) as provided in their latest Trip Generation Manual (12th Edition, 2025) for the proposed uses. Table 2 and 3 summarize the ITE trip generation rates in actual vehicles and in PCE, respectively.

Internal capture is a percentage reduction that can be applied to the trip generation estimates for individual land uses to account for trips internal to the site (trips that travel between uses without leaving the site). In other words, trips may be made between the retail, restaurant, and office uses proposed on-site which can be made either by walking or using internal roadways without using external streets. The internal capture is based on the National Cooperative Highway Research Program's (NCHRP Report 684) internal capture trip capture estimation tool. These internal capture worksheets are attached to this scoping agreement (see Appendix 1).

Based on the anticipated location of the restaurant and retail uses within the Project site, the internal capture associated between these uses are expected to not add traffic to any study area intersections. However, the internal capture reductions between these uses and the industrial uses are anticipated to utilize study area intersections and adjacent streets. As such, these trips are to be applied back to the appropriate locations.

Pass-by trip reductions have been applied to the proposed Project uses consistent with the allowable values per the ITE Trip Generation Manual (12th Edition, 2025). Pass-by trips represent traffic that is already on the roadway today that would make an intermediate stop at the site before continuing on to their ultimate destination.

TABLE 2: TRIP GENERATION RATES (ACTUAL VEHICLES)

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Industrial Park[3]	TSF	130	0.169	0.051	0.220	0.064	0.166	0.230	2.680
Passenger Cars			0.156	0.034	0.190	0.053	0.147	0.200	2.200
2-Axle Trucks			0.002	0.003	0.005	0.002	0.003	0.005	0.080
3-Axle Trucks			0.003	0.003	0.006	0.002	0.004	0.006	0.099
4+-Axle Trucks			0.008	0.010	0.019	0.007	0.012	0.019	0.300
Manufacturing[3]	TSF	140	0.383	0.128	0.510	0.183	0.447	0.630	4.270
Passenger Cars			0.366	0.115	0.480	0.175	0.436	0.610	3.700
2-Axle Trucks			0.003	0.002	0.005	0.001	0.002	0.003	0.095
3-Axle Trucks			0.003	0.003	0.006	0.002	0.002	0.004	0.118
4+-Axle Trucks			0.011	0.008	0.019	0.005	0.007	0.013	0.357
Warehousing[3]	TSF	150	0.092	0.028	0.120	0.042	0.108	0.150	1.380
Passenger Cars			0.081	0.019	0.100	0.031	0.099	0.130	0.950
2-Axle Trucks			0.002	0.001	0.003	0.002	0.001	0.003	0.072
3-Axle Trucks			0.002	0.002	0.004	0.002	0.002	0.004	0.089
4+-Axle Trucks			0.007	0.006	0.013	0.007	0.006	0.013	0.269
High-Cube Fulfillment Center (Sort)[3]	TSF	155	0.340	0.080	0.420	0.252	0.348	0.600	4.830
Passenger Cars			0.335	0.075	0.410	0.242	0.338	0.580	4.570
2-Axle Trucks			0.001	0.001	0.002	0.002	0.001	0.003	0.043
3-Axle Trucks			0.001	0.001	0.002	0.002	0.002	0.004	0.054
4+-Axle Trucks			0.003	0.003	0.006	0.006	0.007	0.013	0.163
Public Park	Acres	411	0.03	0.02	0.05	0.09	0.06	0.15	0.78
Animal Hospital/Veterinary Clinic	TSF	640	2.44	1.20	3.64	1.41	2.12	3.53	21.50
Strip Retail Plaza (<40,000 SF)	TSF	822	2.16	1.77	3.93	3.15	3.14	6.29	54.45
Fast-Food Restaurant With Drive-Thru	TSF	934	16.95	16.29	33.24	16.43	15.17	31.60	448.12

[1] Trip Generation & Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 12th Edition (2025).

[2] TSF = thousand square feet

[3] Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

TABLE 3: TRIP GENERATION RATES (PCE)

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Industrial Park[3] (PCE)	TSF	130	0.190	0.076	0.266	0.082	0.195	0.277	3.420
Passenger Cars			0.156	0.034	0.190	0.053	0.147	0.200	2.200
2-Axle Trucks (PCE = 1.5)			0.003	0.004	0.007	0.003	0.005	0.008	0.120
3-Axle Trucks (PCE = 2.0)			0.006	0.007	0.013	0.005	0.008	0.013	0.199
4+-Axle Trucks (PCE = 3.0)			0.025	0.031	0.056	0.021	0.035	0.056	0.901
Manufacturing[3] (PCE)	TSF	140	0.410	0.147	0.556	0.195	0.466	0.660	5.149
Passenger Cars			0.366	0.115	0.480	0.175	0.436	0.610	3.700
2-Axle Trucks (PCE = 1.5)			0.005	0.003	0.008	0.002	0.003	0.005	0.143
3-Axle Trucks (PCE = 2.0)			0.006	0.006	0.012	0.003	0.005	0.008	0.236
4+-Axle Trucks (PCE = 3.0)			0.033	0.023	0.056	0.015	0.022	0.037	1.070
Warehousing[3] (PCE)	TSF	150	0.109	0.042	0.151	0.059	0.122	0.181	2.044
Passenger Cars			0.081	0.019	0.100	0.031	0.099	0.130	0.950
2-Axle Trucks (PCE = 1.5)			0.003	0.002	0.005	0.003	0.002	0.005	0.108
3-Axle Trucks (PCE = 2.0)			0.004	0.004	0.008	0.004	0.004	0.008	0.178
4+-Axle Trucks (PCE = 3.0)			0.021	0.017	0.038	0.021	0.017	0.038	0.808
High-Cube Fulfillment Center (Sort)[3] (PCE)	TSF	155	0.348	0.088	0.436	0.267	0.364	0.631	5.231
Passenger Cars			0.335	0.075	0.410	0.242	0.338	0.580	4.570
2-Axle Trucks (PCE = 1.5)			0.002	0.001	0.003	0.003	0.002	0.005	0.065
3-Axle Trucks (PCE = 2.0)			0.002	0.002	0.004	0.004	0.004	0.008	0.108
4+-Axle Trucks (PCE = 3.0)			0.009	0.010	0.019	0.018	0.020	0.038	0.488

[1] Trip Generation & Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 12th Edition (2025).

[2] TSF = thousand square feet

[3] Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

As shown in Table 4, the proposed Project is anticipated to generate a net total of 9,580 two-way trips per day with 847 AM peak hour trips and 1,093 PM peak hour trips at Project Buildout (in actual vehicles). Detailed trip generation calculations, in actual vehicles, are provided in Appendix 2.

Passenger car equivalent (PCE) factors were applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). PCEs allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. The PCE factors are consistent with the recommended PCE factors in the County's Guidelines.

Intersection operations analysis for a truck-intensive project would be required to utilize the PCE trip generation consistent with the County's Guidelines. As shown in Table 4, the proposed Project is anticipated to generate 11,458 two-way PCE trips per day with 945 PCE AM peak hour trips and 1,198 PCE PM peak hour trips at Project Buildout. Detailed trip generation calculations, in PCE, are provided in Appendix 3.

TABLE 4: TRIP GENERATION SUMMARY

Project Phase	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
Phase 1 (Actual):	220	59	279	131	231	362	3,284
Phase 1+2 (Actual):	506	160	666	333	538	871	7,776
Buildout (Phase 1+2+3) (Actual):	**643**	**204**	**847**	**399**	**694**	**1,093**	**9,580**
Phase 1 (PCE):	241	77	318	151	255	406	4,036
Phase 1+2 (PCE):	546	194	740	370	581	951	9,204
Buildout (Phase 1+2+3) (PCE):	**696**	**249**	**945**	**448**	**750**	**1,198**	**11,458**

TRIP DISTRIBUTION

The Project trip distribution represents the directional orientation of traffic to and from the Project site. Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. In addition, truck routes will be taken into consideration in the development of the trip distribution patterns for heavy trucks. 2024 GeoTab data has been used to support the Project truck trip distribution patterns. 2024 Streetlight data for auto trips has been utilized to support the Passenger Car trip distribution patterns.

Truck routes throughout the City of Ontario are anticipated to change as part of the City's General Plan Amendment (GPA). The City's currently adopted Truck Routes are shown in Exhibit 2. The City's GPA proposes to change the truck routes by removing the segments of Edison Avenue between Euclid Avenue (SR-83) and Walker Avenue as well as Archibald Avenue from the SR-60 Freeway to Merrill Avenue. However, new segments of Eucalyptus Avenue between Euclid Avenue (SR-83) and Hellman Avenue, Hellman Avenue from Eucalyptus Avenue to Merrill Avenue, and Walker Avenue from Edison Avenue to Merrill Avenue would be added to the City Truck Routes. These proposed changes are reflected in Exhibit 3. Exhibit 4 shows the Project truck trip distribution patterns based on the proposed GPA City Truck Routes.

EXHIBIT 2: CURRENTLY ADOPTED CITY TRUCK ROUTES

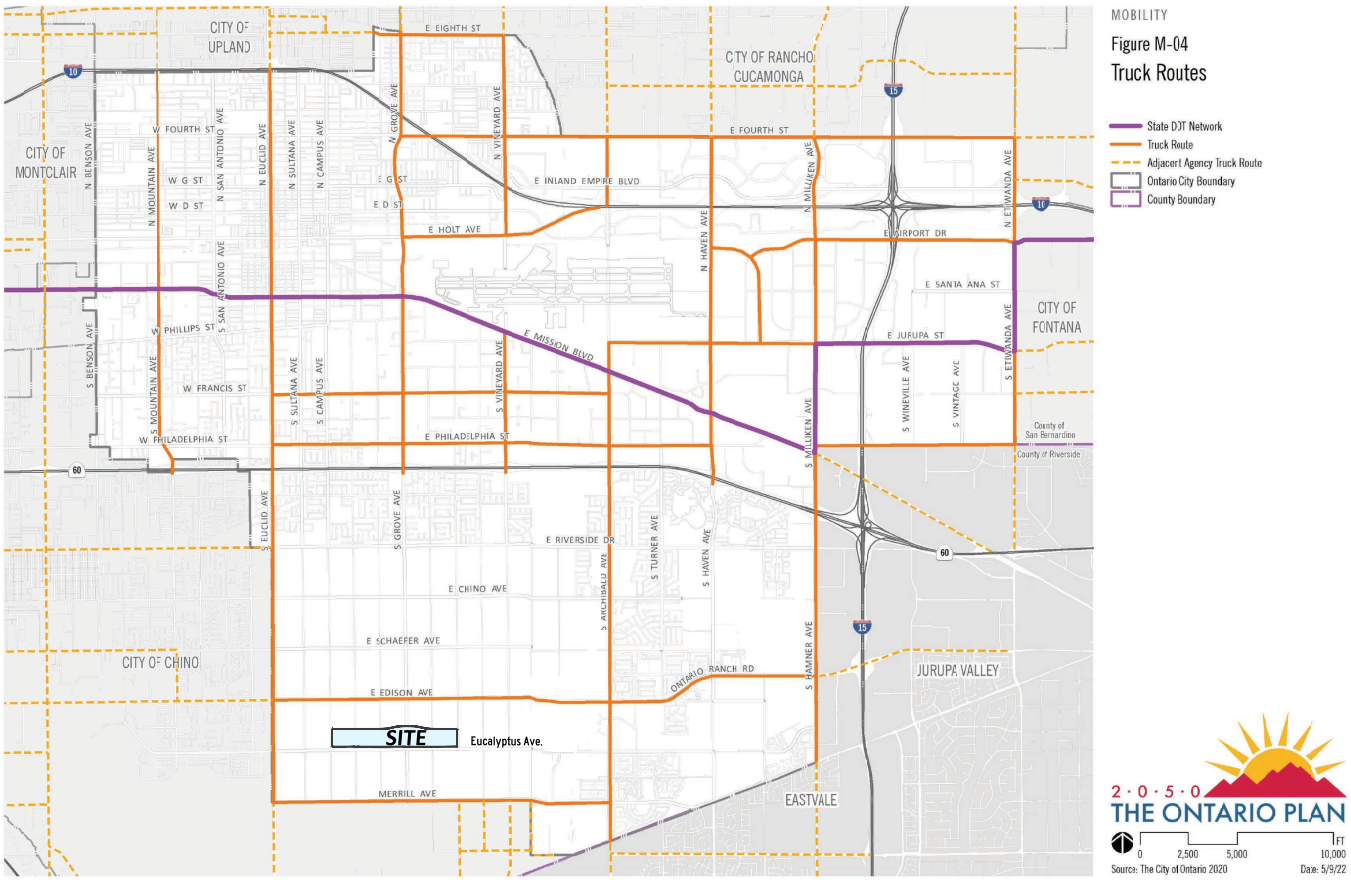


EXHIBIT 3: PROPOSED CITY TRUCK ROUTES

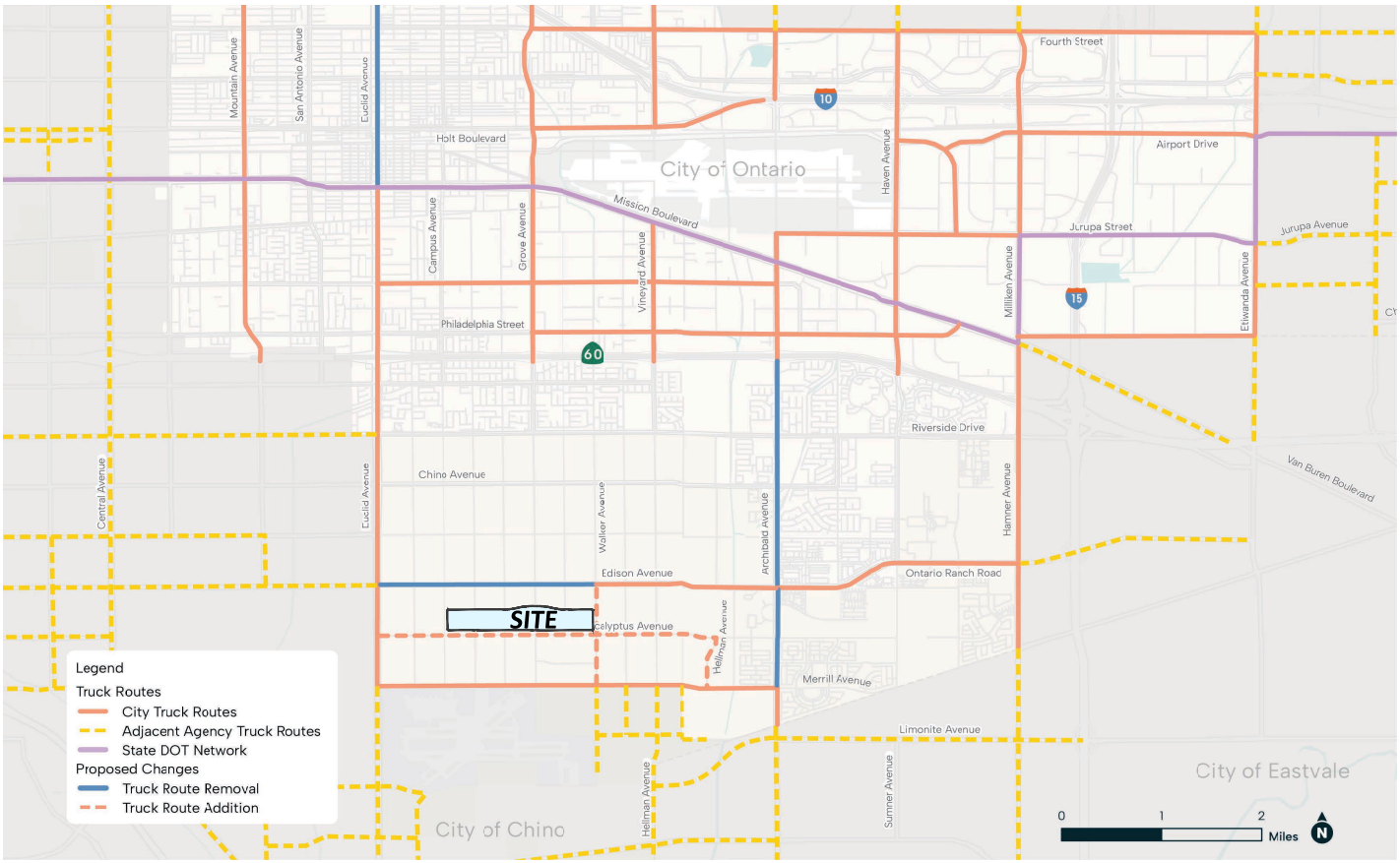
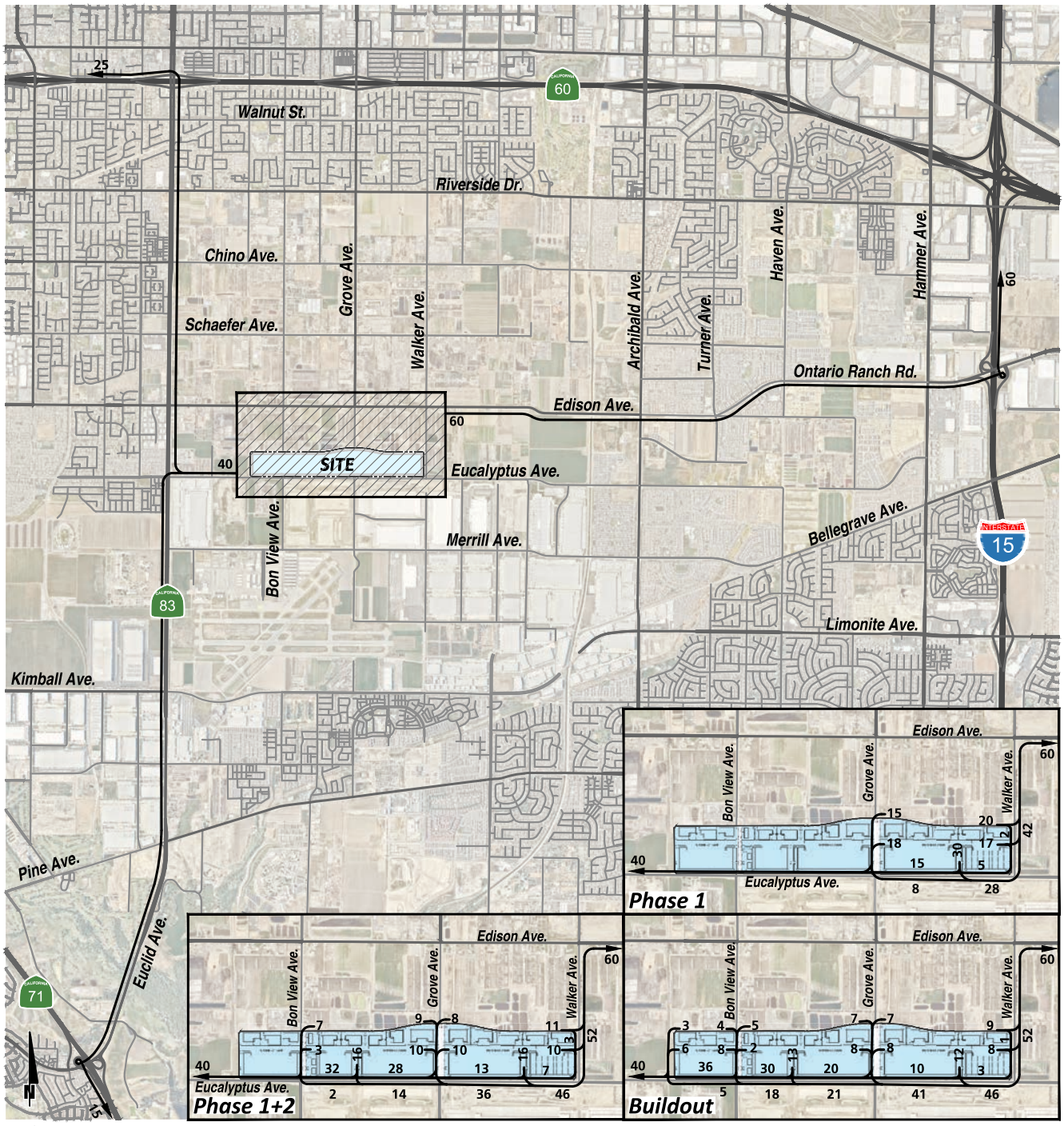


EXHIBIT 4: PROJECT (INDUSTRIAL TRUCKS) TRIP DISTRIBUTION



The Project's industrial and commercial retail passenger car trip distributions are shown in Exhibits 5 and 6, respectively. Lastly, the internal capture distribution, illustrating trips between the industrial and commercial retail uses, is shown in Exhibit 7.

PROPOSED ANALYSIS SCENARIOS

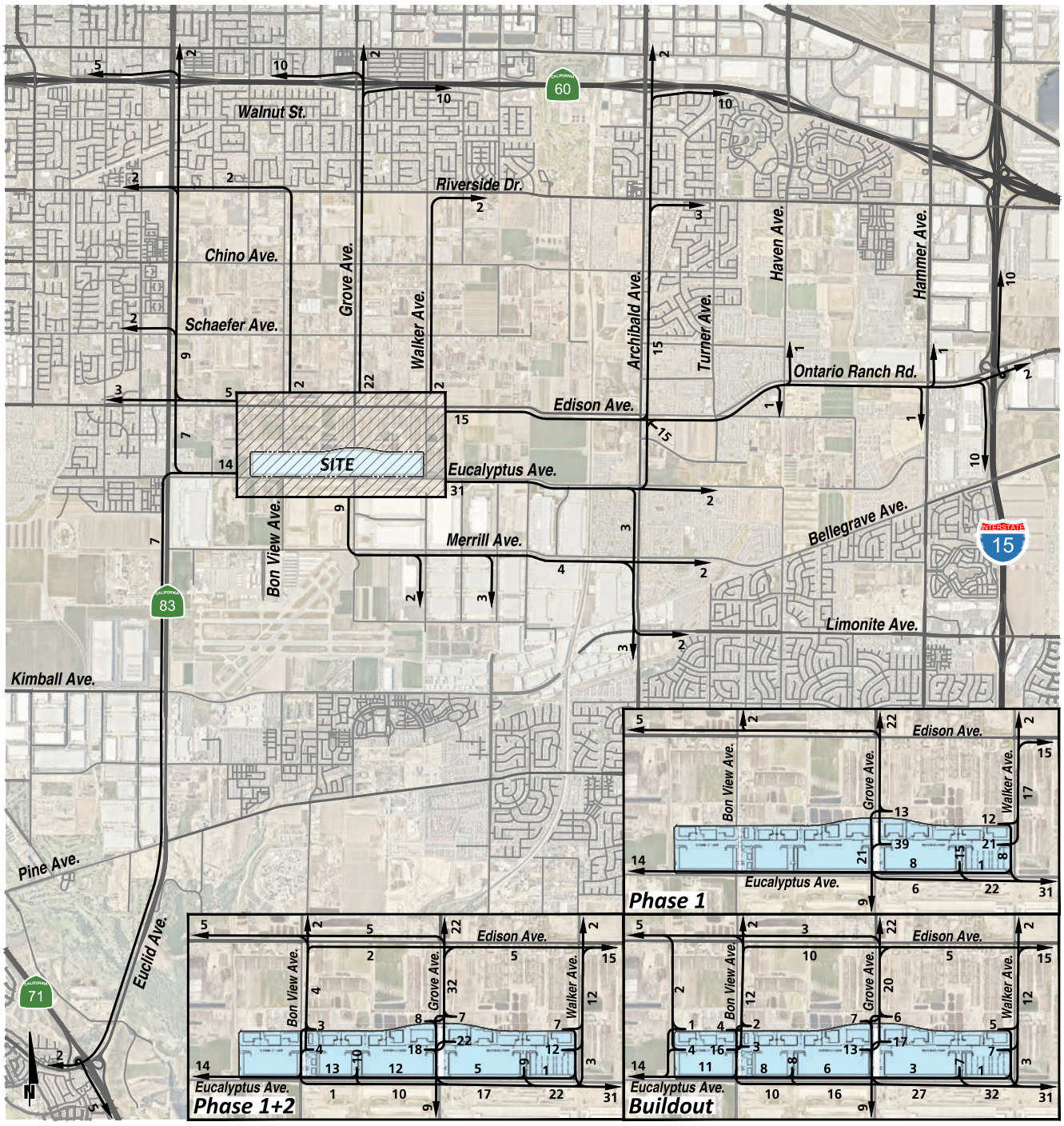
The following analysis scenarios are proposed to be evaluated in the Traffic Study:

- Existing (2025) – Baseline traffic conditions (data as counted)
- Existing plus Project (E+P) – Baseline with the addition of Project Phase 1
- Existing plus Project (E+P) – Baseline with the addition of Project Phase 1+2
- E+P (Project Buildout) – Baseline with the addition of Project Buildout
- Opening Year (2031) Without Project – To be interpolated between Existing and 2050 Without Project traffic conditions. This scenario assumes the currently adopted City Truck Routes.
- Opening Year (2031) With Project – To be interpolated between Existing and 2050 With Project traffic conditions. This scenario would assume the Proposed GPA City Truck Routes. The existing baseline used would have to be modified first to reallocate existing trucks to adhere to the Proposed GPA City Truck Routes. Project Buildout traffic to be manually added to the interpolated forecasts.
- Horizon Year (2050) Without Project – Post-processed data using model forecasts that includes the currently adopted City Truck Routes. This scenario includes all of the currently known General Plan Amendment (SB 330) sites.
- Horizon Year (2050) With Project – Post processed data using model forecasts that accounts for the Proposed GPA City Truck Routes with the manual addition of the Project Buildout traffic. This scenario includes all of the General Plan Amendment (SB 330) sites, including the sites proposed by the Project.

All study area intersections will be evaluated using the Highway Capacity Manual (HCM) 7th Edition analysis methodology. Horizon Year (2050) traffic forecasts will be developed using the County of San Bernardino's SBTAM+ (v3.2) travel demand forecasting model. Near-term Opening Year traffic volumes will be derived by interpolating between Existing and Horizon Year traffic conditions. Only Project Buildout traffic is to be manually added to the interpolated forecasts.

Fehr & Peers will prepare and perform model operation using the SBTAM+ model to reflect pending and approved other development projects as well as consistency with the City's adopted General Plan. The model will then be utilized to generate Horizon Year (2050) traffic forecasts. Fehr & Peers will provide the modeling data input/outputs to Urban Crossroads for use in preparing the technical traffic analysis.

EXHIBIT 5: PROJECT (INDUSTRIAL PASSENGER CARS) TRIP DISTRIBUTION

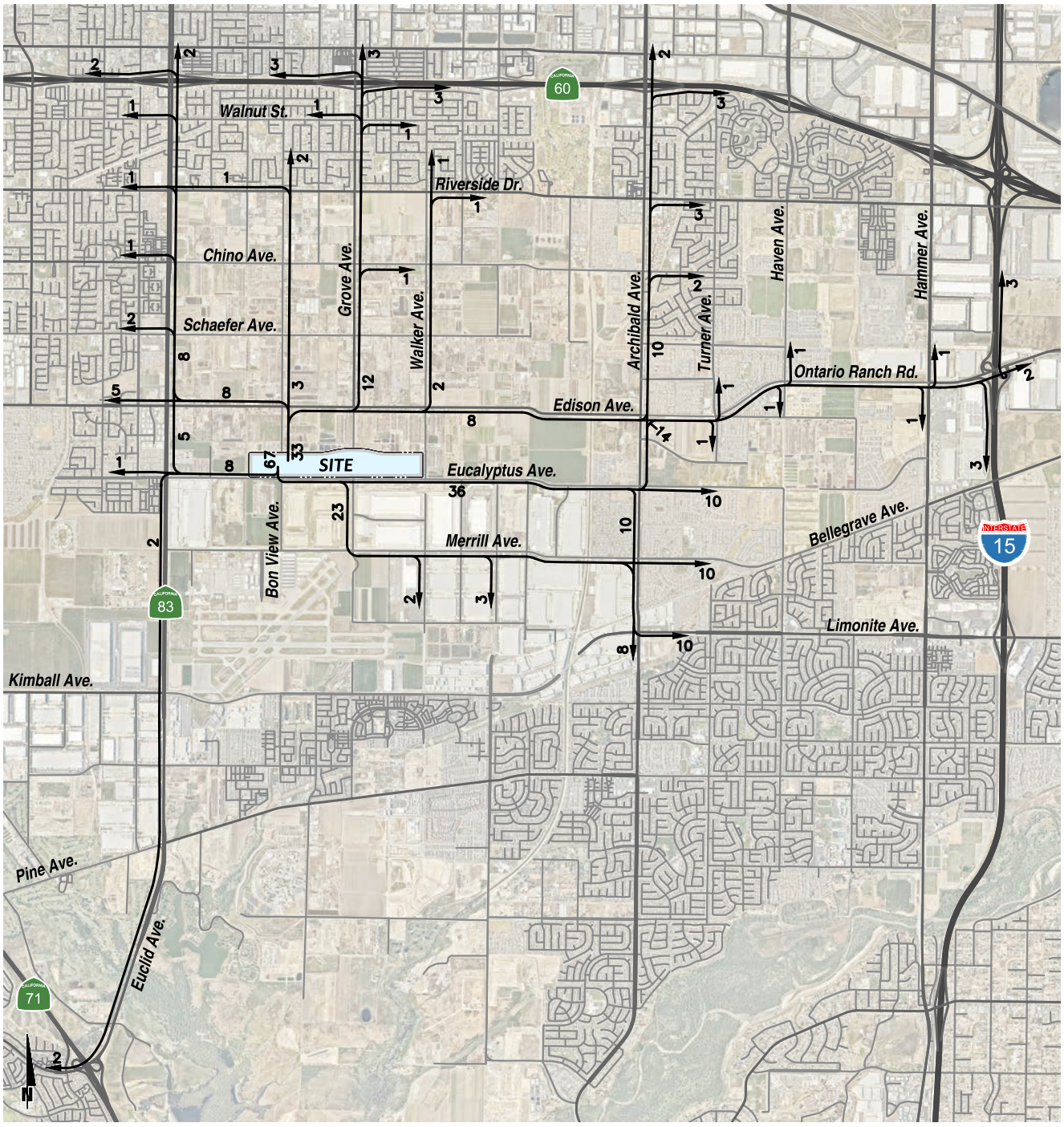


LEGEND:

10 = *Percent To/From Project*

→ = *Industrial Passenger Car Trip Distribution*

EXHIBIT 6: PROJECT (COMMERCIAL RETAIL) TRIP DISTRIBUTION



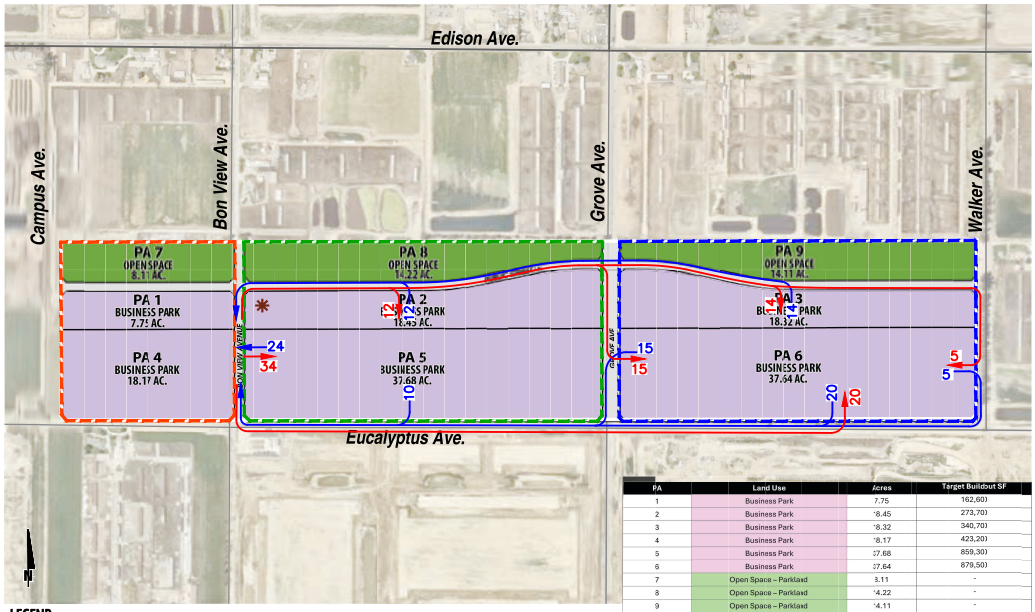
LEGEND:

10 = *Percent To/From Project*

→ = *Retail Commercial Trip Distribution*

EXHIBIT 7: INDUSTRIAL INTERNAL CAPTURE TRIP DISTRIBUTION

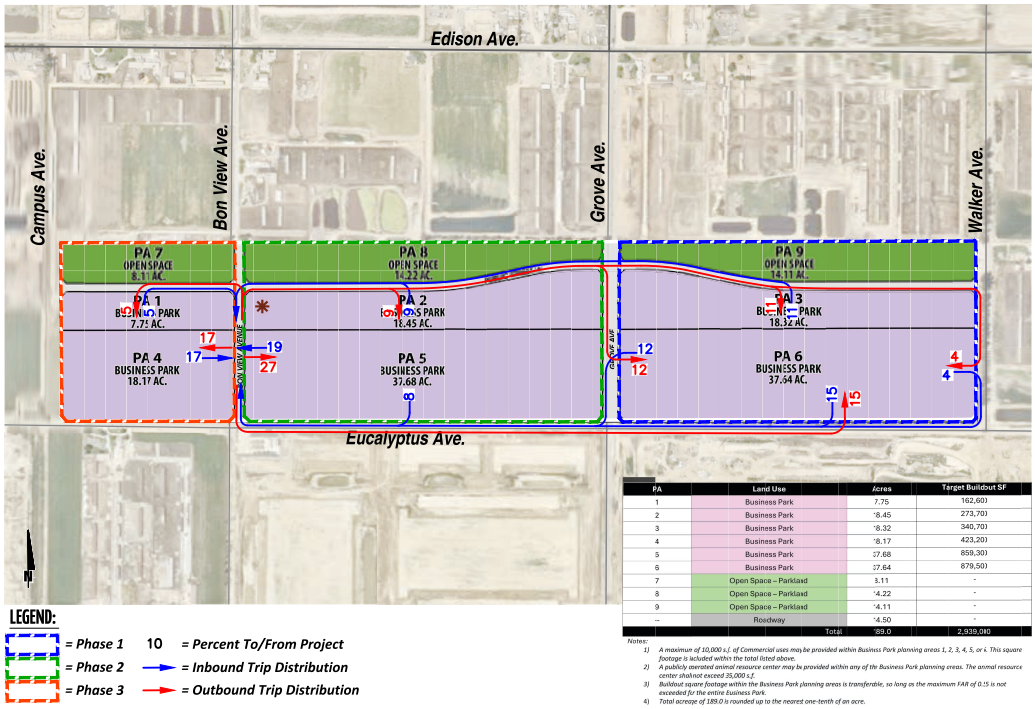
Project (Phase 1+2):



PA	Land Use	Acres	Target Buildout SF
1	Business Park	7.75	162,60
2	Business Park	18.45	273,70
3	Business Park	18.32	340,70
4	Business Park	18.17	423,20
5	Business Park	37.68	859,30
6	Business Park	37.64	879,50
7	Open Space – Parkland	8.11	-
8	Open Space – Parkland	14.22	-
9	Open Space – Parkland	14.11	-
--	Roadway	14.50	-
	Total	189.0	2,939,080

Notes:
1) A maximum of 10,000 s.f. of Commercial uses may be provided within Business Park planning areas 1, 2, 3, 4, 5, or 6. This square footage is included within the total listed above.
2) A publicly operated animal resource center may be provided within any of the Business Park planning areas. The animal resource center shall not exceed 35,000 s.f.
3) Buildout square footage within the Business Park planning areas is transferable, so long as the maximum FAR of 0.15 is not exceeded for the entire Business Park.
4) Total acreage of 189.0 is rounded up to the nearest one-tenth of an acre.

Project (Buildout):



PA	Land Use	Acres	Target Buildout SF
1	Business Park	7.75	162,60
2	Business Park	18.45	273,70
3	Business Park	18.32	340,70
4	Business Park	18.17	423,20
5	Business Park	37.68	859,30
6	Business Park	37.64	879,50
7	Open Space – Parkland	8.11	-
8	Open Space – Parkland	14.22	-
9	Open Space – Parkland	14.11	-
--	Roadway	14.50	-
	Total	189.0	2,939,080

Notes:
1) A maximum of 10,000 s.f. of Commercial uses may be provided within Business Park planning areas 1, 2, 3, 4, 5, or 6. This square footage is included within the total listed above.
2) A publicly operated animal resource center may be provided within any of the Business Park planning areas. The animal resource center shall not exceed 35,000 s.f.
3) Buildout square footage within the Business Park planning areas is transferable, so long as the maximum FAR of 0.15 is not exceeded for the entire Business Park.
4) Total acreage of 189.0 is rounded up to the nearest one-tenth of an acre.

INTERSECTION ANALYSIS LOCATIONS

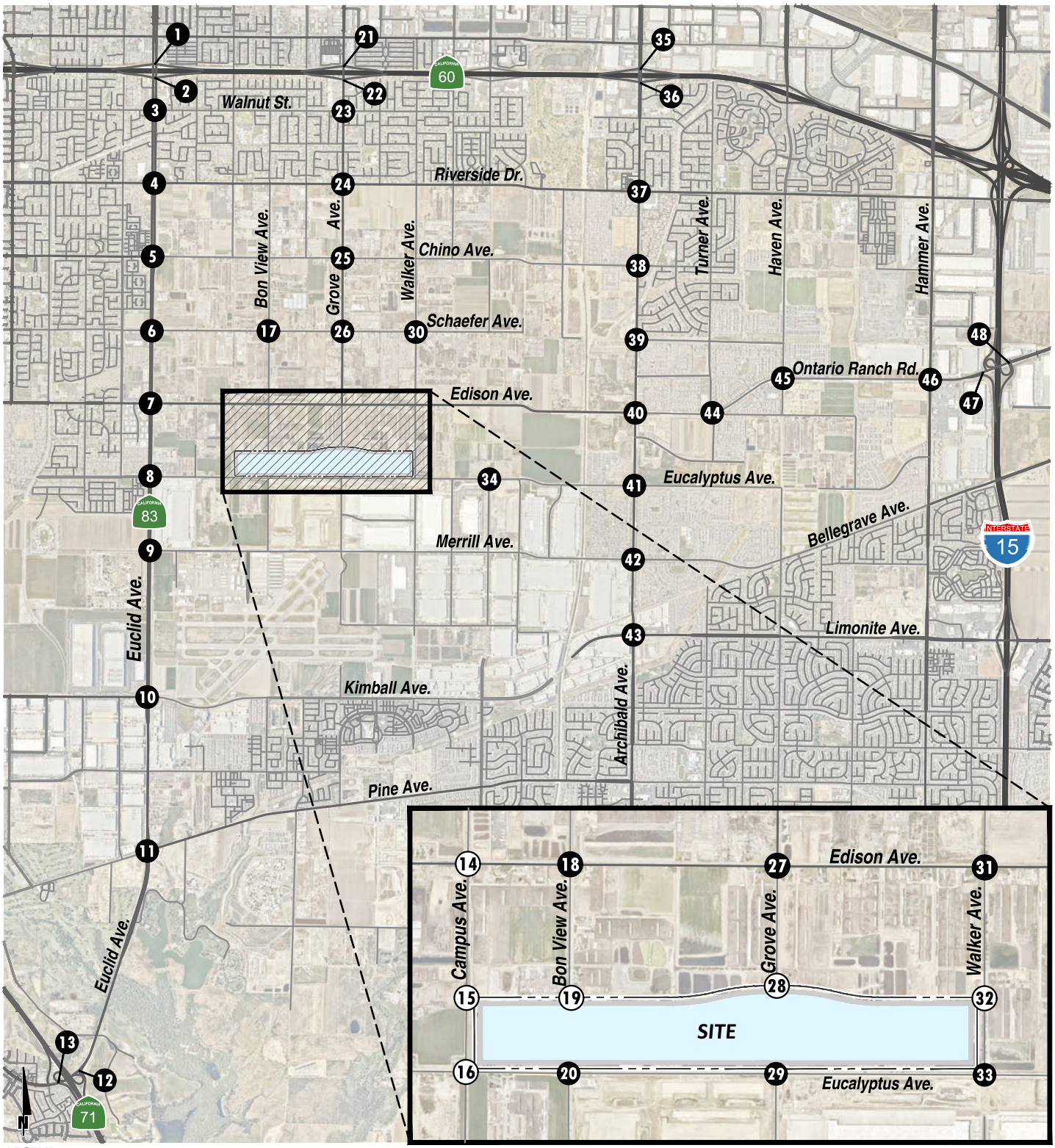
Exhibit 8 depicts the recommended intersection analysis locations, based upon the Project trip generation and trip distribution patterns included as part of this letter. The intersection analysis locations are also listed in Table 5.

TABLE 5: LIST OF STUDY INTERSECTIONS

#	Intersection
1	Euclid Av. (SR-83) & SR-60 WB Ramps
2	Euclid Av. (SR-83) & SR-60 EB Ramps
3	Euclid Av. (SR-83) & Walnut St.
4	Euclid Av. (SR-83) & Riverside Dr.
5	Euclid Av. (SR-83) & Chino Av.
6	Euclid Av. (SR-83) & Schafer Av.
7	Euclid Av. (SR-83) & Edison Av.
8	Euclid Av. (SR-83) & Eucalyptus Av.
9	Euclid Av. (SR-83) & Merrill Av.
10	Euclid Av. (SR-83) & Kimball Av.
11	Euclid Av. (SR-83) & Pine Av.
12	SR-71 NB Ramps & Euclid Av. (SR-83)
13	SR-71 SB Off-Ramp & Euclid Av. (SR-83)
14	Bon View Av. & Schaefer Av.
15	Campus Av. & New Public St.
16	Campus Av. & Edison Av.
17	Campus Av. & Eucalyptus Av.
18	Bon View Av. & Edison Av.
19	Bon View Av. & New Public St.
20	Bon View Av. & Eucalyptus Av.
21	Grove Av. & SR-60 WB Ramps
22	Grove Av. & SR-60 EB Ramps
23	Grove Av. & Walnut St.
24	Grove Av. & Riverside Dr.

#	Intersection
25	Grove Av. & Chino Av.
26	Grove Av. & Schaefer Av.
27	Grove Av. & Edison Av.
28	Grove Av. & New Public St.
29	Grove Av. & Eucalyptus Av.
30	Walker Av. & Schaefer Av.
31	Walker Av. & Edison Av.
32	Walker Av. & New Public St.
33	Walker Av. & Eucalyptus Av.
34	Hellman Av. & Eucalyptus
35	Archibald Av. & SR-60 WB Ramps
36	Archibald Av. & SR-60 EB Ramps
37	Archibald Av. & Riverside Dr.
38	Archibald Av. & Chino Av.
39	Archibald Av. & Schaefer Av.
40	Archibald Av. & Edison Av./Ontario Ranch Rd.
41	Archibald Av. & Eucalyptus Av.
42	Archibald Av. & Merrill Av.
43	Archibald Av. & Limonite Av.
44	Turner Av. & Ontario Ranch Rd.
45	Haven Av. & Ontario Ranch Rd.
46	Hamner Av. & Ontario Ranch Rd.
47	I-15 SB Ramps & Ontario Ranch Rd.
48	I-15 NB Ramps & Ontario Ranch Rd.

EXHIBIT 8: INTERSECTION ANALYSIS LOCATIONS



LEGEND:

0 = *Existing Intersection Analysis Location*

(0) = *Future Intersection Analysis Location*

EXISTING COUNT DATA

Weekday AM and PM peak hour traffic counts collected in May 2025 are proposed to be utilized for this analysis. These traffic counts were collected while local schools were in session and operating on normal bell schedules. Construction activity and roadway closures are occurring in the area, as such, where applicable, historic counts will be utilized for certain intersections or corridors.

Existing traffic will be modified per the Proposed GPA City Truck Routes for the purposes of interpolating with the Horizon Year (2050) With Project traffic conditions in order to develop the near-term Opening Year traffic forecasts.

AMBIENT GROWTH

No ambient growth is proposed as the near-term Opening Year forecasts would be interpolated between Existing and Horizon Year traffic conditions.

TRAFFIC SIGNAL WARRANTS

Traffic signal warrant analysis will be conducted for all unsignalized full access driveways/intersections following the guidance of the California Manual on Uniform Control Devices (CA MUTCD).

OTHER DEVELOPMENT PROJECTS

Other development projects will be accounted for in the long-range traffic modeling.

OPEN ITEMS – SIGNAL TIMING

It is requested that the City provide traffic signal timing for any City controlled intersections that we should take into consideration in our operations analysis. Applicable signal timing for Caltrans facilities will be obtained from District 8. However, it is our understanding that Caltrans has relinquished signal timing for intersections on Euclid Avenue (SR-83) to the City.

If you have any questions or comments, we can be reached at jbrawner@urbanxroads.com and cso@urbanxroads.com.

APPENDIX 1

INTERNAL CAPTURE WORKSHEETS

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Eucalyptus Business Park	**Organization:**	Urban Crossroads, Inc.
Project Location:	Ontario	**Performed By:**	JB
Scenario Description:	Phase 1 + 2	**Date:**	9/2/2025
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				467	382	85
Retail				20	11	9
Restaurant				166	85	81
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				0		
Total				653	478	175

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		4	20	0	0	0
Retail	3		1	0	0	0
Restaurant	25	1		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	653	478	175
Internal Capture Percentage	17%	11%	31%
External Vehicle-Trips[3]	545	424	121
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	7%	28%
Retail	45%	44%
Restaurant	25%	32%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Eucalyptus Business Park	**Organization:**	Urban Crossroads, Inc.
Project Location:	Ontario	**Performed By:**	JB
Scenario Description:	Phase 1 + 2	**Date:**	9/2/2025
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				736	246	490
Retail				32	16	16
Restaurant				158	82	76
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				0		
Total				926	344	582

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1	2	0	0	0
Retail	0		5	0	0	0
Restaurant	2	8		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	926	344	582
Internal Capture Percentage	4%	5%	3%
External Vehicle-Trips[3]	890	326	564
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	1%	1%
Retail	56%	31%
Restaurant	9%	13%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Eucalyptus Business Park	**Organization:**	Urban Crossroads, Inc.
Project Location:	Ontario	**Performed By:**	JB
Scenario Description:	Buildout	**Date:**	7/8/2025
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				534	436	98
Retail				20	11	9
Restaurant				166	85	81
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				0		
Total				720	532	188

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		4	20	0	0	0
Retail	3		1	0	0	0
Restaurant	25	1		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	720	532	188
Internal Capture Percentage	15%	10%	29%
External Vehicle-Trips[3]	612	478	134
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	6%	24%
Retail	45%	44%
Restaurant	25%	32%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Eucalyptus Business Park	**Organization:**	Urban Crossroads, Inc.
Project Location:	Ontario	**Performed By:**	JB
Scenario Description:	Buildout	**Date:**	7/8/2025
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				818	272	546
Retail				32	16	16
Restaurant				158	82	76
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				0		
Total				1008	370	638

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1	2	0	0	0
Retail	0		5	0	0	0
Restaurant	2	8		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,008	370	638
Internal Capture Percentage	4%	5%	3%
External Vehicle-Trips[3]	972	352	620
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	1%	1%
Retail	56%	31%
Restaurant	9%	13%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

APPENDIX 2

PROJECT TRIP GENERATION (ACTUAL VEHICLES)

TABLE 2-1: PROJECT TRIP GENERATION (ACTUAL VEHICLES)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Project Phase 1 (2028):									
Industrial Park	340.700	TSF							
Passenger Cars:			53	12	65	18	50	68	750
2-axle Trucks:			1	1	2	1	1	2	28
3-axle Trucks:			1	1	2	1	1	2	34
4+-axle Trucks:			3	4	7	2	4	6	102
Total Truck Trips (Actual Vehicles):			5	6	11	4	6	10	164
Warehousing	553.300	TSF							
Passenger Cars:			45	10	55	17	55	72	526
2-axle Trucks:			1	1	2	1	1	2	40
3-axle Trucks:			1	1	2	1	1	2	50
4+-axle Trucks:			4	3	7	4	3	7	150
Total Truck Trips (Actual Vehicles):			6	5	11	6	5	11	240
High-Cube Fulfillment Center (Sort)	326.200	TSF							
Passenger Cars:			109	24	133	79	110	189	1,492
2-axle Trucks:			0	0	0	1	0	1	14
3-axle Trucks:			0	0	0	1	1	2	18
4+-axle Trucks:			1	1	2	2	2	4	54
Total Truck Trips (Actual Vehicles):			1	1	2	4	3	7	86
Public Park	33.8	AC	1	1	2	3	2	5	26
Phase 1 (2028) Total			**220**	**59**	**279**	**131**	**231**	**362**	**3,284**
Project Phase 2 (2029):									
Industrial Park	273.700	TSF							
Passenger Cars:			43	9	52	15	40	55	602
2-axle Trucks:			1	1	2	1	1	2	22
3-axle Trucks:			1	1	2	1	1	2	28
4+-axle Trucks:			2	3	5	2	3	5	82
Total Truck Trips (Actual Vehicles):			4	5	9	4	5	9	132
Warehousing	553.300	TSF							
Passenger Cars:			45	10	55	17	55	72	526
2-axle Trucks:			1	1	2	1	1	2	40
3-axle Trucks:			1	1	2	1	1	2	50
4+-axle Trucks:			4	3	7	4	3	7	150
Total Truck Trips (Actual Vehicles):			6	5	11	6	5	11	240
High-Cube Fulfillment Center (Sort)	261.000	TSF							
Passenger Cars:			87	20	107	63	88	151	1,194
2-axle Trucks:			0	0	0	1	0	1	12
3-axle Trucks:			0	0	0	1	1	2	14
4+-axle Trucks:			1	1	2	2	2	4	42
Total Truck Trips (Actual Vehicles):			1	1	2	4	3	7	68
Animal Hospital/Veterinary Clinic	35.000	TSF	85	42	127	49	74	123	753
Strip Retail Plaza (<40,000 SF)	5.000	TSF	11	9	20	16	16	32	272
Fast-Food Restaurant With Drive-Thru	5.000	TSF	85	81	166	82	76	158	2,241
Public Park	37.7	AC	1	1	2	3	2	5	30
Phase 1+2 Subtotal[2]			588	242	830	390	595	985	9,342
Retail Internal Capture Reduction			-5	-4	-9	-9	-5	-14	-120
Retail Pass-by Trip Reduction (40% - PM/Daily)			0	0	0	-3	-3	-6	-62
Restaurant Internal Capture Reduction			-21	-26	-47	-7	-10	-17	-242
Restaurant Pass-by Trip Reduction (50% - AM; 55% - PM/Daily)			-28	-28	-56	-36	-36	-72	-1,100
Industrial Internal Capture Reduction:			-28	-24	-52	-2	-3	-5	-42
Phase 1+2 Total:			**506**	**160**	**666**	**333**	**538**	**871**	**7,776**

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Project Phase 3 (2031):									
Industrial Park	162.600	TSF							
Passenger Cars:			25	6	31	9	24	33	358
2-axle Trucks:			0	0	0	0	1	1	14
3-axle Trucks:			0	1	1	0	1	1	16
4+-axle Trucks:			1	2	3	1	2	3	50
Total Truck Trips (Actual Vehicles):			1	3	4	1	4	5	80
Manufacturing	211.700	TSF							
Passenger Cars:			77	24	101	37	92	129	784
2-axle Trucks:			1	0	1	0	0	0	20
3-axle Trucks:			1	1	2	0	1	1	26
4+-axle Trucks:			2	2	4	1	2	3	76
Total Truck Trips (Actual Vehicles):			4	3	7	1	3	4	122
Warehousing	163.600	TSF							
Passenger Cars:			13	3	16	5	16	21	156
2-axle Trucks:			0	0	0	0	0	0	12
3-axle Trucks:			0	0	0	0	0	0	16
4+-axle Trucks:			1	1	2	1	1	2	44
Total Truck Trips (Actual Vehicles):			1	1	2	1	1	2	72
High-Cube Fulfillment Center (Sort)	47.900	TSF							
Passenger Cars:			16	4	20	12	16	28	220
2-axle Trucks:			0	0	0	0	0	0	2
3-axle Trucks:			0	0	0	0	0	0	4
4+-axle Trucks:			0	0	0	0	0	0	8
Total Truck Trips (Actual Vehicles):			0	0	0	0	0	0	14
Project Buildout Subtotal[2]			725	286	1,011	456	751	1,207	11,148
Retail Internal Capture Reduction			-5	-4	-9	-9	-5	-14	-120
Retail Pass-by Trip Reduction (40% - PM/Daily)			0	0	0	-3	-3	-6	-62
Restaurant Internal Capture Reduction			-21	-26	-47	-7	-10	-17	-242
Restaurant Pass-by Trip Reduction (50% - AM; 55% - PM/Daily)			-28	-28	-56	-36	-36	-72	-1,100
Industrial Internal Capture Reduction:			-28	-24	-52	-2	-3	-5	-44
Public Park	21.0	AC	1	0	1	2	1	3	16
Project Buildout Total:			**643**	**204**	**847**	**399**	**694**	**1,093**	**9,580**

[1] AC = Acres; TSF = thousand square feet

[2] Subtotal reflects the trips associated with the applicable phase(s) before Pass-By or Internal Capture reductions.

APPENDIX 3

PROJECT TRIP GENERATION (PCE)

TABLE 3-1: PROJECT TRIP GENERATION (PCE)

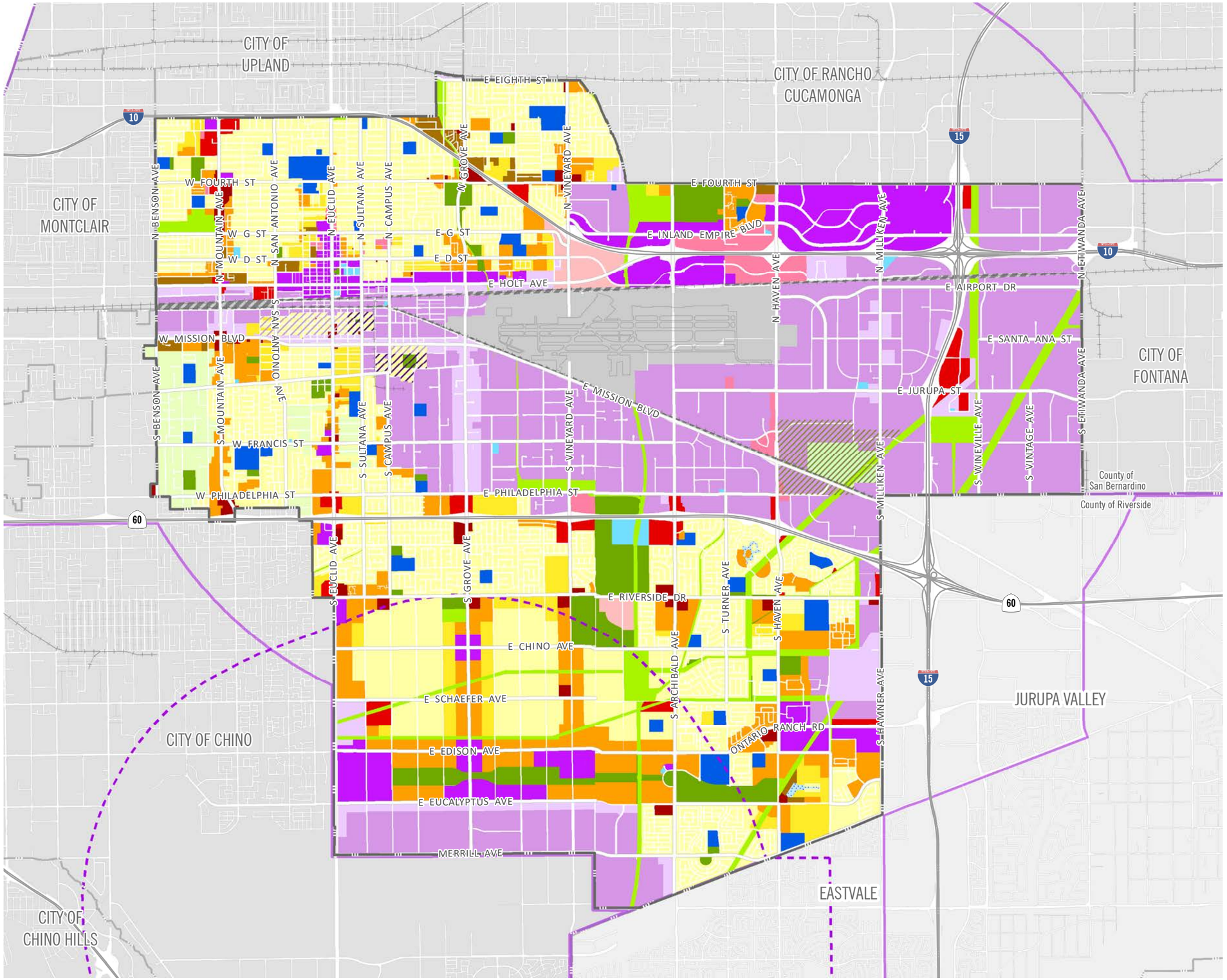
Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Project Phase 1 (2028):									
Industrial Park	340.700	TSF							
Passenger Cars:			53	12	65	18	50	68	750
2-axle Trucks:			1	1	2	1	2	3	42
3-axle Trucks:			2	2	4	2	3	5	68
4+-axle Trucks:			9	11	20	7	12	19	308
Total Truck Trips (PCE):			12	14	26	10	17	27	418
Warehousing	553.300	TSF							
Passenger Cars:			45	10	55	17	55	72	526
2-axle Trucks:			2	1	3	2	1	3	60
3-axle Trucks:			2	2	4	2	2	4	98
4+-axle Trucks:			12	9	21	12	9	21	448
Total Truck Trips (PCE):			16	12	28	16	12	28	606
High-Cube Fulfillment Center (Sort)	326.200	TSF							
Passenger Cars:			109	24	133	79	110	189	1,492
2-axle Trucks:			1	0	1	1	1	2	22
3-axle Trucks:			1	1	2	1	1	2	36
4+-axle Trucks:			3	3	6	6	7	13	160
Total Truck Trips (PCE):			5	4	9	8	9	17	218
Public Park	33.8	AC	1	1	2	3	2	5	26
Phase 1 (2028) Total			**241**	**77**	**318**	**151**	**255**	**406**	**4,036**
Project Phase 2 (2029):									
Industrial Park	273.700	TSF							
Passenger Cars:			43	9	52	15	40	55	602
2-axle Trucks:			1	1	2	1	1	2	34
3-axle Trucks:			2	2	4	1	2	3	54
4+-axle Trucks:			7	8	15	6	10	16	248
Total Truck Trips (PCE):			10	11	21	8	13	21	336
Warehousing	553.300	TSF							
Passenger Cars:			45	10	55	17	55	72	526
2-axle Trucks:			2	1	3	2	1	3	60
3-axle Trucks:			2	2	4	2	2	4	98
4+-axle Trucks:			12	9	21	12	9	21	448
Total Truck Trips (PCE):			16	12	28	16	12	28	606
High-Cube Fulfillment Center (Sort)	261.000	TSF							
Passenger Cars:			87	20	107	63	88	151	1,194
2-axle Trucks:			1	0	1	1	1	2	18
3-axle Trucks:			1	1	2	1	1	2	28
4+-axle Trucks:			2	3	5	5	5	10	128
Total Truck Trips (PCE):			4	4	8	7	7	14	174
Animal Hospital/Veterinary Clinic	35.000	TSF	85	42	127	49	74	123	753
Strip Retail Plaza (<40,000 SF)	5.000	TSF	11	9	20	16	16	32	272
Fast-Food Restaurant With Drive-Thru	5.000	TSF	85	81	166	82	76	158	2,241
Public Park	37.7	AC	1	1	2	3	2	5	30
Phase 1+2 Subtotal[2]			628	276	904	427	638	1,065	10,770
Retail Internal Capture Reduction			-5	-4	-9	-9	-5	-14	-120
Retail Pass-by Trip Reduction (40% - PM/Daily)			0	0	0	-3	-3	-6	-62
Restaurant Internal Capture Reduction			-21	-26	-47	-7	-10	-17	-242
Restaurant Pass-by Trip Reduction (50% - AM; 55% - PM/Daily)			-28	-28	-56	-36	-36	-72	-1,100
Industrial Internal Capture Reduction:			-28	-24	-52	-2	-3	-5	-42
Phase 1+2 Total:			**546**	**194**	**740**	**370**	**581**	**951**	**9,204**

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Project Phase 3 (2031):									
Industrial Park	162.600	TSF							
Passenger Cars:			25	6	31	9	24	33	358
2-axle Trucks:			0	1	1	0	1	1	20
3-axle Trucks:			1	1	2	1	1	2	32
4+-axle Trucks:			4	5	9	3	6	9	148
Total Truck Trips (PCE):			5	7	12	4	8	12	200
Manufacturing	211.700	TSF							
Passenger Cars:			77	24	101	37	92	129	784
2-axle Trucks:			1	1	2	0	1	1	30
3-axle Trucks:			1	1	2	1	1	2	50
4+-axle Trucks:			7	5	12	3	5	8	228
Total Truck Trips (PCE):			9	7	16	4	7	11	308
Warehousing	163.600	TSF							
Passenger Cars:			13	3	16	5	16	21	156
2-axle Trucks:			0	0	0	0	0	0	18
3-axle Trucks:			1	1	2	1	1	2	30
4+-axle Trucks:			3	3	6	3	3	6	132
Total Truck Trips (PCE):			4	4	8	4	4	8	180
High-Cube Fulfillment Center (Sort)	47.900	TSF							
Passenger Cars:			16	4	20	12	16	28	220
2-axle Trucks:			0	0	0	0	0	0	4
3-axle Trucks:			0	0	0	0	0	0	6
4+-axle Trucks:			0	0	0	1	1	2	24
Total Truck Trips (PCE):			0	0	0	1	1	2	34
Project Buildout Subtotal[2]			777	331	1,108	503	806	1,309	13,010
Retail Internal Capture Reduction			-5	-4	-9	-9	-5	-14	-120
Retail Pass-by Trip Reduction (40% - PM/Daily)			0	0	0	-3	-3	-6	-62
Restaurant Internal Capture Reduction			-21	-26	-47	-7	-10	-17	-242
Restaurant Pass-by Trip Reduction (50% - AM; 55% - PM/Daily)			-28	-28	-56	-36	-36	-72	-1,100
Industrial Internal Capture Reduction:			-28	-24	-52	-2	-3	-5	-44
Public Park	21.0	AC	1	0	1	2	1	3	16
Project Buildout Total:			**696**	**249**	**945**	**448**	**750**	**1,198**	**11,458**

[1] AC = Acres; TSF = thousand square feet

[2] Subtotal reflects the trips associated with the applicable phase(s) before Pass-By or Internal Capture reductions.

Attachment B – Current TOP Land Use Plan



LAND USE

Figure A

Current Land Use Plan

- Ontario City Boundary
- County Boundary
- Rail Network
- Ontario Airport Influence Area
- Chino Airport Influence Area

Overlay Zones

- Business Park Overlay
- Industrial Overlay
- Landfill Impact Area

TOP 2050 Land Use

Residential

- RR Rural Residential
- LDR Low Density Residential
- LMDR Low Medium Density Residential
- MDR Medium Density Residential
- HDR High Density Residential

Mixed-Use

- MU Mixed Use

Commercial

- NC Neighborhood Commercial
- GC General Commercial
- OC Office Commercial
- HOS Hospitality

Employment

- BP Business Park
- IND Industrial

Other

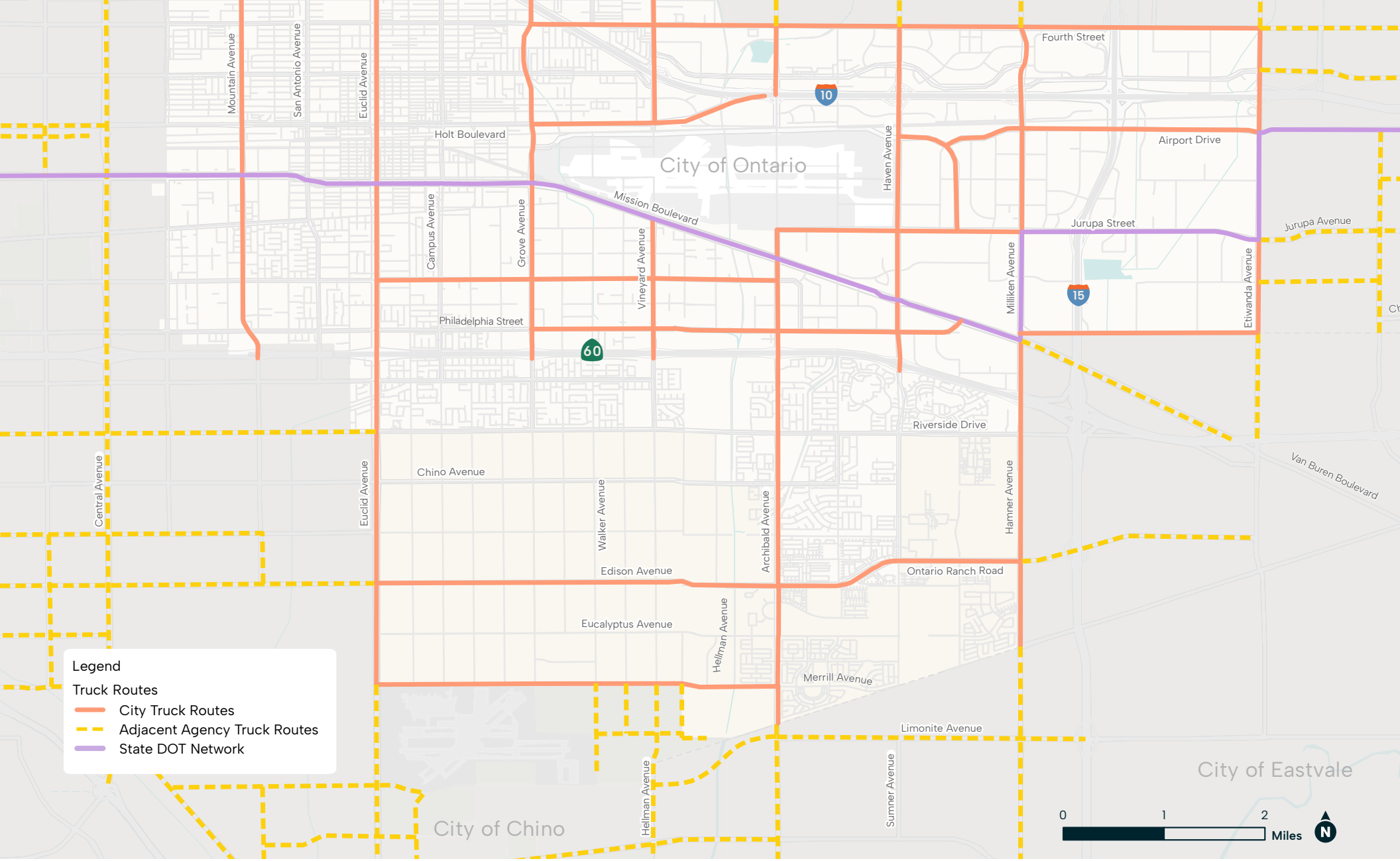
- OS-NR Open Space - Non-Rec
- OS-R Open Space - Recreation
- OS-W Open Space - Water
- PF Public Facility
- PS Public School
- ARPT Airport
- LF Landfill
- Rail
- ROW Right of Way

2·0·5·0 THE ONTARIO PLAN

0 2,500 5,000 10,000 FT

Source: The City of Ontario 2025 Date: 8/12/2025

Attachment C – Existing City of Ontario Truck Route Map



City of Ontario Existing Truck Routes

Fehr & Peers

Attachment D – Project VMT Mitigation Memorandum

TECHNICAL MEMORANDUM

DATE: January 21, 2026
TO: Scott Mulkay, Ontario Ranch Venture I, II, LLC
FROM: Alex So, Urban Crossroads, Inc.
JOB NO: 16431-01 VMT

SUBJECT: ONTARIO EUCALYPTUS BUSINESS PARK SPECIFIC PLAN VEHICLE MILES TRAVELED (VMT) MITIGATION STRATEGY ASSESSMENT

Urban Crossroads, Inc. has completed the following Vehicle Miles Traveled (VMT) Mitigation Strategy Assessment for the Ontario Eucalyptus Business Park Specific Plan Ontario Eucalyptus Business Park Specific Plan development (Project) located south of Edison Avenue, west of Walker Avenue, east of Campus Avenue and north of Eucalyptus Avenue in the City of Ontario.

PROJECT OVERVIEW

Project is to consist of a business park with some mixed-use commercial retail, a public animal shelter, and park use on approximately 189.0 acres and a total building footprint of 2,939,000 square feet.

BACKGROUND

Under Senate Bill (SB) 743 and the California Environmental Quality Act (CEQA) Guidelines, transportation impacts are evaluated based on Vehicle Miles Traveled. The Project's VMT analysis, prepared consistent with the City of Ontario Resolution No. 2020-071 (June 2020) (**City Guidelines**) (1) and regionally accepted methods and data, found that the Project's VMT would exceed the applicable City significance threshold. Exceeding this threshold constitutes a potentially significant transportation impact under CEQA. As a result, the lead agency must consider feasible mitigation measures that would reduce Project generated VMT and, where possible, bring the impact below the threshold or otherwise lessen it to the extent feasible.

This VMT Mitigation Memo documents a focused and defensible approach tailored to the City of Ontario context. The memo identifies a menu of on-site design features and transportation demand management strategies and screens measures for feasibility, effectiveness, and proportionality given local conditions and City policies.

The intent is to provide the City with a transparent record demonstrating that reasonable and feasible VMT reduction measures have been selected, sized, and scheduled consistent with CEQA, SB 743, CAPCOA best practice, and City of Ontario guidance to reduce the identified significant VMT impact.

VMT REDUCTION STRATEGIES

The California Air Pollution Control Officers Association (**CAPCOA**) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (October 2024) (**Handbook**) (2) has been utilized to determine trip reduction measures that would be applicable to the Project. The Handbook describes methods to quantify reductions in greenhouse gas emissions and, in the case of Transportation measures (i.e., trip reduction strategies), the associated reductions to VMT. This evaluation will focus on a review of the Handbook's Transportation measures that are determined to be applicable to the Project.

SELECTING MEASURES

To determine which Transportation measures should be considered from the Handbook, land use type, scale, and locational context are each identified as key factors for determining an individual measure's applicability to a development project. The Handbook contains a fact sheet for each measure that describes the measure, locational context, scale of application, implementation requirements, and other considerations that should be reviewed to determine a measure's applicability.

PROJECT TYPE

Project type is an important consideration when determining which measures are applicable for consideration. For example, measures associated with neighborhood design are not applicable to an office project, whereas trip reduction programs intended to reduce employee commute VMT would not be applicable to an apartment project.

SCALE

The Handbook identifies that measures can be applied at different scales or geographic levels, however, "some measures may only be applicable at the project-level, whereas others may be more appropriate within a broader planning context such as for a general plan or climate action plan." The geographic levels considered in the Handbook include Project/Site and Plan/Community. Project/Site applies to measures that can reduce VMT at the scale of an individual development project or employer. Plan/Community refers to measures that reduce VMT at the scale of a specific plan, general plan, or climate action plan. Transportation measures can be quantified at either the Project/Site scale or the Plan/Community scale, but never both. [1]

LOCATIONAL CONTEXT

The Handbook describes locational context as "used to identify trip reduction measures within the transportation sector that are appropriate in certain types of neighborhoods differentiated by transportation characteristics and level of development (e.g., rural, suburban, and urban)." More specifically, rural, suburban, and urban are defined as follows.

Rural: An area characterized by little development. Compared to urban and suburban areas, rural areas have a lower density of residences, higher numbers of single-family residences, and higher numbers of vehicle dependent land use patterns. Where applicable, the Handbook provides three

[1] Handbook, Page 37

land use distinctions within the rural locational context category—R_a, R_b, and R_c. R_a refers to rural areas within a master-planned community. These rural areas often include a broad offering of amenities and services, which may be accessed by walking or other alternative forms of transportation. R_b refers to rural areas adjacent to a commuter rail station with convenient rail service to a major employment center. As the name implies, these rural areas have greater access to commuter rail as an alternative mode of transportation. R_c refers to rural areas with transit service and that are near jobs/services.

Suburban: An area characterized by dispersed, low-density, single-use, automobile dependent land use patterns, usually outside of the central Town. Also known as a suburb.

Urban: An area located within the central Town with higher density land uses than in the suburbs. Often characterized by multi-family housing, tall office buildings, and dense retail.

The Project's locational context is determined to be suburban.

Transportation Measures

As noted in the Handbook, the Transportation section measures "promote transit and alternative transportation, support use of alternatively fueled vehicles, or encourage land use planning practices that reduce vehicle trips and vehicle miles traveled (VMT). Measures within the transportation sector are separated into seven subsectors: Land Use, Neighborhood Design, Parking or Road Pricing Management, Transit, Trip Reduction Programs, Clean Vehicles and Fuels, and School Programs."[2] All 56 transportation measures and sub measures were evaluated for their applicability to the Project and can be found in Attachment B.

Land Use Subsector (T-1 through T-4, T-17, T-31 through T-33 and T-55)

For a speculative industrial park, land use measures are generally not appropriate as primary VMT mitigation. These strategies require changing what is built and where, which depends on jurisdictional actions or broader area planning beyond the applicant's control. The industrial park is planned and entitled for industrial use, so adding housing or public facing mixed use would conflict with adopted plans and would need legislative changes. Industrial operations require secure yards, truck circulation, and controlled access, which are not compatible with uses intended to create internal walk trips at a meaningful scale. Because tenants, shifts, and supply chains are unknown, commitments tied to a specific occupant mix cannot be credibly defined or enforced. At the park scale the project still has limited influence on regional trip lengths that drive VMT outcomes. CEQA also requires clear nexus, proportionality, and implementability, which relocation, off site land use changes, or housing production do not satisfy within project timelines.

T-33 Locate Project near Bike Path/Bike Lane

This measure requires projects to be located within 0.5-mile bicycling distance to an existing Class I or IV path or Class II bike lane. A project that is designed around an existing or planned bicycle facility encourages sustainable mode use. The project design should include a comparable network that connects the project uses to the existing off-site facilities that connect to work/retail destinations. As an implementation consideration, projects should provide sufficient and convenient bicycle

[2] Handbook, Page 30

parking and long-term storage, ideally near the bike lane itself, for residents, employees, and visitors, and a bicycle repair station with tools and equipment.

The Project site is located within a planned grid of multipurpose trails and bikeways, including proposed Class II bike lanes along E. Eucalyptus Avenue and parallel east–west streets, and proposed Class I multipurpose trail corridors on multiple north–south streets adjacent to the site. By locating the Project within this bikeway focus area and providing on-site non-vehicular connections that tie directly into the City's planned network, employees and visitors will have a realistic opportunity to shift short work and mid-day trips from drive-alone vehicle travel to bicycle trips.

This integration with the City's bikeway system is consistent with the intent of CAPCOA Measure T-33 (Locate Project Near Bike Path/Bike Lane) and is expected to reduce project-generated VMT relative to a similar employment project without such bikeway access. The dense spacing of planned Class I and Class II facilities around the site shortens bicycle travel distances to nearby residential neighborhoods and services, supports mode shift away from single-occupant vehicles, and therefore contributes to a net reduction in VMT per employee. While CAPCOA does not provide a specific, empirically derived VMT reduction factor for T-33, the Project's location and design clearly implement this measure and are reasonably expected to result in incremental VMT reductions.

Parking or Road Pricing/Management Subsector (T-14 through T-16, T-24 and T-48 through T-52)

For a speculative industrial park, parking or road pricing and related management measures are generally not appropriate as primary VMT mitigation. These strategies are designed to influence traveler behavior through priced parking, cordon or congestion charges, access permits, or dynamic curb and lane management. Implementing them at a private industrial park faces several constraints: employee and truck access must be reliable and time sensitive to maintain operations; pricing employee parking at a meaningful level risks off site spillover into surrounding industrial streets without a coordinated, jurisdiction led district program; truck parking, staging, and circulation are operational necessities that cannot be priced or constrained without harming goods movement; roadway or cordon pricing requires public authority, regional systems, and enforcement that a single private project cannot deliver; and unknown tenants and shifts limit the ability to set durable pricing policies or mode targets. From a CEQA standpoint, nexus, proportionality, and implementability are weak where pricing would shift demand to public rights of way, depend on off-site enforcement, or require legislative actions outside the applicant's control.

Neighbor Design Subsector (T-18 through T-22 and T-34 through T-37)

For a speculative industrial park, neighborhood design measures are generally not appropriate as primary VMT mitigation because their effectiveness depends on area wide features such as block size, intersection density, connected street grids, and a diverse land use mix that are planned and delivered at the community or specific plan scale by the jurisdiction. The project does not control off site rights of way, signal spacing, or parcelization, and reconfiguring the surrounding network would require public capital programs, multi owner participation, and long timelines that exceed project permitting. Industrial operating needs also limit applicability: secure perimeters, controlled access, truck courts, and large turning radii constrain fine grained block patterns and public circulation that would invite non-employee trips. With unknown tenants and shift structures, committing to neighborhood level amenities intended to attract public facing activity is speculative and may

conflict with freight safety. From a CEQA standpoint, nexus, proportionality, and implementability are weak for off-site grid changes or streetscape retrofits led by others.

T-18 Provide Pedestrian Network Improvements

This measure will increase the sidewalk coverage to improve pedestrian access. Providing sidewalks and an enhanced pedestrian network encourages people to walk instead of drive. This mode shift results in a reduction in VMT and GHG emissions.

The Project includes an internal non vehicular circulation system with continuous sidewalks, marked crossings, and pedestrian connections linking each Planning Area to Eucalyptus Avenue, New Public Street "A" and connections to parks and open space areas. These facilities are designed to provide direct, comfortable, and safe walking routes between building entries, parking areas, and nearby streets, which improves the practicality of walk trips for employees and visitors. By making it easier to walk within the site and to connect to adjacent uses, the Project supports mode shift away from drive alone vehicle trips for short commute, lunch, and other discretionary trips. As a result, the onsite pedestrian network is expected to reduce project generated VMT compared to a comparable industrial project without these pedestrian improvements.

CAPCOA Measure T-18 includes an empirical formula for estimating VMT reductions from enhanced pedestrian infrastructure; however, to maintain a conservative analysis and avoid introducing additional uncertainty related to input assumptions, this study does not quantify a numerical T-18 reduction. Instead, the VMT benefits of the Project's onsite pedestrian improvements are acknowledged qualitatively.

T-19-A Construct or Improve Bike Facility

This measure will construct or improve a single bicycle lane facility (only Class I, II, or IV) that connects to a larger existing bikeway network. Providing bicycle infrastructure helps to improve biking conditions within an area. This encourages a mode shift on the roadway parallel to the bicycle facility from vehicles to bicycles, displacing VMT and thus reducing GHG emissions. When constructing or improving a bicycle facility.

Consistent with the intent of T-33, the Project's internal non vehicular circulation (sidewalks, multi purpose trails, and Class II bikeways) is designed to directly connect employees and visitors to the City's planned bikeway network identified in the General Plan. By tying each Planning Area to Eucalyptus Avenue and New Public Street "A," which in turn connect to the broader system of Class I and Class II facilities in the Ontario Ranch area, the Project provides a continuous, safe, and attractive bicycle and pedestrian network between surrounding neighborhoods and employment uses. This integrated onsite and offsite network shortens trip distances for nearby residents, makes bicycle and walking trips a viable substitute for drive alone trips (particularly for commute, lunch, and other short discretionary trips), and is therefore expected to reduce project generated VMT relative to a comparable industrial project without such facilities.

CAPCOA Measure T-19-A does include an empirical formula for estimating VMT reductions; however, to maintain a conservative analysis and avoid introducing additional uncertainty regarding input assumptions, this study does not quantify a numerical T-19-A reduction. Instead, the VMT benefits of the Project's onsite network and its connections to the City bikeway system are acknowledged qualitatively.

Transit Subsector (T-25 through T-29 and T-43 through T-47)

For a speculative industrial park, transit measures are generally not appropriate as primary VMT mitigation because effective transit outcomes depend on off-site factors that the project does not control, including route alignment, headways, service span, stop placement, and funding that are set by the transit agency on multi-year cycles. Industrial shift times often occur outside typical service windows, and goods movement operations require reliable access that fixed route transit cannot serve without significant schedule and coverage changes. Employer transit pass programs or first and last mile shuttles have limited effectiveness where baseline service is infrequent or indirect, and creating new routes or extending hours would require agency approval, public funding, and long lead times that do not align with project permitting. With tenants and shifts unknown, durable commitments to specific routes or service levels are speculative and may not be transferable to future occupants. From a CEQA standpoint, nexus, proportionality, and implementability are weak for measures that rely on third party capital or operating decisions.

T-25 Extend Transit Network Coverage

This measure will expand the local transit network by either adding or modifying existing transit service or extending the operation hours to enhance the service near the project site. Starting services earlier in the morning and/or extending services to late-night hours can accommodate the commuting times of alternative-shift workers.

The Project will construct a new bus stop along Grove Avenue at Eucalyptus Avenue to accommodate a future Omnitrans route serving the site and surrounding area. By providing a ready to use transit stop with appropriate frontage improvements, the Project reduces the barriers for Omnitrans to implement or adjust service and shortens walk distances between employment uses and future transit. If a bus line is ultimately operated at this location, the stop would support mode shift from drive alone commute and mid-day trips to transit, which would reduce project generated VMT relative to a similar industrial project without transit supportive infrastructure. However, because the decision to serve this stop and the level of future service are solely under the control of the transit agency and cannot be guaranteed by the applicant, this analysis does not claim a quantitative VMT reduction under T-25. The VMT benefit of the constructed bus stop is therefore acknowledged qualitatively.

Clean Vehicles and Fuels Subsector (T-30, T-53 through T-54)

For a speculative industrial park, clean vehicle and alternative fuel strategies are generally not appropriate as primary VMT mitigation because they reduce emissions per mile rather than the number or length of trips that drive VMT significance. Fleet composition and fuel choice are controlled by future tenants and their carriers, not by a site developer, and long-haul goods movement patterns are determined by supply chain geography that a single project cannot change. Installing charging or fueling infrastructure on site can support compliance with state regulations and lower greenhouse gas and criteria pollutant emissions, but it does not shorten employee commute distances or reduce truck trip generation and therefore does not address the VMT metric used for CEQA transportation impacts. With tenants and shift schedules unknown, binding commitments to specific vehicle technologies or turnover timelines are speculative and may not be enforceable or transferable. From a CEQA perspective, nexus, proportionality, and implementability are weak for requiring off site fleet purchases or operational changes by third parties. Accordingly,

clean vehicle and fuel investments should be documented as air quality and greenhouse gas co benefits.

School Programs Subsector (T-40 and T-56)

School focused measures (e.g., Safe Routes to School, school pool programs, student transit passes, campus-based trip reduction) are not appropriate as primary VMT mitigation for a speculative industrial park because the project does not generate school trips or control K–12 or college travel behavior. These programs target student and parent travel to and from educational facilities and require coordination with school districts, campuses, and jurisdictions on bell schedules, attendance zones, and crossing improvements that are outside the applicant's authority and timeline. Industrial shift times and secure site design further limit any interaction with school commute windows, and unknown future tenants prevent durable commitments tied to specific schools or student populations. From a CEQA standpoint, nexus, proportionality, and implementability are weak where measures depend on third party institutions and off site right of way changes.

Accordingly, VMT mitigation should focus on measures within project control and scale, such as employee-oriented transportation demand management, first and last mile access support, and fair share participation in qualified jurisdictional programs with a direct connection to employee commute. For the purposes of this evaluation, the measures listed within the Trip Reduction Programs subsector that are focused on reducing employee commute VMT would be most applicable to the Project's employment generating land uses.

Trip Reduction Programs Subsector (T-5 through T-13, T-23, T-38 though T-39, T-41 through T-42)

Each fact sheet within the Trip Reduction Programs subsector was reviewed to determine each measure's applicability to the Project.

The following explores all applicable mitigation measures for an employment project located in a suburban area. The quantification below assumes that potential future tenants implement the identified measures using default values supplied by the Handbook's calculation fact sheet. Generally, trip reduction programs are more appropriate for the occupant/tenant (i.e., employer) to implement and monitor rather than the building owner or developer. As such, any VMT reductions are estimates only, as the Project does not have known tenants.

The City's VMT threshold is based on total VMT per service population, which includes all trip types, not just commute trips. However, the following VMT mitigation measures are designed to reduce home-based work (HBW) VMT only.

For industrial projects, where non-work trips (e.g., truck, visitor, and delivery trips) make up a significant portion of total VMT, these HBW focused measures may have limited effectiveness. As a result, even with mitigation, it can be challenging for an industrial project to reduce total VMT enough to meet the City's threshold.

T-5 Implement Commute Trip Reduction Program (Voluntary)

This measure will implement a voluntary commute trip reduction (CTR) program with employers. CTR programs discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT.

The Project will incorporate an employer based trip reduction program consistent with CAPCOA Measure T-5. This program is expected to include a package of strategies such as commuter information, carpool and vanpool support, and promotion of transit, walking, and bicycling for appropriate trips. These elements are intended to reduce drive alone commute and mid day trips and therefore reduce project generated VMT compared to a similar industrial project without such a program.

Within the CAPCOA framework, T-5 is mutually exclusive with other measures in the same trip reduction program subsector to avoid double counting the same behavioral effects. To maintain a conservative analysis and avoid overlap with other applied measures, this study does not take a separate quantitative VMT reduction credit for T-5. Instead, the employer based trip reduction program is acknowledged qualitatively as supporting the Project's overall VMT reduction strategy.

T-7 Implement Commute Trip Reduction (CTR) Marketing

Future project employers shall implement a marketing strategy to promote a CTR program. Information sharing and marketing promote and educate employees about their travel choices to the employment location beyond single occupancy driving such as carpooling, taking transit, walking, and biking, thereby reducing VMT. The following features (or similar alternatives) of the marketing strategy are essential for effectiveness.

- On-site or online commuter information services.
- Employee transportation coordinators.
- On-site or online transit pass sales.
- Guaranteed ride home service.

TABLE 5: T-7 VMT CALCULATION VARIABLES

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from project/site employee commute VMT	0-4.0	%	calculated
User Inputs				
B	Percent of employees eligible for program	0-100	%	user input
Constants, Assumptions, and Available Defaults				
C	Percent reduction in employee commute vehicle trips	-4	%	TRB 2010
D	Adjustment from vehicle trips to VMT	1	unitless	assumed

$$A = B \times C \times D$$

Project employers will provide their employees with materials and online resources as a means to promote the commute trip reduction program. As calculated for the Project, with proper

implementation and 90%[3] of the Project's employees eligible, this design feature is expected to reduce home-based work (HBW) attraction VMT by 3.6%.

T-8 Provide Ridesharing Program

The Project will provide a ridesharing program and establish a permanent transportation management association with funding requirements for employers. Ridesharing encourages carpooled vehicle trips in place of single-occupied vehicle trips, thereby reducing the number of trips and VMT. Ridesharing must be promoted through a multifaceted approach. Examples include the following.

- Designating a certain percentage of desirable parking spaces for ridesharing vehicles.
- Designating adequate passenger loading and unloading and waiting areas for ridesharing vehicles.
- Providing an app or website for coordinating rides.

TABLE 6: T-8 VMT CALCULATION VARIABLES

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from project/site employee commute VMT	0-8.0	%	calculated
User Inputs				
B	Percent of employees eligible for program	0-100	%	user input
Constants, Assumptions, and Available Defaults				
C	Percent reduction in employee commute VMT	-4	%	SANDAG 2019

$$A = B \times C$$

As calculated for the Project, with proper implementation and generally 90%[3] of the Project's employees eligible, the Project is expected to reduce commute VMT by 3.6%.

T-10 Provide End-of-Trip Bicycle Facilities

This measure is listed in the Handbook as available to projects in a suburban setting. As described in the Handbook, "the measure will install and maintain end-of-trip facilities for employee use. End-of-trip facilities include bike parking, bike lockers, showers, and personal lockers. The provision and maintenance of secure bike parking and related facilities encourages commuting by bicycle, thereby reducing VMT and GHG emissions."[4] The fact sheet for this measure was utilized to calculate the Project's potential VMT reduction.

[3] Employees who might not be able to participate could include those who work nighttime hours when transit and rideshare services are not available or employees who are required to drive to work as part of their job duties. As the Project is estimated to operate during typical business hours, it is expected that 90% of the employees will be operating during hours in which services associated with reduction measures are available.

[4] Handbook, Page 100

TABLE 7: T-10 VMT CALCULATION VARIABLES

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from project/site employee commute VMT	0.1-4.4	%	calculated
User Inputs				
	None			
Constants, Assumptions, and Available Defaults				
B	Bike mode adjustment factor	1.78 or 4.86[1]	unitless	Buehler 2012
C	Existing bicycle trip length for all trips in region	2.2	miles	FHWA 2017a
D	Existing vehicle trip length for all trips in region	11.7	miles	FHWA 2017a
E	Existing bicycle mode share for work trips in region	0.4	%	FHWA 2017b
F	Existing vehicle mode share for work trips in region	95.3	%	FHWA 2017b

[1]The bike mode adjustment factor should be provided by the user based on type of bike facility. A study found that commuters with showers, lockers, and bike parking at work are associated with 4.86 times greater likelihood to commute by bicycle when compared to individuals without any bicycle facilities at work. Individuals with bike parking, but no showers and lockers at the workplace, are associated with 1.78 times greater likelihood to cycle to work than those without trip-end facilities.

$$A = \frac{C \times \left(E - (B \times E)\right)}{D \times F}$$

This will promote an alternative mode of commuting for employees. As calculated, the Project will reduce VMT by 0.1%.

TOTAL VMT REDUCTIONS

The Handbook states that effectiveness levels for multiple measures within a subsector may be multiplied to determine a combined effectiveness level. Because the combination of measures and independence of measures are complicated, the Handbook recommends that measure reductions within a subsector be multiplied unless the user can provide substantial evidence indicating that emission reductions are independent of one another and that they should therefore be added. Each subsector has a maximum allowable reduction. These were derived by combining the maximum allowable reduction of each individual non-mutually-exclusive measure within the subsector. As all the Project Design Features above fall under the Subsector of "Trip Reduction Programs," the Handbook states that the "Trip Reduction Subsector" has a maximum reduction of 45%. Therefore, a project cannot exceed the maximum allowable reduction. The Handbook provides the following equation for combining Subsector reductions:

$$Reduction_{Subsector} = 1 - [(1 - A) \times (1 - B) \times (1 - C) \dots]$$

Project's VMT reduction are as follows:

$$-7.2\% = 1 - [(1 - 3.6\%) \times (1 - 3.6\%) \times (1 - 0.1\%)]$$

As outlined in the VMT reduction calculations, the Project includes a mitigation measure estimated to reduce its HBW VMT (commute-related VMT) by 7.2%. However, the City of Ontario assesses VMT significance using the OD method, which considers all trip types and does not isolate trip purposes like HBW. Therefore, the 7.2% reduction applies only to a portion of the Project's total VMT and is not sufficient to fully mitigate the overall impact. This reduction was applied specifically to the HBW attraction VMT based on data presented by the Project's Project-Level VMT Assessment prepared by Fehr & Peers (VMT Analysis), resulting in an overall 4.8% decrease in the Project's total VMT. As calculated from the VMT Analysis, in order to meet the City's significance threshold, a total VMT reduction of 54.1% would be required. As such, even with the VMT reduction achieved by implementing the measures discussed previously, the Project would continue to exceed the City's VMT threshold

If you have any questions, please contact me directly at aso@urbanxroads.com.

REFERENCES

1. **City of Ontario.** *The City of Ontario Resolution No. 2020-071.* City of Ontario : s.n., June 2020.
2. **CAPCOA.** *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity.* October 2024.

ATTACHMENT A:
MITIGATION MATRIX

Subsector	Measure ID	Measure	Plan or Project Level Application	Applicable Locational Context	CAPCOA Quantifiable	Applicability to Project
Land Use	**T-33**	**Locate Project near Bike Path/Bike Lane:** This measure requires projects to be located within 0.5-mile bicycling distance to an existing Class I or IV path or Class II bike lane. A project that is designed around an existing or planned bicycle facility encourages sustainable mode use. The project design should include a comparable network that connects the project uses to the existing off-site facilities that connect to work/retail destinations. As an implementation consideration, projects should provide sufficient and convenient bicycle parking and long-term storage, ideally near the bike lane itself, for residents, employees, and visitors, and a bicycle repair station with tools and equipment. This measure can be implemented with Measure T-9.	Project	Urban, Suburban	No	**Feasible**
Trip Reduction Programs	**T-5**	**Implement Commute Trip Reduction Program (Voluntary):** This measure will implement a voluntary commute trip reduction (CTR) program with employers. CTR programs discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions.	Project	Urban, Suburban	Yes	**Feasible**
	T-7	**Implement Commute Trip Reduction Marketing:** This measure will implement a mandatory CTR program with employers. CTR programs discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions.	Project	Urban, Suburban	Yes	**Feasible**
	T-8	**Provide Ridesharing Program:** This measure will implement a ridesharing program and establish a permanent transportation management association with funding requirements for employers. Ridesharing encourages carpooled vehicle trips in place of single-occupied vehicle trips, thereby reducing the number of trips, VMT, and GHG emissions.	Project	Urban, Suburban	Yes	**Feasible**
	T-10	**Provide End-of-Trip Bicycle Facilities:** This measure will install and maintain end-of-trip facilities for employee use. End-of-trip facilities include bike parking, bike lockers, showers, and personal lockers. The provision and maintenance of secure bike parking and related facilities encourages commuting by bicycle, thereby reducing VMT and GHG emissions.	Project	Urban, Suburban	Yes	**Feasible**
Neighborhood Design	**T-18**	**Provide Pedestrian Network Improvement:** This measure will increase the sidewalk coverage to improve pedestrian access. Providing sidewalks and an enhanced pedestrian network encourages people to walk instead of drive. This mode shift results in a reduction in VMT and GHG emissions.	Plan	Urban, Suburban, Rural	Yes	**Feasible**
	T-19-A	**Construct or Improve Bike Facility:** This measure will construct or improve a single bicycle lane facility (only Class I, II, or IV) that connects to a larger existing bikeway network. Providing bicycle infrastructure helps to improve biking conditions within an area. This encourages a mode shift on the roadway parallel to the bicycle facility from vehicles to bicycles, displacing VMT and thus reducing GHG emissions. When constructing or improving a bicycle facility, a best practice is to consider local or state bike lane width standards. A variation of this measure is provided as T-19-B, Construct or Improve Bike Boulevard.	Plan	Urban, Suburban	Yes	**Feasible**
Transit	**T-25**	**Extend Transit Network Coverage:** This measure will expand the local transit network by either adding or modifying existing transit service or extending the operation hours to enhance the service near the project site. Starting services earlier in the morning and/or extending services to late-night hours can accommodate the commuting times of alternative-shift workers. This will encourage the use of transit and therefore reduce VMT and associated GHG emissions.	Plan	Urban, Suburban	Yes	**Feasible**