

APPENDIX E

TRANSPORTATION DEMAND MANAGEMENT PLAN



Memorandum

Date: May 5, 2025
To: City of Fremont
From: Brett Walinski, T.E.
Subject: TDM Plan for the Proposed 43800 Osgood Road Industrial Use

Hexagon Transportation Consultants, Inc. has completed this Transportation Demand Management (TDM) Plan for the proposed Industrial use at 43800 Osgood Road in Fremont, California. This TDM Plan is intended to ensure the project contributes to regional mobility goals by reducing single-occupancy vehicle trips and encouraging alternative transportation modes.

The project, as proposed, would convert an existing vacant 143,815 square foot retail building and add a 6,000-square-foot mezzanine level, creating a total of 149,815 square feet of industrial space. Access to the site would be provided via two existing driveways on Osgood Road. The site location is shown on Figure 1. The site plan is shown on Figure 2.

Scope of Plan

This plan was developed in accordance with the City of Fremont municipal code Section 10.20.030, Trip Reduction and Transportation Demand Management ordinance, which requires the adoption of a TDM Plan for new developments.

Section 18.50.050(h) of the Fremont Municipal Code, titled Transportation Demand Management (TDM), states: *Permit approvals for new and expanding developments shall include measures to promote usage of alternatives to automobile travel. The goal is to reduce total vehicle trips and vehicle trips during peak hours by a minimum of 20 percent through site design measures to support enhanced transit ridership, biking, and walking. Periodic review of TDM measures shall also be required as part of the permit approval.*

The effects of the project and the proposed TDM measures were evaluated for daily and weekday AM and PM peak-hour traffic conditions. The AM and PM peak hours are typically from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM, respectively. These are the periods that the most congested traffic conditions occur on an average weekday.

Project Trip Generation

The City of Fremont requires that each project shall incorporate measures to meet vehicle trip generation rates that are twenty percent (20%) lower than the standard rates as established in the most recent edition of the ITE *Trip Generation Manual*. This plan has been prepared with the goal of achieving at least a 20 percent reduction in project trips.

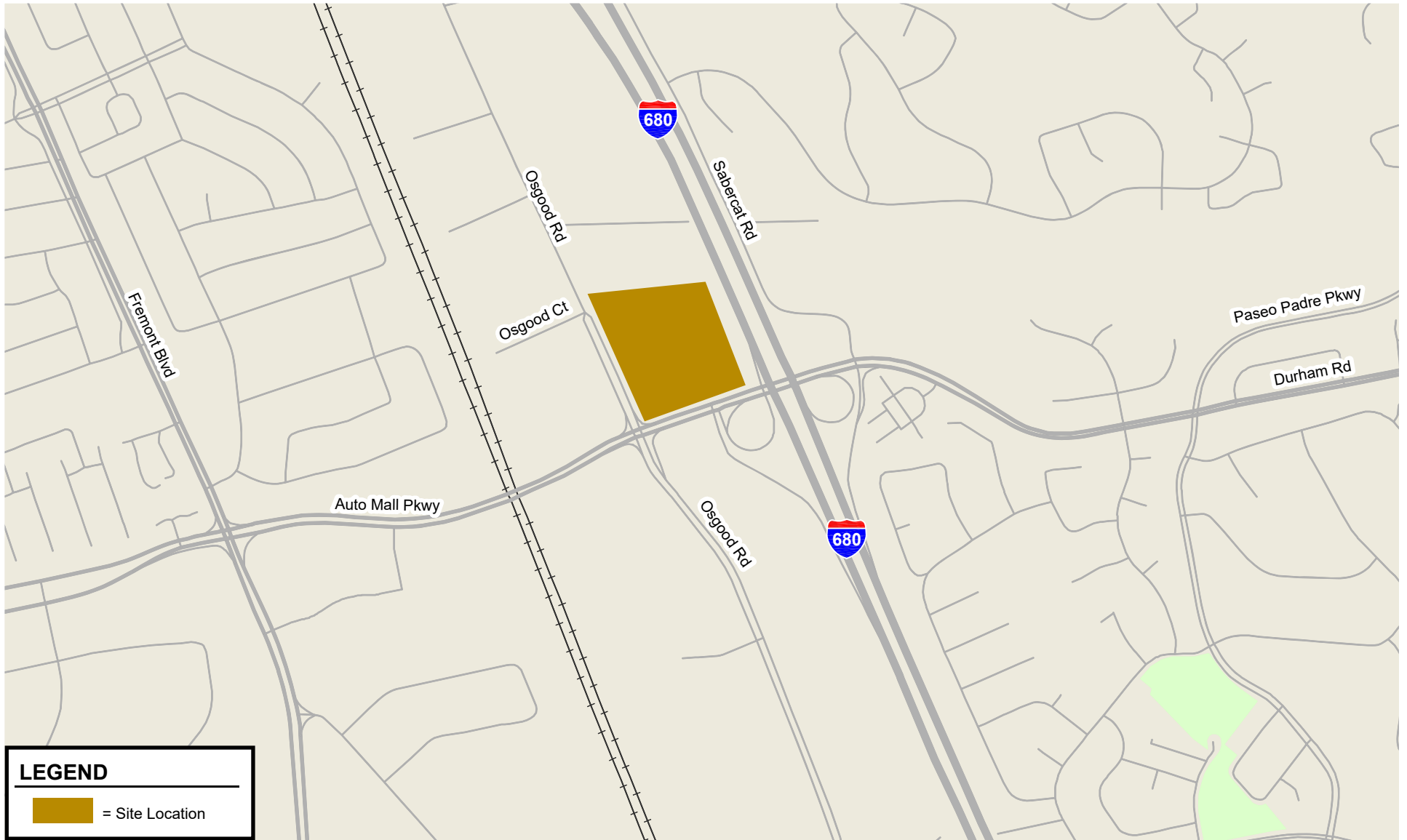


Figure 1
Site Location

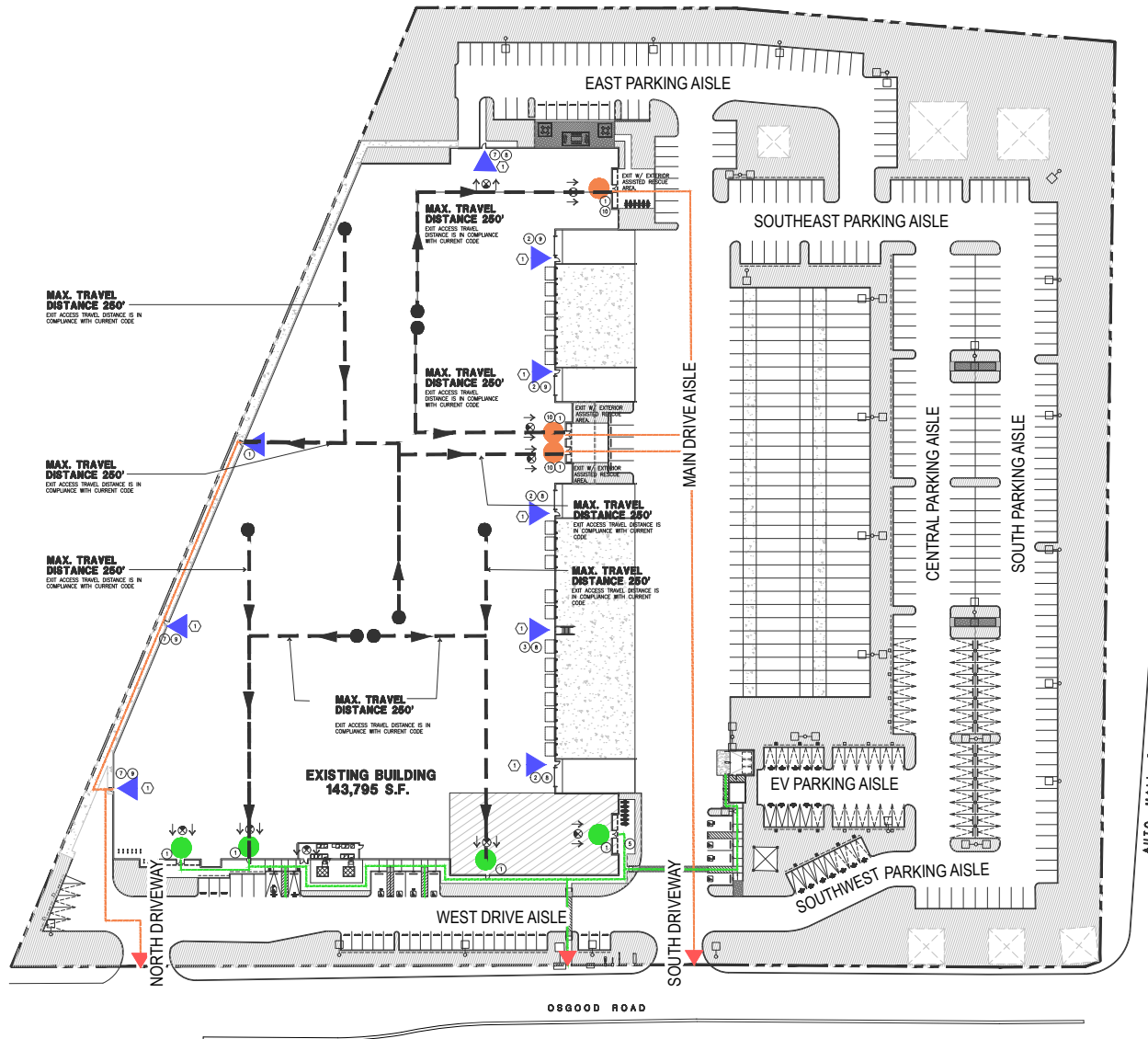


Figure 2
Site Plan

Consistent with the project’s local transportation analysis (LTA), the trip generation rates published in the Institute of Transportation Engineers’ (ITE) manual entitled *Trip Generation, 11th Edition (2021)* for High Cube Fulfillment Center - Sort (land use code 155) were used for this plan. Before TDM reductions, the proposed project is estimated to generate a total of 965 daily trips (passenger-car equivalent trips) with 131 trips during the AM peak hour and 180 trips during the PM peak hour.

As shown in Table 1, in order to meet the City’s 20 percent trip reduction requirement, the project should aim to generate a maximum of 778 daily trips, including 105 AM peak hour trips and 145 PM peak hour trips.

Note that the 20 percent reduction was not applied to trucks (heavy vehicles). The project would generate both truck trips and auto trips. For the purpose of the TDM Plan, it is assumed that heavy-vehicles are not subject to the 20 percent trip reduction requirement. That heavy vehicles warrant special consideration is supported by the fact that the federal government, under the Commerce Clause of the United States Constitution, regulates and protects interstate commerce and related heavy vehicle traffic. In addition, TDM measures are typically targeted toward reducing employee-related trips.

**Table 1
Project Trip Generation Estimates**

	Size	Daily		AM Peak Hour			PM Peak Hour				
		Rate	Trips	Rate	In	Out	Total	Rate	In	Out	Total
Gross Project Trips ¹	149,815 sf	6.44	965	0.87	106	25	131	1.20	70	110	180
Passenger vehicles (A)		6.25	936	0.85	104	24	128	1.18	69	108	177
20% Trip Reduction ² (B)			187		21	5	26		14	22	35
Trucks ³ (C)		0.19	28	0.02	2	1	3	0.02	1	2	3
Net Project Trips⁴ = (A)-(B)+(C)			778		85	20	105		56	88	145

¹ Trip generation based on average rates contained in the *ITE Trip Generation Manual, 11th Edition*, for High Cube Fulfillment Center Warehouse-Sort (Land Use Code 155).
² City of Fremont TDM trip reduction goal of 20 percent, applied to passenger vehicles.
³ Truck trip generation based on truck data plots in the *ITE Trip Generation Manual, 11th Edition*, for High Cube Fulfillment Center Warehouse-Sort (Land Use Code 155). Note that the 20 percent TDM trip reduction does not apply to (large) trucks.
⁴ Project Trips after TDM trip reduction.
 Note: numbers may not add due to rounding.

Existing Transportation Setting

The project is located in an area with existing transportation infrastructure that can support multimodal travel, including bicycle facilities on Osgood Road and Auto Mall Parkway, nearby transit service via AC Transit, and access to the regional BART system. The existing transportation infrastructure in the immediate vicinity of the site is described below.

Bicycle Network

The bicycle facilities in the City of Fremont are identified and described in the *Fremont Bicycle Master Plan, 2018*. The bicycle facilities in the immediate project study area are described as follows.

- Osgood Road has existing Class II bike lanes intermittent with Class II buffered bike lanes north of Auto Mall Parkway. Along the site frontage are existing Class II buffered bike lanes northbound and a Class III bike route southbound. There are existing Class II buffered bike lanes on southbound Osgood Road north of Osgood Court. The City's master bike plan shows Osgood Road to have future Class II buffered bike lanes along the entire segment north of Auto Mall Parkway. South of Auto Mall Parkway, Osgood Road has existing Class II buffered bike lanes in both directions.
- Auto Mall Parkway has existing Class II bike lanes west of Osgood Road, but is to be upgraded to a Class IV separated bikeway from west of Osgood Road to the I-680 overcrossing east of Osgood Road.
- The East Bay Greenway Trail is a north-south multi-use path that passes through the study area approximately 0.15 miles west of the site. The trail/path follows the UPRR alignment from north of Auto Mall Parkway to the Warm Springs BART station south of Grimmer Boulevard.



The existing bicycle network is shown on Figure 3.

Pedestrian Facilities

Both Osgood Road and Auto Mall Parkway have sidewalks in the vicinity of the site, with the following exceptions. There is no sidewalk on the north side of Auto Mall Parkway between Osgood Road and the I-680 overcrossing, and no sidewalk on the south side of Auto Mall Parkway between Fremont Boulevard and Hugo Terrace. There is no sidewalk on the south side of Auto Mall Parkway between the southbound loop off-ramp and the I-680 overcrossing. However, there are sidewalks on both sides of the I-680 overcrossing.

At the signalized intersection of Auto Mall Parkway and Osgood Road there are crosswalks on all approaches except the east approach. The northeast corner of the intersection has no ADA ramp or pedestrian-actuated signal phase for the east approach.



There are no crosswalks, ADA curb ramps or pedestrian actuated signal phases at the signalized intersection of Auto Mall Parkway and the southbound I-680 loop off ramp.

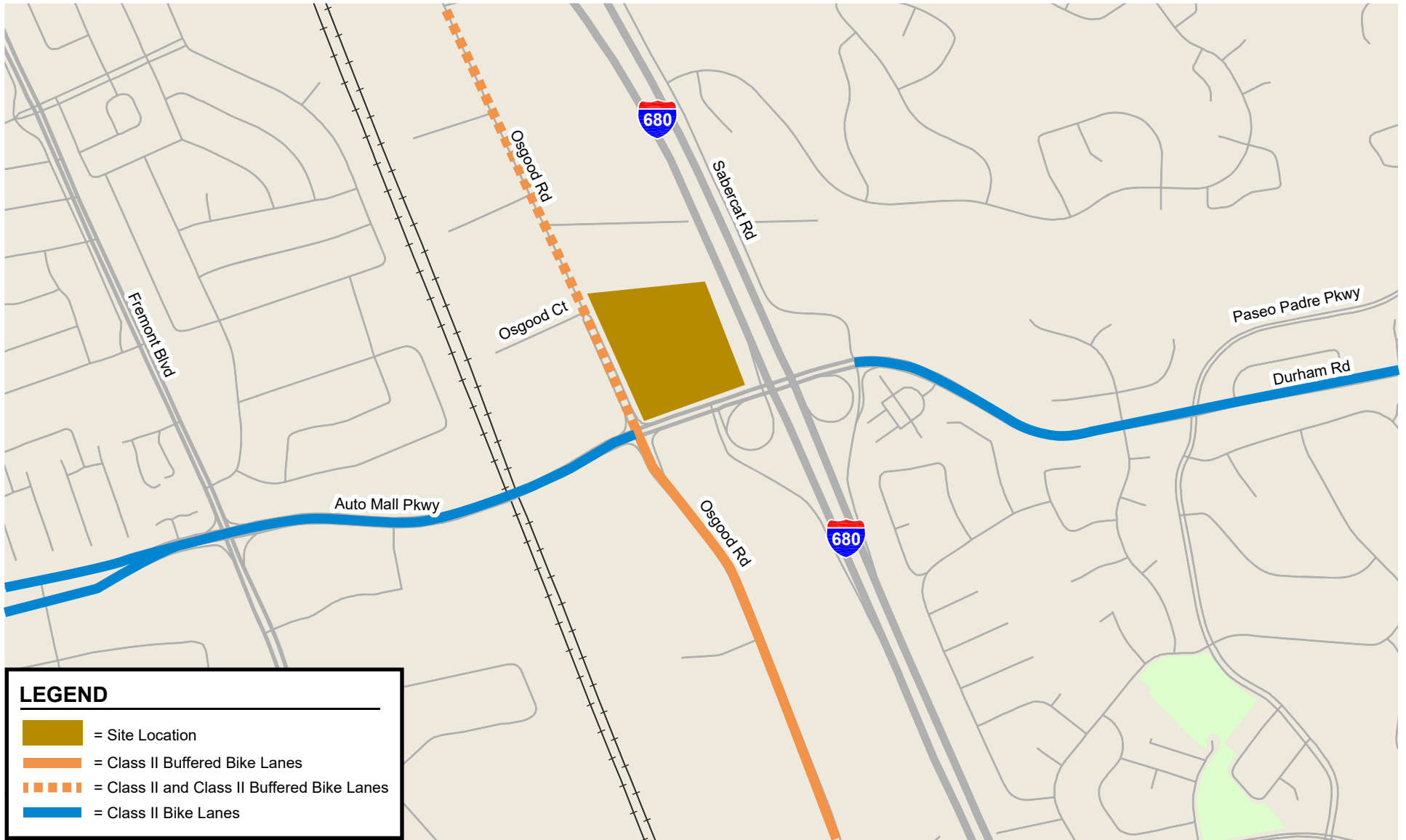


Figure 3
Existing Bicycle Network

The planned East Bay Greenway Trail passes through the study area. According to the Warm Springs Community Plan, the multi-use trail (also called a Class I shared-use path) follows the UPRR alignment from north of Auto Mall Parkway to the Warm Springs BART station south of Grimmer Boulevard.

Pedestrian facilities in the vicinity of the site are shown on Figure 4.

Transit Service

Transit service to the area is provided by AC Transit and BART. The bus routes nearest the site are AC Transit Lines 215 and 623.

AC Transit Line 215 connects the Fremont BART station to the intersection at Warren Avenue and Kato Road, via Osgood Road. The nearest bus stops are located directly fronting the site (northbound bus) and directly across the street from the site (southbound bus).

AC Transit Line 623 provides service between Irvington High School/Horner Middle School (both near Grimmer Boulevard and Blacow Road) and the intersection of Warm Springs Boulevard and Dixon Landing Road, via Auto Mall Parkway. Since Line 623 provides school service only, the line is not expected to serve the site.



Rail service is provided by BART. The BART station nearest the site is the Warm Springs/South Fremont station located south of the project site approximately 0.85 miles. It is accessible via Line 215. Trains run every 15 minutes on weekdays and every 20 minutes on weekends and holidays. BART has plans to construct a new infill station—the Irvington Station—located southwest of the Washington Boulevard & Osgood Road intersection approximately one and one-quarter miles north of the project site. The station is scheduled to open in 2026.

The bus routes that provide service near the project site are described in Table 2 and shown on Figure 5.

**Table 2
Existing Bus Service**

Bus Route	Description	Operating Hours	Peak-Hour Headway	Closest Bus Stop	Walk Distance to Site
AC Transit 215	Fremont BART and Warren Ave/Kato Rd via Osgood Road	6:30 am to 10:00 pm	60 minutes	Osgood Road fronting site	0.0 miles
AC Transit 623 ^a	Irvington HS/Horner Middle School to Warm Springs Blvd/Dixon Landing Road via Auto Mall Parkway	7:15 am to 8:00 am northbound, 1:30 pm to 4:00 pm southbound	3 minutes and 60 minutes	Auto Mall Pkwy west of Osgood Road	700 feet

^a Line 623 provides school bus service only. Does not operate during peak (commute) hours.

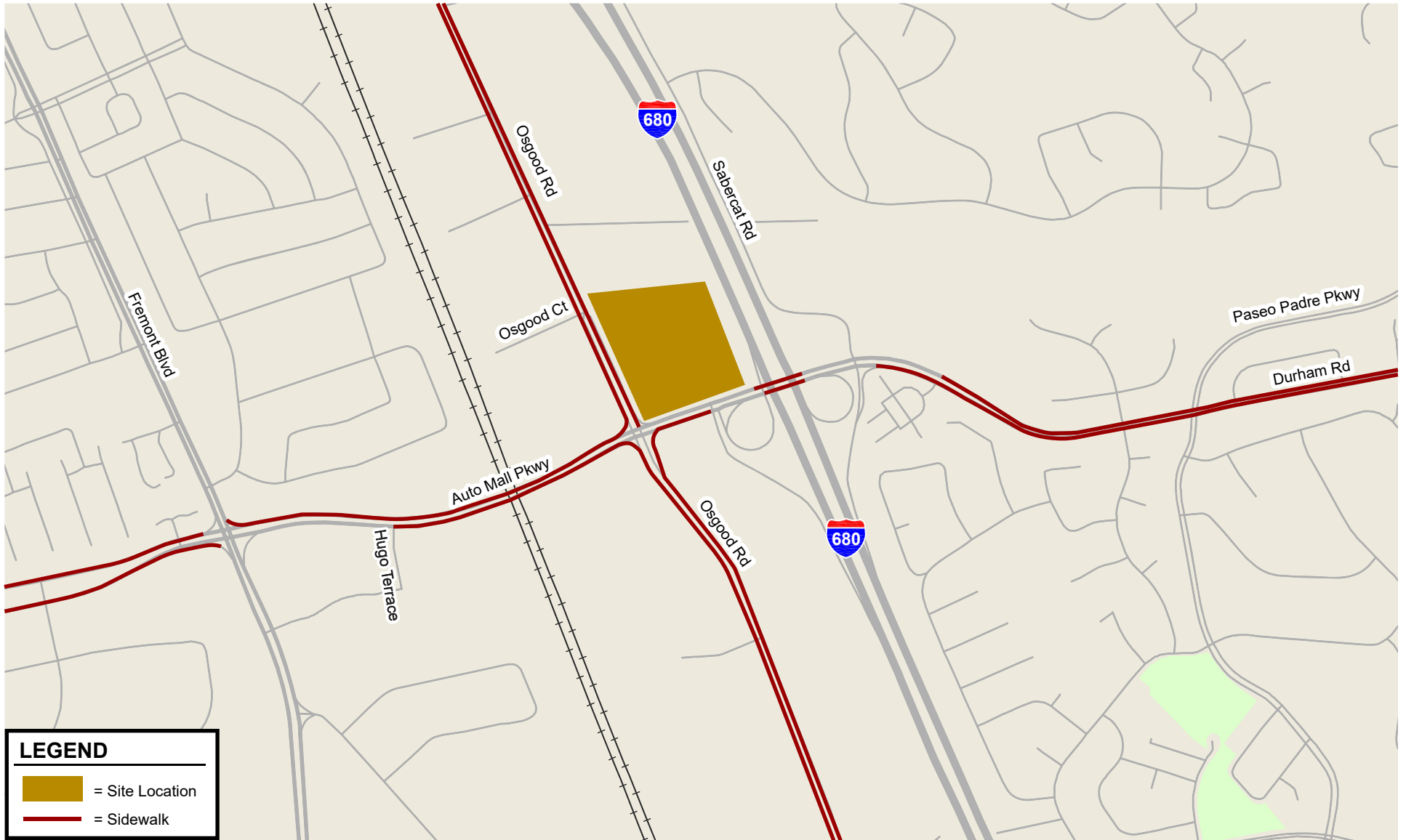


Figure 4
Existing Pedestrian Facilities

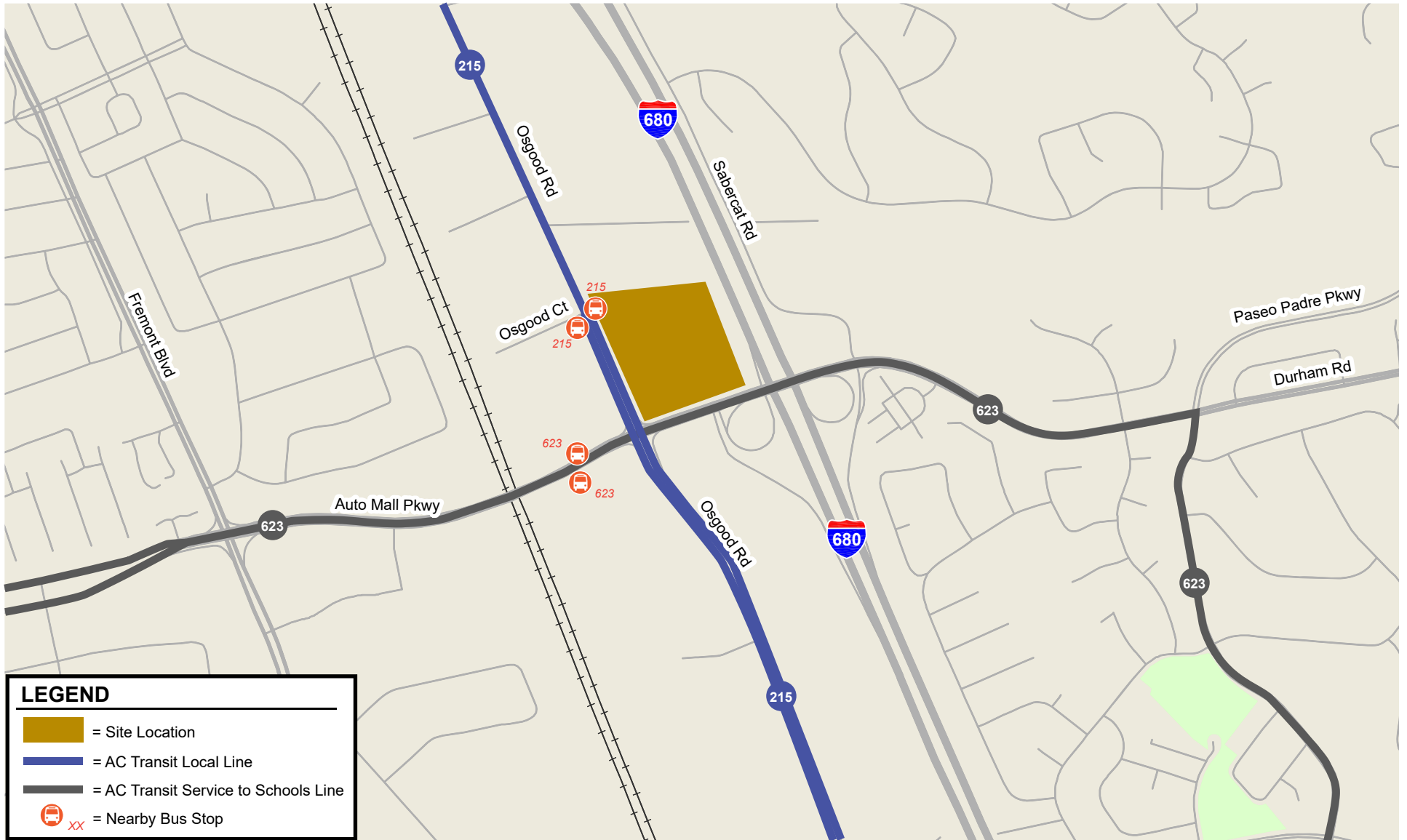


Figure 5
Existing Transit Service

Proposed TDM Measures

The TDM measures available to the project were identified using the Alameda CTC VMT Reduction Calculator Tool. The Tool was employed in the project's VMT analysis. In that report, VMT reduction strategies were identified that could reduce the project VMT to a level that meets the City's VMT reduction requirements. Although the focus of the VMT Reduction Calculator Tool is reduction in VMT, many of those same reduction measures would also reduce the number of project trips. Accordingly, the Tool was used for this TDM Plan to identify the measures that could, alone or in combination, allow the project to meet the City's TDM goal of a 20 percent reduction in project trips.

Because the project is to be built on spec, it is not known exactly which trip reduction measures would be most suitable for the eventual use. The measures described below are some of the trip-reduction measures applicable to the range of potential uses on-site (within the broader industrial use designation). The eventual project tenant will select the measures necessary to meet the City's 20 percent trip reduction goal, whether or not they are listed in this preliminary document, and update this TDM plan as appropriate. Thus, the measures listed below are potential and the end user will have flexibility to select different measures.

Since the project is an industrial use, TDM measures are targeted toward employees (the project will employ approximately 150 to 200 workers). Below is an array of measures from which the tenant/developer could choose, in coordination with the City.

Price Workplace Parking

This strategy would condition the development to charge employees for parking on-site at above market rates. Transportation or parking allowances by the employer, which would offset the cost of parking, would be prohibited. This measure also requires educating existing employees about alternatives to driving. The parking pricing program would be implemented as follows:

- All employee parking spaces will be subject to a monthly fee of at least \$50
- The fee will be collected through payroll deduction
- Visitors and customers will be exempt from parking fees
- Clear signage will be posted explaining the parking program
- Revenues generated may be used to fund other TDM measures

TDM Coordinator

An individual may be designated to serve as a part-time TDM Coordinator. This individual will facilitate the TDM program, implement the tenant's TDM measures, and provide employees with information regarding alternative modes of transportation. The TDM Coordinator would provide the following services and functions:

- Set up and maintain an online transportation kiosk that includes links to transit and bike information
- Provide trip planning assistance to employees

- Submit annual TDM monitoring reports to the City

Online Transportation Kiosk

An online kiosk may be established with transportation information that members can access from their smart phones, their homes, or anywhere else, via an app and website. The kiosk will provide information about transportation alternatives and TDM programs in a single online location. The project developer or TDM Coordinator will have responsibility for setting up and maintaining this online information center. The online information center will include:

- A local bikeways map showing bicycle lanes, routes and paths and facility information about the bike parking, showers and lockers on-site
- An app or website for coordinating rides, such as 511 Rideshare, for info on alternatives to driving, carpooling and coordinating rides
- Information about services such as Uber, Lyft, and other on-demand transportation services
- Access to AC Transit and VTA routes and schedules and links to other transit services
- Information about and links to the BART schedules

Employer Carpool Program

The project may establish an on-site carpooling program for employees. It would include the following:

- An app or website for coordinating rides
- A ride-matching service to help employees find suitable carpool partners based on origin/destination locations and work schedules
- Preferential parking for carpoolers

Carpool parking spaces shall be located near building entrances and be clearly marked. The carpool program could include periodic promotions and contests to encourage participation.

Employer Vanpool Program

The employer will operate a vanpool funded by the employer. Based on the Alameda CTC VMT Reduction Calculator Tool, the employee participation rate is estimated at 2.7 percent for the project zone. With approximately 150 to 200 employees, this would equal approximately four to six employees participating, or one van.

The vanpool program will be structured as follows:

- The employer will lease or purchase appropriate vanpool vehicles
- The employer will cover the capital costs of the vehicles and maintenance
- Participants will pay a nominal fee that is significantly less than driving alone
- Vanpool routes will be established based on employee residential clustering

Bicycle Trip End Facilities

The project will provide both short-term bicycle parking (bike racks) and long-term bicycle parking. The array of bicycle trip-end facilities includes:

- Bicycle parking
- Showers
- Lockers
- Bicycle repair station (optional)



These features would encourage employees to bicycle to work, making bicycle commuting a more viable option.

The project plans show short-term bicycle parking (bike racks) to be located at the building entrance and at the southeast corner of the building. Long-term bicycle parking would be located at the northwest corner of the building, near the north site driveway.

Contingency Measures

If the annual monitoring report shows the site has not met its trip reduction goals, additional TDM measures shall be implemented. These additional (contingency) measures may include:

- Increased incentives and subsidies for alternative transportation modes
- Higher parking pricing to further discourage single-occupancy vehicle use
- Enhanced marketing and promotion of existing TDM programs
- Additional vanpools if demand warrants
- Guaranteed ride home program - employees who use alternative transportation modes would have access to a guaranteed ride home program for emergencies, paid for by the employer.

Implementation of these contingency measures would be determined based on the specific transportation needs identified in the monitoring reports and the preferences expressed by employees in surveys.

TDM Implementation, Monitoring, and Reporting

Section 18.50.050(h) of the Fremont Municipal Code requires regular monitoring of project traffic to ensure that the implemented TDM measures achieve the stated 20 percent trip reduction requirement. The program will be evaluated annually to assess the actual level of trip reduction achieved at the site.

Implementation

The project applicant along with the TDM coordinator will be responsible for implementation of the TDM plan. Implementation milestones may include:

- Designating a TDM Coordinator prior to occupancy
- Setting up the online transportation kiosk prior to occupancy
- Installing bicycle parking facilities prior to occupancy
- Implementing the parking pricing program from the first day of operation
- Establishing carpool/vanpool programs within three months of occupancy
- Creating and distributing employee information packages from the first day of hiring

The implementation timeline will be coordinated with the overall project development schedule to ensure that TDM measures are in place when the facility becomes operational. Note that the implementation milestones listed here will depend on the TDM measures that are selected by the ultimate project tenant. Thus, some of these milestones may not be applicable.

Monitoring

To comply with the City's TDM requirements, the project is required to demonstrate that it has achieved the 20 percent reduction. That would be determined by performing traffic counts at the site driveways and conducting employee surveys. For the TDM measures to be deemed effective, the monitoring effort must make a finding that trip generation from the site reflects the expected 20 percent reduction in project trips (i.e. total trips equal to or less than 778 daily trips, 105 AM peak hour trips and 145 PM peak hour trips).

Traffic Counts. Daily, AM and PM peak-hour trip generation must be measured at the site annually. Mechanical tube counts, hand counts, or video counts may be used. The counts will be conducted one day per year on a typical weekday (Tuesday, Wednesday, or Thursday), when school is in session, the weather is clear, and not during a week containing a holiday.

Questionnaire Surveys. Per Fremont City code Section 10.20.060(e), the TDM coordinator will conduct an annual written survey of all employees to determine the mode split and the effectiveness of the existing TDM measures.

Annual Report

The results of the TDM monitoring and assessment will be documented in an annual report for use in the City's annual review. The report will specify the data collected, the method and frequency of data collection, and the results of the member surveys, as applicable. The report will be submitted to the City by the TDM Coordinator. The City will review the data and methods and assess whether the goal of a 20 percent trip reduction is being met.

If the City determines that the trip reduction goal is not being achieved, additional TDM measures may be implemented. Modifications to the TDM plan may include additional programs or substitute activities for achieving vehicle trip reductions. The annual TDM monitoring report will describe any planned modifications to the TDM program intended to ensure compliance with the trip reduction targets established for this project. The report will also outline an implementation schedule.

Section 10.20.060 of the City of Fremont Municipal Code, Annual Evaluation and Plan Update, states: *Within 30 days of the anniversary of the previous year's plan implementation, or at some other time required by the city (not more often than once each year), submit an evaluation to the City of the previous year's activities and plans for the subsequent year. The evaluation will*

include, but not be limited to, all materials given to employees in the previous year and a description and schedule of contacts with employers. Plans for the following year will be based on the TDM Coordinator's analysis of the success of the previous year's efforts in encouraging the use of transportation alternatives and must be implemented within 30 days of submittal to the City unless the City determines that the plan requires revision.

Accordingly, the site TDM Coordinator will prepare and submit an annual report to the City describing the previous year's activities and plans for the subsequent year.

Conclusions

This Transportation Demand Management Plan for the proposed industrial use at 43800 Osgood Road provides a comprehensive approach to reducing single-occupancy vehicle trips. Through a combination of pricing strategies, commute programs, information resources, and physical improvements, the plan aims to achieve the City of Fremont's requirement of a 20 percent reduction in vehicle trips.

The plan relies on existing transportation infrastructure in the project area, including bicycle facilities, pedestrian connections, and transit services, while introducing additional elements such as carpool and vanpool programs, bicycle facilities, and financial incentives that will encourage employee use of alternative transportation modes. The mandatory monitoring and reporting requirements will ensure that the effectiveness of these measures is achieved and maintained, and that necessary adjustments are made to meet the established targets.

By implementing this TDM Plan, the project will contribute to the City of Fremont's transportation and environmental goals while providing future employees with an array of commute options that can reduce transportation costs and improve their commuting experience.