

## 4.12 TRANSPORTATION AND CIRCULATION

### 4.12.1 ENVIRONMENTAL SETTING

This section provides a discussion of the existing conditions related to transportation and traffic around and within the vicinity of the Project Site.

#### ROADWAY NETWORK

Regional and local roadways serving the Project Site are described below.

##### Regional Access

- ▶ I-680 is a freeway extending north to Fairfield and south to San Jose through Concord and Pleasanton. I-680 is accessible from the Project Site via SR-12 and I-80.
- ▶ I-80 is a freeway extending west to San Francisco via the Bay Bridge, and east through Berkeley and Sacramento, into Nevada and beyond. I-80 is accessible from the Project Site via SR-12.
- ▶ SR-12 is an east-west freeway directly north of the Project Site extending west to I-80 and east over the Sacramento River and beyond. There are two travel lanes in each direction in the Project study area. SR-12 can be accessed via Pennsylvania Avenue from the Project Site.

##### Local Access

- ▶ Pennsylvania Avenue is a north-south street along the eastern boundary of the Project Site, extending from I-80 to Cordelia Road and Cordelia Street. Pennsylvania provides one travel lane in each direction south of SR-12 and provides two travel lanes in each direction with a landscaped median north of SR-12. The proposed Project driveways would connect to Pennsylvania Avenue. The posted speed limit is 40 miles-per-hour (mph).
- ▶ Cordelia Road/Cordelia Street is an east-west street that extends from Main Street in Suisun City to I-680. Cordelia Street is east of Pennsylvania Avenue and Cordelia Road is west of Pennsylvania Avenue. Both Cordelia Road and Cordelia Street provide one travel lane in each direction. The posted speed limit is 45 mph.
- ▶ Beck Avenue is a north-south street west of the Project Site, extending from I-80 to Cordelia Road. Beck Avenue provides two travel lanes in each direction with a median north of the railroad line and one travel lane in each direction with a center left-turn lane south of the railroad. The posted speed limit is 40 mph.
- ▶ Chadbourne Road is a north-south street west of the Project Site, extending beyond the northern and southern boundaries of the city of Fairfield. Chadbourne Road provides two travel lanes in each direction with landscaped medians north of Cordelia Road and one travel lane in each direction south of Cordelia Road. The posted speed limit is 40 mph.
- ▶ West Texas Street is an east-west street north of the Project Site, extending from I-80 to Pennsylvania Avenue. West Texas Street becomes Texas Street east of Pennsylvania Ave and later turns into the north-south oriented North Texas Street. West Texas Street provides two travel lanes in each direction and a center two-way left-turn lane. The posted speed limit is 35 mph.

## TRANSIT SYSTEM

Transit service providers in the vicinity of the Project Site include Fairfield and Suisun Transit (FAST), Solano County Transit (SolTrans), and Amtrak. FAST provides local bus service in the city of Fairfield and the city of Suisun City. SolTrans provides intercity bus service. Amtrak provides regional rail service. Existing transit services near the Project Site are shown in Exhibit 4.12-2 and described below.

### Bus Services

FAST is the primary bus service provider in Fairfield and Suisun City with destinations throughout the two cities. Route 1, Route 5, and Route 7 operate in the vicinity of the Project Site. All three routes terminate at the Fairfield Transportation Center and have connecting services to SolanoExpress, SolTrans, and Amtrak. SolanoExpress Blue Line and Green Express Line and SolTrans Red Line provide express intercity and commuter bus service between Solano County and Contra Costa County. Table 4.12-1 summarizes the characteristics of the FAST and SolTrans routes operating in the Project area.

**Table 4.12-1. FAST and SolTrans Transit Routes in Project Vicinity of the Project Site**

Agency	Route	Type	Termini	Closest Stop	Hours of Operation <sup>1</sup>	Peak Frequency (Minutes)
FAST	1	Local	Fairfield Transportation Center to Fairfield Walmart	West Texas Street & Pennsylvania Avenue	Monday-Friday: 6:00 AM to 7:55 PM Saturday: 9:00 AM to 4:55 PM	30
FAST	5	Local	Fairfield Transportation Center to Suisun City Senior Center	Pennsylvania Avenue & Woolner Avenue	Monday-Friday: 5:30 AM to 7:40 PM Saturday: 9:30 AM to 4:20 PM	60
FAST	7	Local	Fairfield Transportation Center to Cordelia Library	Beck Avenue & Courage Drive	Monday-Friday: 6:00 AM to 6:55 PM Saturday: 10:00 AM to 4:20 PM	60
FAST (Solano Express)	Blue	Intercity/Commuter	Walnut Creek BART to Sacramento Valley Station	Fairfield Transportation Center	Monday-Friday: 4:20 AM to 8:30 PM Saturday: 7:55 AM to 7:50 PM	30
FAST (Solano Express)	Green Express	Intercity/Commuter	Suisun City/Fairfield Amtrak to El Cerrito del Norte BART	Fairfield Transportation Center	Monday-Friday: 4:10 AM to 8:55 PM	30

Agency	Route	Type	Termini	Closest Stop	Hours of Operation <sup>1</sup>	Peak Frequency (Minutes)
SolTrans	Red	Intercity/ Commuter	Suisun City/Fairfield to El Cerrito del Norte BART	Fairfield Transportation Center	Monday- Friday: 4:30 AM to 12:00 AM  Saturday: 7:00 AM to 10:00 PM  Sunday: 9:00 AM to 10:00 PM	60

Table Notes

1. Time rounded to 5 minutes.

Source: FAST Transit and SolTrans, accessed August 2021.

## Amtrak

Amtrak provides medium and long-distance intercity rail service throughout the contiguous United States. The Capitol Corridor route provides regional service from San Jose to Auburn-Conheim, passing through Suisun City with headways between 30 and 60 minutes. The nearest Amtrak station to the Project Site is the Suisun-Fairfield Train Station, located approximately 1.5 miles east of the Project Site at Main Street, south of SR-12.

## PEDESTRIAN NETWORK

Pedestrians facilities such as sidewalks, multi-use paved trails, and unpaved recreational trails are provided in the cities of Fairfield and Suisun City. Existing pedestrian facilities in the vicinity of the Project Site are shown on Exhibit 4.12-3. Continuous sidewalks are provided in developed areas of the cities. Pedestrian activity is concentrated primarily in the downtown area, particularly near the Suisun-Fairfield Train Station, shopping centers on Lotz Way and Sunset Avenue, and public facilities including schools and Suisun City Library. In 2020, there were 134 miles of sidewalk and approximately 173 miles of potential sidewalk coverage throughout the city. Crosswalks with pedestrian pushbuttons are provided at major signalized intersections. Pedestrians can also make use of paths adjacent to SR-12 around Suisun Slough Channel.

The developing area south of SR-12 between Hale Ranch Road and Pennsylvania Avenue have discontinuous pedestrian facilities. The Suisun City Active Transportation Plan and Fairfield Active Transportation Plan identified pedestrian facilities to close sidewalk gaps in this area. Specific locations within the vicinity of the Project Site include:

- ▶ Cordelia Street: 1.01-mile segment between Pennsylvania Avenue and Main Street
- ▶ SR-12: 0.17-mile segment between Marina Boulevard and Marina Center
- ▶ Pennsylvania Avenue: 0.44-mile segment between Empire Street and Kansas Street
- ▶ Cordelia Road: 3.13-mile segment between Hale Ranch Road and Pennsylvania Avenue

## **BICYCLE NETWORK**

Bicycle facilities are separated into four classes:

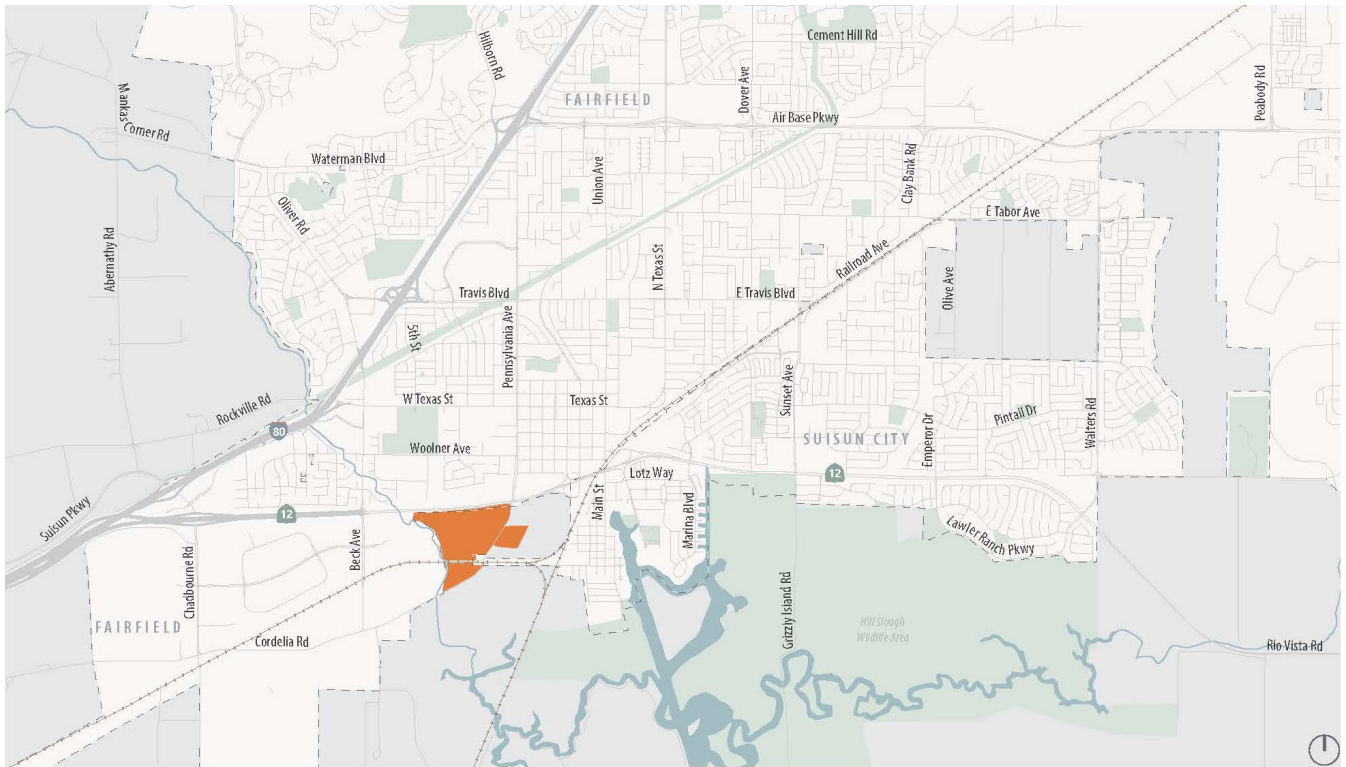
- ▶ Class I (Bicycle Path) facilities are located off-street and can serve both bicyclists and pedestrians.
- ▶ Class II (Bicycle Lanes) facilities provide dedicated space for bicyclists within the paved street width using striping and appropriate signage.
- ▶ Class III (Bicycle Routes) facilities are installed along streets that do not provide sufficient width for dedicated Class II bicycle lanes. The street is designated as a bicycle route, where bikes and cars share the road using on-street markings and signage, which inform drivers to expect bicyclists.
- ▶ Class IV (Cycletrack/Protected Bicycle Lanes) facilities are for the exclusive use of bicycles and require a vertical element that serves as a barrier separating the bikeway and adjacent vehicular traffic.

Suisun City Class I bicycle paths are provided adjacent to SR-12 between Main Street and Walters Road east of the Project Site. The facility north of SR-12 is called Central County Bikeway and the facility south of SR-12 is called Grizzly Island Trail. Another Class I facility is provided in Fairfield, the Fairfield Linear Park Trail, along I-80 between the Solano Community College to Travis Boulevard. Class II bicycle lanes are provided on Beck Avenue between Cadenasso Drive and SR-12. Class III bicycle facilities are provided on West Texas Street and North Texas Street. These facilities are within the vicinity of the Project Site but do not serve as direct routes to the Project Site as no bicycle facilities exist along the Project Site frontages. Exhibit 4.12-4 illustrates the existing and proposed bicycle facilities in the vicinity of the Project Site.

The Fairfield and Suisun City Active Transportation Plans propose the following bikeway projects in the Project area:

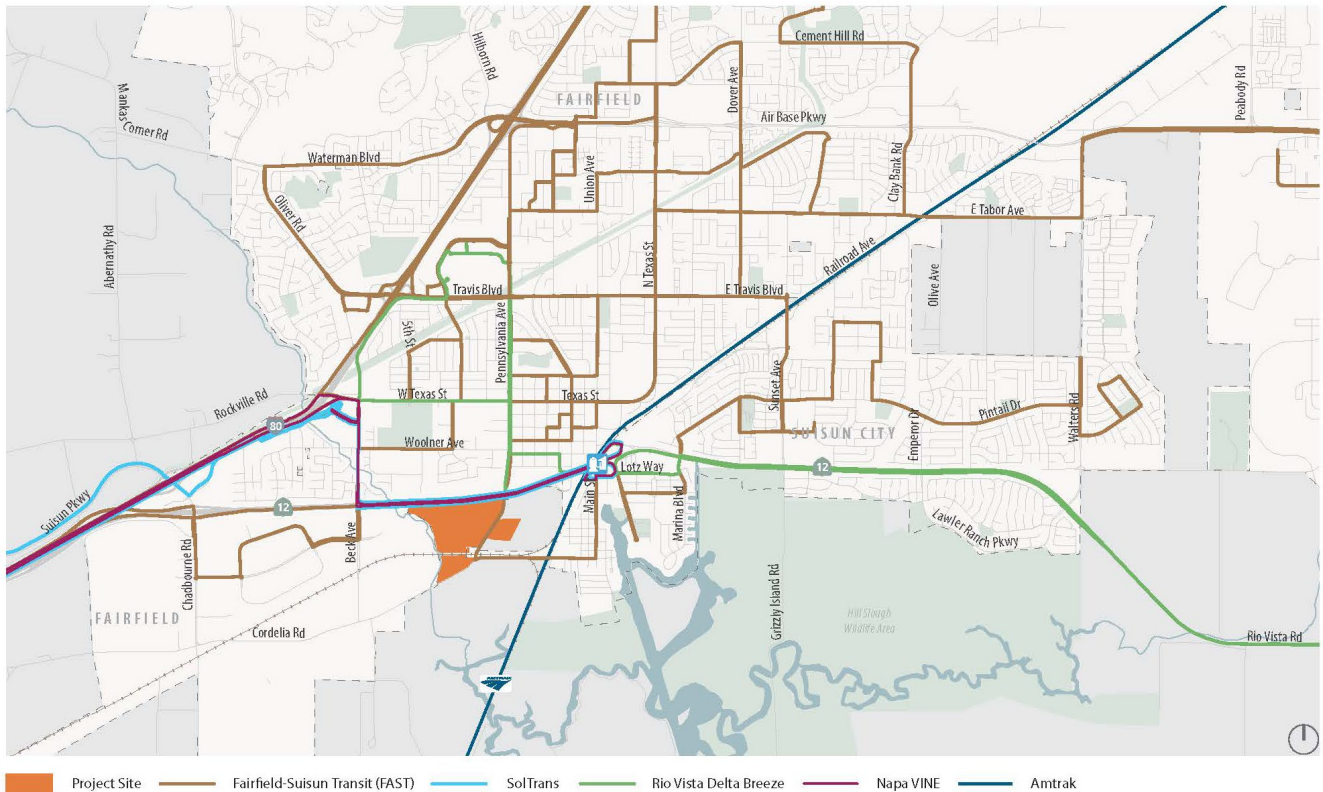
- ▶ Class I facilities
  - SR-12 between Beck Avenue and Illinois Street (Fairfield)
- ▶ Class II facilities
  - Main Street between Cordelia Street and the Central County Bikeway as part of the Downtown Access Bikeway project, including the removal of parking on one side of the street to close the gap to FAST Transit and Amtrak and to connect to one MTC Priority Development Area (Suisun City)
  - Pennsylvania Avenue between Woolner Avenue and West Texas Street (Fairfield)
  - Beck Avenue between SR-12 and California Northern Railroad (Fairfield)
  - Cordelia Road between Hale Ranch Road and Beck Avenue (Fairfield)
- ▶ Class III facilities
  - Cordelia Road between Beck Avenue and Pennsylvania Avenue (Fairfield)

- Cordelia Street between Pennsylvania Avenue and Waterfront Path (Suisun City)
  - West Texas Street between Pennsylvania Avenue and Jefferson Street (Fairfield)
  - Chadbourne Road between Fairfield Linear Park and Cordelia Road (Fairfield)
- ▶ Class IV facilities
- West Texas Street between Beck Avenue and Pennsylvania Avenue (Fairfield)



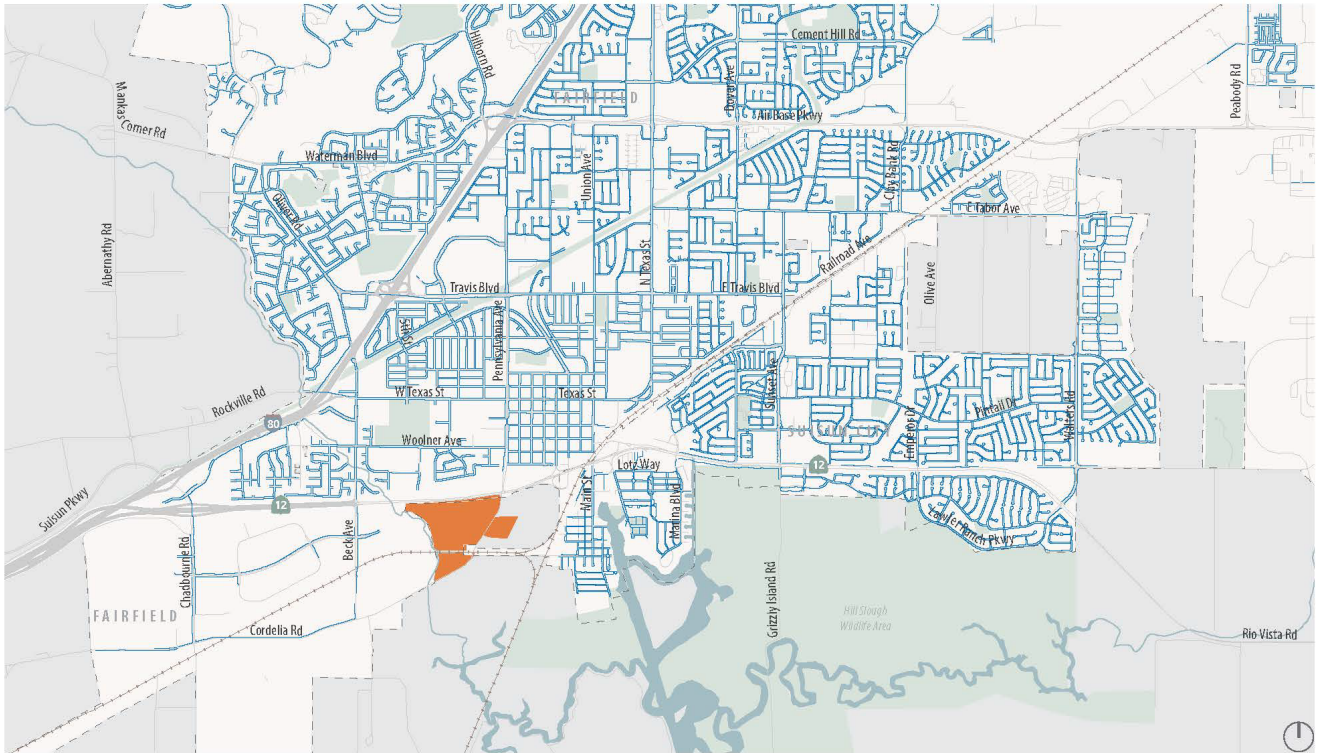
Source: Fehr & Peers

**Exhibit 4.12-1. Project Site Vicinity**



Source: FAST and SolTrans

**Exhibit 4.12-2. Existing Transit Services**

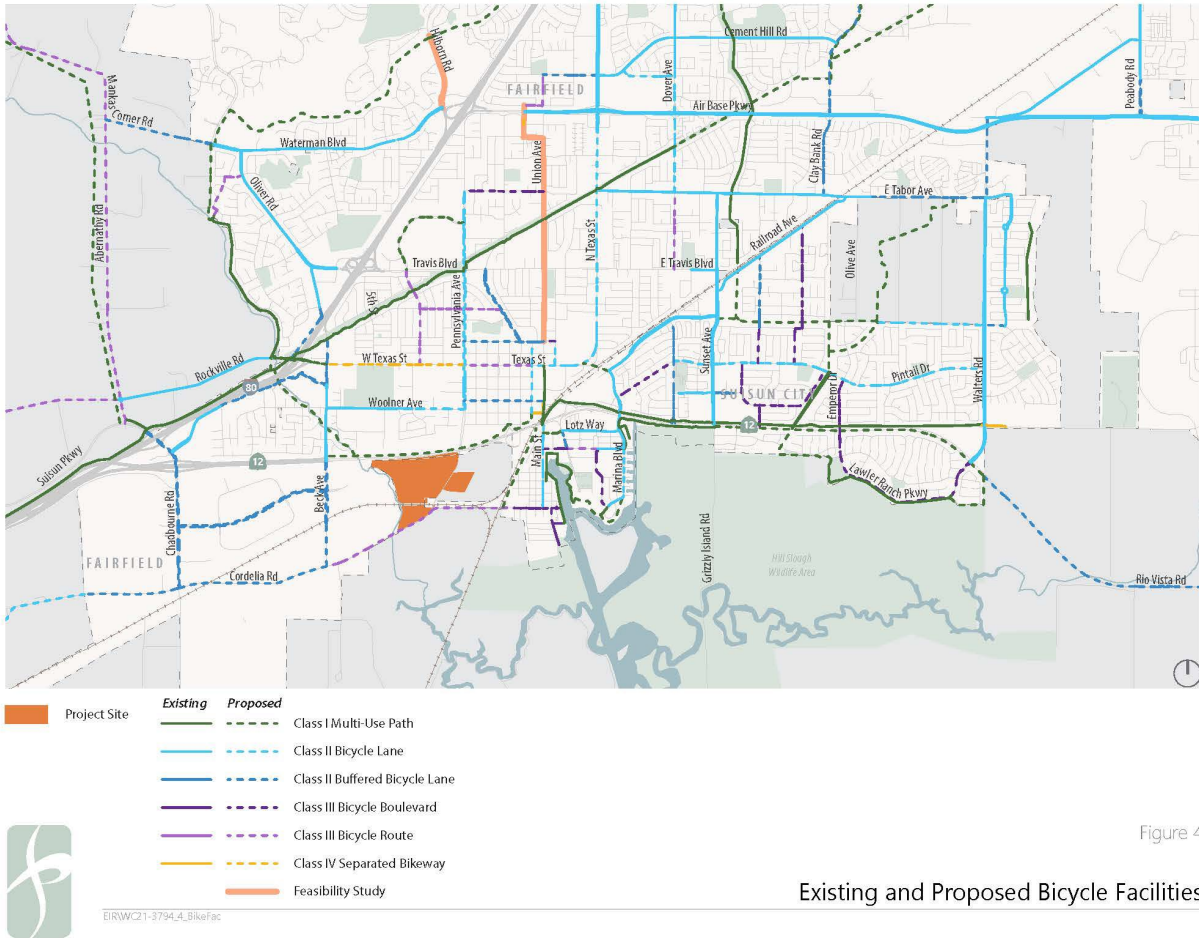


Project Site
  Existing Sidewalk

Source: Fehr & Peers

### Exhibit 4.12-3. Existing Pedestrian Facilities





Source: Suisun City General Plan, Suisun City Active Transportation Plan, City of Fairfield General Plan, and City of Fairfield Active Transportation Plan

**Exhibit 4.12-4. Existing and Planned Bicycle Network**



## **4.12.2 REGULATORY FRAMEWORK**

### **FEDERAL REGULATIONS**

#### **Americans with Disabilities Act of 1990**

The Americans with Disabilities Act of 1990 (revised 2010) is a landmark civil rights law that prohibits discrimination based upon disability. Titles I, II, III, and V of the act have been codified in Title 42 of the United States Code, beginning at Section 12101. Title III prohibits discrimination on the basis of disability in “places of public accommodation” (businesses and non-profit agencies that serve the public) and “commercial facilities” (other businesses). The regulation includes Appendix 4.13-A to Part 36 (Standards for Accessible Design), which establishes minimum standards for ensuring accessibility for persons with a disability when designing and constructing a new facility or altering an existing facility, including roadways, parking lots, and sidewalks. Examples of key guidelines include detectable warnings for pedestrians when entering traffic where there is no curb, a clear zone of 48 inches for the pedestrian travel way, and a vibration-free zone for pedestrians.

### **STATE REGULATIONS**

#### **California Department of Transportation**

Caltrans has authority over the State highway system, including freeways, interchanges, and arterial routes. Caltrans operates and maintains State highways in Suisun City and Fairfield. The Vehicle Miles Traveled-Focused Transportation Impact Study Guide (May 20, 2020) provides information that Caltrans used to review impacts on State highway facilities for consistency with Senate Bill (SB) 743.

#### ***State Transportation Improvement Program***

The California Transportation Commission administers transportation programming, which is the public decision-making process that sets priorities and funds projects that have been envisioned in long-range transportation plans. The California Transportation Commission commits expected revenues for transportation projects over a multi-year period. The State Transportation Improvement Program is a multi-year capital improvement program for transportation projects both on and off the State highway system. The State Transportation Improvement Program is funded with revenues from the State Highway Account and other funding sources. State Transportation Improvement Program programming typically occurs every two years.

#### ***California Transportation Plan 2050***

The California Transportation Plan 2050 was adopted in 2021. The plan, which is overseen by Caltrans, serves as a blueprint for California’s transportation system, as defined by goals, policies, and strategies to meet the State’s future mobility needs. The goals defined in the plan fall into three categories: social equity, prosperous economy, and quality environment. Each goal is tied to performance measures. In turn, members from regional and metropolitan planning agencies report these performance measures to Caltrans (State of California 2007).

### **ASSEMBLY BILL 32 (AB 32) AND SENATE BILL 375 (SB 375)**

With the passage of Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006, the State of California committed itself to reducing greenhouse gas (GHG) emissions to 1990 levels by 2020. The California Air

Resources Board (CARB) is coordinating a response to comply with AB 32. In 2008, CARB defined its 1990 baseline level of emissions. On December 11, 2008, CARB adopted its Proposed Scoping Plan for AB 32. This scoping plan included the approval of SB 375 as the means for achieving regional transportation-related GHG targets. In 2011, CARB completed its major rulemaking for reducing GHG emissions. Rules on emissions, as well as market-based mechanisms such as the cap-and-trade program, took effect on January 1, 2012.

SB 375 provides guidance regarding curbing emissions from cars and light trucks to help the State comply with AB 32. There are four major components to SB 375. First, SB 375 requires regional GHG emissions targets. CARB's Regional Targets Advisory Committee will guide the adoption of targets to be met by 2020 and 2035 for each Metropolitan Planning Organization (MPO) in the state. These targets, which MPOs may propose themselves, must be updated every eight years in conjunction with the revision schedule of the housing and transportation elements of local general plans. Second, MPOs are required to create a Sustainable Communities Strategy (SCS) that provides a plan for meeting regional targets. The SCS and the Regional Transportation Plan (RTP) must be consistent, including action items and financing decisions. If the SCS does not meet the regional target, the MPO must produce an Alternative Planning Strategy that details an alternative plan for meeting the target. Third, SB 375 requires regional housing elements and transportation plans to be synchronized on 8-year schedules. In addition, Regional Housing Needs Assessment allocation numbers must conform to the SCS. If local jurisdictions are required to rezone land as a result of changes in the housing element, rezoning must take place within three years of adoption of the housing element. Finally, MPOs must use transportation and air emissions modeling techniques that are consistent with the guidelines prepared by the California Transportation Commission. Regional Transportation Planning Agencies, cities, and counties are encouraged, but not required, to use travel demand models that are consistent with California Transportation Commission guidelines. The adopted RTP, per SB 375 (Plan Bay Area), is discussed below.

### **COMPLETE STREETS (AB 1358)**

AB 1358, also known as the California Complete Streets Act of 2008, requires cities and counties to include "complete street" policies in their general plans. These policies address the safe accommodation of all users, including bicyclists, pedestrians, motorists, public transit vehicles and riders, children, the elderly, and persons with disabilities. These policies can apply to new streets, as well as the redesign of corridors.

### **SENATE BILL 743 (SB 743)**

With the passage of SB 743 (September 27, 2013) and the subsequent adoption of the revised California Environmental Quality Act (CEQA) Guidelines (December 28, 2018), level of service (LOS) can no longer be used as a criterion for identifying significant transportation impacts for most projects under CEQA effective July 1, 2020. LOS measures the average amount of delay experienced by vehicle drivers at an intersection during the most congested time of day, while the new metric VMT measures the total number of daily miles traveled by vehicles on the roadway network and thereby the impacts on the environment from those miles traveled.

In other words, SB 743 changes the focus of transportation impact analysis in CEQA from measuring impacts on drivers to measuring the impact of driving. Land use projects with one or more of the following characteristics would have lesser VMT impacts:

- ▶ Higher land use densities

- ▶ Mix of project uses
- ▶ Support of a citywide jobs-housing balance (i.e., provide housing in a job-rich area, or vice versa)
- ▶ Proximity to the core of a region
- ▶ Proximity to high-quality transit service
- ▶ Location in highly walkable or bikeable areas

This shift in transportation impact criteria is intended to better align transportation impact analysis and mitigation outcomes with the State’s goals to reduce GHG emissions, encourage infill development, and improve public health through more active transportation. Specific to SB 743, Section 15064.3(c) of the revised CEQA Guidelines states that, “a lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide.” However, Public Resources Code Section 21099(b)(2) states that, “upon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the Guidelines.”

Although the Governor’s Office of Planning and Research (OPR) provides recommendations for adopting new VMT analysis guidelines, lead agencies maintain discretion over analysis methodology, significance thresholds, feasible mitigation, and findings.

## **REGIONAL REGULATIONS**

### **Metropolitan Transportation Commission**

Metropolitan Transportation Commission (MTC) is the regional transportation planning, coordinating, and financing agency for the nine-county Bay Area, including Solano County. It is the federally designated metropolitan planning organization (MPO) for the Bay Area region. MTC is responsible for preparing the Regional Transportation Plan (RTP), a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities. The RTP is a 20-year plan that is updated every 3 years to reflect new planning priorities and changing projections of future growth and travel demand. The long-range plan must be based upon a realistic forecast of future revenues, and the transportation projects taken must help improve regional air quality. MTC also screens requests from local agencies for State and federal grants for transportation projects to determine compatibility with the RTP.

### **Plan Bay Area 2050**

Plan Bay Area 2050 is overseen by MTC and the Association of Bay Area Governments (ABAG) and was adopted. It serves as the region’s Sustainable Community Strategy (SCS) and the 2050 RTP (preceded by RTP 2040), integrating transportation and land use strategies to manage GHG emissions and plan for future population growth. The RTP and SCS include policies that call for shifting more travel demand to transit and accommodating growth along transit corridors in Priority Development Areas. In October 2021, Plan Bay Area 2050 was adopted by ABAG and MTC. Major projects included in Plan Bay Area 2050 include high-speed rail along the Caltrain corridor, per-mile tolling on selected congested freeways, and improvements to local and express bus services.

Plan Bay Area identifies Priority Production Areas (PPAs), which are places for job growth in middle-wage industries like manufacturing, logistics or other trades. Areas north of Cordelia Road and the railroad line operated by the California Northern Railroad are in a PPA (ABAG/MTC 2022). Economic Strategies in Plan Bay Area include: “EC6. Retain and invest in key industrial lands. Implement local land use policies to protect key industrial lands, identified as Priority Production Areas, while funding key infrastructure improvements in these areas” (ABAG/MTC 2021).

### **Bay Area Air Quality management District**

The Bay Area Air Quality Management District is the regional agency with the authority to develop and enforce regulations for the control of air pollution throughout the Bay Area. The Clean Air Plan is the district’s plan for reducing the emissions of air pollutants that combine to produce ozone. The Bay Area Air Quality Management District has published guidelines for the purpose of evaluating the air quality impact of projects and plans.

On-road motor vehicles are the largest source of air pollution in the Bay Area. To address the impact of vehicles, the California Clean Air Act requires air districts to adopt, implement, and enforce transportation control measures.

### **Solano County General Plan**

The Solano County General Plan (Solano County 2008) was adopted in November 2008. The State of California requires every city and county to prepare a general plan to guide the growth and development of the region. The General Plan includes policies related to land use and circulation, housing, recreation, conservation and open space, noise, environmental hazards, and historic resources. These topics are addressed within individual elements of the General Plan with goals, objectives, and a policy framework. Since the traffic-generating components of the proposed Project and offsite improvements would be developed in the City of Suisun City, Solano County’s policies do not directly apply to the proposed Project.

### **Solano County Active Transportation Plan**

The Solano Countywide Active Transportation Plan was approved in May 2020 as the Solano Active Transportation Element of the County Comprehensive Transportation Plan (CTP). The Plan provides a framework to help the Solano Transportation Authority (STA) improve active transportation conditions throughout Solano County. The cities of Fairfield and Suisun City have individual plans that include existing inventory, recommended project lists, and priorities for near-term action for both pedestrian and bicycle infrastructure. The goal of this plan is to provide guidance to STA and local jurisdictions to help people of all ages and abilities feel comfortable walking and bicycling in their communities.

## **LOCAL REGULATIONS**

### **City of Suisun City General Plan**

The City General Plan (City of Suisun City 2015) serves as a guiding policy document for the development of the City. The Suisun City 2035 General Plan was adopted in 2015 and consists of three volumes: Policy Document, Technical Background Reports, and Environmental Impact Report. Relevant General Plan policies include:

- ▶ **Policy T-1.6 Safe Transportation System:** The City will design and operate streets and intersections to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities
- ▶ **Policy T-1.9 New Infrastructure:** New roads, intersections, and access points should be designed in accordance with City standards and avoid introducing any hazardous conditions.
- ▶ **Policy T-2.3, 2.4, 2.7 Connection to Downtown Area:** New Developments shall be highly connected internally and connected with adjacent developed areas; Support improvements to connect existing gaps in transportation system and to improve regional connectivity with connections to Fairfield, SR-12, and I-80 that reduce trip lengths and provide redundant routes for emergency responders.
- ▶ **Policy T-3.6 Travel Demand Management for New Developments:** New developments that would accommodate 100 full- or part-time employees or more are required to incorporate feasible travel demand management strategies, such as contributions to transit, bike, and pedestrian improvements; flextime and telecommuting; a carpool program; parking management, cash out, and pricing; or other measures, as appropriate, to reduce travel demand.
- ▶ **Policy T-3.7 GHG Reduction:** The City will support regional goals to reduce per-capita GHG emissions reductions from automobiles and light-duty trucks in a way that also promotes 2035 General Plan objectives.

## **CITY OF FAIRFIELD GENERAL PLAN**

The City General Plan (City of Fairfield 2015) is a policy document divided into individual elements for topics including land use and circulation. The Plan is a comprehensive general plan that serves as the City’s primary guide for long-term development. The Circulation Element of the General Plan addresses goals and policies for a balanced and multi-modal circulation system with roadway development, road safety, public transit, pedestrian and bicycle facilities, and transportation systems management. Since the proposed Project would be developed in the City of Suisun City, the City of Fairfield’s policies do not directly apply to the proposed Project.

### **4.12.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

This section describes the impact analysis related to transportation and traffic for the proposed Project, describing the methods used to determine the impacts of the proposed Project and listing the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion, as applicable.

#### **THRESHOLDS OF SIGNIFICANCE**

In accordance with Appendix G of the CEQA Guidelines and local guidance, the proposed Project would be considered to have a significant effect if it would result in any of the conditions listed below.

#### **Appendix G of the CEQA Guidelines:**

- ▶ Conflict or inconsistency with CEQA Guidelines Section 15064.3, subdivision (b), concerning VMT.

- ▶ Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
- ▶ Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- ▶ Potential to cause inadequate emergency access.

### Supplemental Local Guidance:

- ▶ Inadequate pedestrian or bicycle facilities to connect to the area circulation system.
- ▶ Substantial increase in transit riders that could not be adequately served by existing transit services.

These criteria are described in more detail in the following sections.

### IMPACT ANALYSIS

**Impact 4.12-1 Near-Term Vehicle-Miles Traveled (VMT).** *The proposed Project home-based work VMT per employee is above 85 percent of the City-wide average.* Therefore, this impact would be **potentially significant**.

The City of Fairfield travel demand model, which includes Fairfield and Suisun City, was used to analyze the Project’s impact on VMT.<sup>1</sup> Using Caltrans and Federal Highway Administration model validation standards, the model was calibrated and validated to 2019 pre-pandemic conditions and finalized in year 2020 (herein referred to as the “year 2020 model”). The year 2020 model network and land use in the Project vicinity were confirmed to reflect existing roadway network and land uses.

Impacts are identified based on the Project’s VMT compared against a percentage of a baseline value of VMT. The VMT analysis was conducted consistent with the Suisun City VMT-based CEQA thresholds. Based on the Suisun City thresholds, the proposed Project impact was evaluated against two criteria: (1) a project would result in a significant impact if it would generate an average home-based work VMT per employee that is greater than 85 percent of the citywide average, and (2) if the threshold is exceeded, the project’s VMT impact could still be found to be less-than-significant if it did not cause the total citywide VMT to increase. The average home-based work VMT per employee metric in the first criterion evaluates the VMT for all employee trips that travel between home and work. Trips related to non-commute economic activity (i.e. goods deliveries, customer visits, etc.) would not be captured in this metric. The focus of this metric is on passenger vehicle commute trips as being the primary component of VMT for most employment-focused land uses. The total citywide VMT metric in the second criterion evaluates all VMT (for all trip purposes by all users) that occurs within a geographic boundary. Since the proposed Project is expected to generate truck traffic, which is not captured by the average home-based work passenger vehicle commute metric in the first criterion, this total citywide VMT metric includes all vehicle trips. This metric is used to understand whether a project causes trips to shorten and thereby result in a net decrease in area-wide VMT.

Based on the model runs, the citywide average home-based work daily VMT per employee is 14.8, and the 85 percent citywide average threshold is 12.6. The Project is expected to result in 14.2 home-based work daily VMT

<sup>1</sup> The City of Fairfield Model was adjusted to ensure the model vehicle trip generation for the project was consistent with ITE trip generation estimate for the project of 2,310 daily trips.



per employee, which is 1.6 VMT greater than the threshold. The Project would also increase total citywide daily VMT by approximately 10,000. Therefore, this impact would be **potentially significant**. The VMT analysis results are summarized in the Table 4.12-2.<sup>2</sup>

**Table 4.12-2. Existing and Existing Plus Project Daily VMT Results**

	Criterion 1: Home-Based Work VMT per Employee	Criterion 2: Total Citywide VMT
No Project Value	14.8	472,000
Threshold Value	12.6 <sup>1</sup>	472,000 <sup>2</sup>
Project Value	14.2	482,000
Change between Threshold and Project Value	+1.6	+10,000
Change as % of Threshold Value	+12.7%	+2.1%

VMT = vehicle miles traveled

Table Notes

1. Represents 85 percent of the citywide average home-based work VMT per employee.
2. Represents the total citywide VMT.

### Mitigation Measures

#### **Mitigation Measure 4.12-1: Transportation Demand Management (TDM) Plan.**

Prior to issuance of building permits, the Project applicant shall develop a TDM Plan for the proposed Project, including any anticipated phasing, and shall submit the TDM Plan to the City for review and approval. The TDM Plan shall identify trip reduction strategies, as well as mechanisms for funding and overseeing the delivery of trip reduction programs and strategies. The TDM Plan shall be designed to achieve the trip reduction, as required to reduce the commute trip VMT per employee from 14.2 to 12.6, consistent with an 11.3-percent reduction. The analysis prepared to support the TDM Plan shall demonstrate that the selected reduction measures will achieve the necessary VMT reduction.

Based on research in the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (GHG Handbook), Table 4.12-3 describes feasible measures for the Project’s TDM Plan aimed to reduce Project-generated trips. The GHG Handbook calculates maximum VMT reduction based on a project’s land use type and locational context. The proposed Project is considered a commercial project type in a suburban setting.<sup>3</sup> A 11.3-percent reduction is potentially achievable with implementation of the measures listed below.

**Table 4.12-3. TDM Plan**

TDM Measure	Description	Maximum VMT Reduction <sup>1</sup>
Commute Trip Reduction Marketing	Designate a TDM Coordinator to plan, implement, and manage commute programs. The TDM Coordinator shall share	4.00 percent

<sup>2</sup> VMT forecasts presented in this assessment do not consider some foreseeable travel changes, including increased use of transportation network companies, such as Uber and Lyft, nor the potential for autonomous vehicles. Although the technology for autonomous vehicles is expected to be available over the planning horizon, the federal and State legal and policy frameworks are uncertain. Initial modeling of an autonomous future indicates that with automated and connected vehicles, the capacity of the existing transportation system would increase as vehicles can travel closer together; however, these efficiencies are only realized when a high percentage of vehicles on the roadway are automated and connected. There is also the potential for vehicle travel to increase with zero-occupancy vehicles on the roadway. Additionally, the VMT forecasts are based on a model that was developed using data reflecting travel conditions before COVID-19; the effects of COVID-19 may be a near-term suppression in travel activity based on reduced economic output and could permanently modify travel habits.

<sup>3</sup> *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (GHG Handbook), California Air Pollution Control Officers Association, 2021.

	information via regular emails, bulletin postings, challenges, or events on resources and incentives to encourage employees to use alternative modes of travel to work. Information sharing and marketing promote and educate employees about their travel choices to the employment location beyond driving, such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions.	
Ridesharing Program	<p>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. Ridesharing must be promoted through a multi-faceted approach.</p> <p>Examples include the following:</p> <ul style="list-style-type: none"> <li>• Designating a certain percentage of desirable parking spaces for ridesharing vehicles.</li> <li>• Designating adequate passenger loading and unloading and waiting areas for ridesharing vehicles.</li> <li>• Providing an app or website for coordinating rides, or promoting the use of the existing free ridematch program at <a href="http://merge.511.org">merge.511.org</a> for the Bay Area. The larger the pool of participants, the more effective the program will be.</li> </ul>	4.00 percent
Subsidized or Discounted Transit Program – Work Trips Only	Provide subsidized or discounted, or free transit passes for employees. Reducing the out-of-pocket cost for choosing transit improves the competitiveness of transit against driving, increasing the total number of transit trips and decreasing vehicle trips. This decrease in vehicle trips results in reduced VMT and thus a reduction in GHG emissions.	0.84 percent
End-of-Trip Bicycle Facilities	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.	2.50 percent
Employer-Sponsored Vanpool	Implement an incentive to use vanpool services. Vanpooling is a flexible form of public transportation that provides groups of 5 to 15 people with a cost-effective and convenient rideshare option for commuting. The mode shift from long-distance, single-occupied vehicles to shared vehicles reduces overall commute VMT, thereby reducing GHG emissions. Provide an app or website for coordinating rides, or promote the use of the existing free ridematch program at <a href="http://merge.511.org">merge.511.org</a> for the Bay Area. The larger the pool of participants, the more effective the program will be.	3.76 percent
<b>Total VMT Reduction (with multiplicative dampening)</b>	<b>Not applicable.</b>	<b>14.3 percent<sup>2</sup></b>

Table Notes

1. VMT reduction can range based on the level of effort in promoting and implementing the TDM strategies. A site operator doing just the bare minimum would result in lower VMT reduction, and a site operator willing to promote and invest heavily in TDM programs is expected to achieve the maximum VMT reduction. The reductions and measures are not additive but complementary of one another.

2. The values in the Maximum VMT Reduction column cannot be purely added for a total VMT reduction as effectiveness is reduced or capped when measures are combined. Multiplicative dampening considers the reduced or capped effectiveness of combined measures based on national research used to develop the calculations in the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (GHG Handbook)*. The Total VMT Reduction value was calculated with multiplicative dampening.

As part of the TDM Plan, the Project applicant/contractor(s) shall monitor and report its effectiveness at reducing home-based work VMT per employee. Tenant/s shall submit annual reports to the City describing the specific TDM measures that are being implemented, the number of employees on-site, the daily vehicle trips generated by the Project, and length of the trips being generated by the Project. The report shall be prepared by an independent City-approved transportation planning/engineering firm. The TDM Coordinator will provide information to the firm to monitor implementation effectiveness of the approved TDM Plan. To assess the TDM Plan's commute trip reductions, a baseline daily driveway count of vehicle trips shall be conducted before implementation of the TDM Plan and compared to the driveway count after one year of TDM Plan implementation. If the monitoring report shows that there was at least 11.3 percent commute trip VMT reduction, then the TDM Plan is presumed to effectively mitigate the Project impact on VMT. If the monitoring report shows that the TDM Plan does not reduce commute trip VMT by at least 11.3 percent, then the transportation planning/engineering firm shall assess for financial penalties for non-compliance and provide guidance for TDM Plan modification to achieve the VMT reduction goal.

Additionally, if the initial TDM Plan strategies do not reduce commute trip VMT by at least 11.3 percent, the Project shall incorporate additional TMD strategies, such as the following to increase TDM effectiveness in the future:

- Provide enhancements to bus service to the Project site area during peak commute times in coordination with FAST and SolTrans (not quantifiable at this time as future coordination with FAST and SolTrans is required and has not occurred)
- Compliance with a future City VMT/TDM ordinance (not quantifiable at this time as the City does not have a VMT/TDM ordinance)
- Participation in a future City VMT fee program (not quantifiable at this time as the City does not have a VMT fee program)

### ***Significance after Mitigation***

Implementation of Mitigation Measure 4.12-1 is expected to reduce the Project-generated VMT to a level of **less-than-significant with mitigation** by implementing a TDM Plan and regularly monitoring its effectiveness through annual reports to the City to ensure VMT reductions are met.

**Impact 4.12-2 Vehicle System.** *The proposed driveway lengths and turn angles, lack of directional markers and signs, and mix of vehicular and rail activity pose potentially hazardous conditions for vehicles.* Therefore, this impact would be **potentially significant**.

The Project Site plan provides 11 vehicular driveways along Pennsylvania Avenue and Cordelia Road, as shown on Exhibit 4.12-5. The driveway specifications are summarized in Table 4.12-4. Driveways #1 and #2 only provide passenger car access, and all other driveways provide access for cars and trucks. A typical passenger car takes up about 25 feet in queue at a driveway and a typical semitrailer is about 65 feet. All driveways except for #7, #9, and #10 can hold at least two passenger vehicles (about 50 feet) in the driveway throat. Only driveway #7 can hold at least one truck with the current proposed throat length, and all other driveways that provide truck

access do not have enough throat length for a truck. Not having enough throat length to store driveway queues can lead to spillback onto the on-site circulation system and create potentially hazardous conflicts between vehicles, bicyclists, and pedestrians. Three out of the eleven driveways meet the public road at a perpendicular angle. The driveways that do not meet the public road at a perpendicular angle pose potential sight distance issues and create potentially hazardous conditions for vehicles, bicyclists, and pedestrians. About half of the on-site drive aisles do not have perpendicular geometries which pose potentially hazardous vehicular maneuvers and hazardous conditions for on-site vehicles, bicyclists, and pedestrians.

**Table 4.12-4. Driveway Specifications**

Driveway #	Approximate Throat Length (feet)	Approximate Driveway Width (feet)	Vehicle Type Access	Driveway Angle to Meet Public Road
1	25	25	Passenger cars only	Perpendicular
2	25	25	Passenger cars only	Not perpendicular
3	15	40	Passenger cars and trucks	Not perpendicular
4	25	35	Passenger cars and trucks	Perpendicular
5	35	35	Passenger cars and trucks	Perpendicular
6	35	40	Passenger cars and trucks	Perpendicular
7	120	50	Passenger cars and trucks	Not perpendicular
8	30	30	Passenger cars and trucks	Perpendicular
9	60	40	Passenger cars and trucks	Perpendicular
10	60	35	Passenger cars and trucks	Perpendicular
11	40	35	Passenger cars and trucks	Perpendicular

Table Notes:

The length and width are rounded to the nearest 5.

There are no directional markers provided on the site plan. All driveways are assumed to be full access driveways and all drive aisles are wide enough to provide bidirectional travel. A full access driveway at #1, #2, and #9 could pose potentially hazardous conditions for vehicles. Driveway #1 is about 200 feet away from the intersection of Pennsylvania Avenue and SR-12. Vehicles making a left into the site may not have adequate sight distance of oncoming traffic. The curve of the public road at driveways #2 and #9 may cause sight distance issues. Currently, the existing public roadway system does not provide adequate turn lanes for safe access of Project driveways. The California Northern Railroad (CFNR) crosses Pennsylvania Avenue and divides the Project site. Warning equipment and gate arms are currently provided at the Pennsylvania Avenue crossing. The proposed rail spurs extend north and south of the CFNR onto the Project site. The northern spur cuts into the parking lot, and the southern spur is directly behind a row of trailer parking stalls. The direct mix of rail and vehicular activity on the site could lead to circulation conflicts and potentially hazardous conditions for vehicles. Therefore, this impact would be **potentially significant**.

## **Mitigation Measures**

### **Mitigation Measure 4.12-2: Vehicle System Improvements**

Prior to issuance of building permits, the Project shall provide site plans that include the following on-site and off-site vehicle system improvements to minimize hazardous conditions.

- Driveway access improvements.
  - The Project Site tenant has yet to be determined, and thus the exact operations are still unknown. The Project shall design each driveway width and throat length appropriate for the vehicle types expected to be served. For passenger vehicle access only, provide at least 10 feet driveway width for each direction of travel and a throat length of at least 50 feet to hold the approximate length of two vehicles. For driveways that serve trucks, provide at least 15 feet driveway width for each direction of travel and a throat length that can hold at least one of the longest expected trucks to access the site.
  - Combine driveways #1 and #2 to a single right-in right-out only driveway 300 feet south of the Pennsylvania Avenue and SR-12 intersection. This would improve the sight distance of drivers exiting the driveway and reduce vehicular conflicts with northbound vehicles on Pennsylvania Avenue.
  - Connect the northernmost parking lot accessible by driveways #1 and #2 to the vehicle system of Building B-C. This would improve on-site connectivity and circulation. Vehicles that want to make a left turn in and out from the northernmost parking would use driveway #3.
  - Orient all driveways to be perpendicular to the public road for improved sight distance and vehicle maneuvers.
- On-site circulation improvements.
  - Orient drive aisles to be perpendicular to the extent feasible for improved sight distance and vehicle maneuvers.
  - Add directional markers (e.g., signs or painted strips) for on-site circulation guidance and efficiency.
  - At the rail spurs, prohibit vehicles from crossing tracks with the use of signs or physical barriers and remove the adjacent parking spaces.
- Off-site vehicle system improvements.
  - The Suisun City General Plan plans to widen Pennsylvania Avenue and Cordelia Road from a two-lane road to a four-lane road. Coordinate with the City to determine the roadway cross section.
  - For vehicle system efficiency and improved safety, add a center two-way left-turn lane between driveways #3 and #11 for vehicle deceleration and acceleration when making left-turns into and out of the Project driveways.

### **Significance after Mitigation**

Implementation of Mitigation Measure 4.12-2 would improve on-site and off-site vehicle system circulation and not have adverse impacts on the vehicle system by providing sufficient on-site driveway storage to minimize potential spillback on the off-site roadway network, designing driveways with adequate sight distance to allow drivers to safely exit the site, installing effective warning and separation equipment to bring attention to vehicle and rail mixed activity areas, and striping or posting signage to direct on-site circulation.

The proposed Project site plan will be adjusted prior to City approval to show adequate driveway throat depths. On Cordelia Road, the center driveway serving Building F will need to be reconfigured. Proposed Project site plan will be revised to combine Driveways #1 and #2 and to improve internal circulation. No adjustment is needed to the orientation of the driveways, as all are shown as perpendicular. No adjustment is needed to the orientation of the drive aisles, as they are shown as perpendicular and parallel to the proposed buildings to the extent possible. The Project applicant will be required to add directional markers (e.g., signs or painted strips) for on-site circulation. The impact to the vehicle system would be **less-than-significant with mitigation**.

**Impact 4.12-3 Transit System.** *The Project is not expected to increase transit demand at a level that would exceed local commute transit vehicle capacities or conflict with existing or planned transit facilities.* Therefore, this impact would be **less-than-significant**.

Fixed route bus service operates in the vicinity of the Project Site. The closest bus stop is FAST Route 5 approximately 0.6-mile north of the Project Site at Pennsylvania Avenue and Woolner Avenue and the FAST Route 7 bus stop approximately 0.75-mile west of the Project Site at Beck Avenue and Courage Drive. Based on the Suisun City commute patterns, about 90 percent of commute trips are by car.<sup>4</sup> Suisun Microtransit is a service from the City of Suisun City that offers door-to-door transit service within Suisun City limits and important destinations in the city of Fairfield, including Fairfield Transportation Center, David Grant Medical Facility (Travis Air Force Base), Solano County Government Center, Sutter Medical Campus, NorthBay Medical Center, Kaiser Medical Offices, Ole Health Clinic, DaVita Dialysis Center, and Health and Human Social Services Center. Suisun Microtransit offers service Monday through Friday, from 7:00 AM until 7:00 PM, excluding holidays. It is unlikely that the Project would generate large amounts of new demand for the transit services and facilities that serve the area to a level that would exceed the current local commute transit vehicle capacities. The Project is not expected to conflict with existing or planned transit facilities as there are no existing or planned transit facilities at the Project site or frontages that would be interrupted or impacted. Therefore, this impact would be **less-than-significant**.

### **Mitigation Measures**

No mitigation measure required.

**Impact 4.12-4 Pedestrian and Bicycle Systems.** *The Project is expected to increase pedestrian and bicycle activity and the increased activity would be incompatible with the existing transportation infrastructure for pedestrians and bicyclists by exposing users to potential hazards.* Therefore, this impact would be **potentially significant**.

The existing transportation network along the Project Site frontages on Pennsylvania Avenue and Cordelia Road do not provide pedestrian or bicycle facilities. Pedestrian and bicycle facilities are provided in and around the developed parcels near the Project Site. The closest major intersection is at SR-12 and Pennsylvania Avenue,

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<sup>4</sup> Solano County Active Transportation Plan: Suisun City.



adjacent the northeast corner of the proposed development area. This signalized intersection provides actuated pedestrian pushbuttons and signals, a marked crosswalk on the east leg for north-south travel, and a marked crosswalk on the southern leg for east-west travel. The north-south crosswalk connects the Project area south of SR-12 to Fairfield residential and commercial development north of SR-12 on Pennsylvania Avenue. The east-west crosswalk provides pedestrians the option of walking on either the east or west side of Pennsylvania Avenue south of SR-12. Pedestrians traveling south on Pennsylvania Avenue on the east side can continue on Cordelia Road along the Project Site frontage. Pedestrians traveling southbound on the west side of Pennsylvania Avenue can access Planning Area 3 and continue east on Cordelia Street toward Suisun City. Other nearby sidewalks are located on Cordelia Street west of West Street, Beck Avenue, north of Cordelia Road, and Cordelia Road east of Beck Avenue. The closest existing bicycle facility is the Central County Bikeway, a Class I bicycle path in Suisun City providing east-west travel along SR-12 between Walters Road and the Suisun/Fairfield Amtrak Station at Main Street.

The Suisun City and Fairfield Active Transportation Plans propose to build bicycle facilities that directly connect to the Project Site frontages at the following locations:

- ▶ SR-12 between Beck Avenue and Illinois Avenue
- ▶ Cordelia Road between Beck Avenue and Pennsylvania Avenue
- ▶ Cordelia Street between Pennsylvania Avenue and Waterfront Path

A portion of workers are expected to use transit, walk, or bike to and from the Project Site. The Project Site plan does not provide pedestrian or bicycle facilities along Pennsylvania Avenue or Cordelia Road to connect to existing and planned facilities. Inadequate pedestrian and bicycle facilities and connections to the existing pedestrian and bicycle network and transit stations would expose pedestrian and bicyclists to hazardous conditions. The Suisun City and Fairfield General Plans include policy goals of safe and accessible multimodal system and infrastructure. Therefore, the Project's impact on pedestrians and bicyclists would be **potentially significant**.

### ***Mitigation Measures***

#### ***Mitigation Measure 4.12-3: Provide adequate pedestrian and bicycle facilities and improvements along Project Site frontages and on-site***

In accordance with Suisun City requirements and design standards, the Project shall provide adequate pedestrian and bicycle facilities along Project Site frontages and on-site to improve the pedestrian and bicycle transportation conditions.

- Pedestrian Facilities List.
  - Continuous sidewalks of at least five feet at the Project Site frontages along both sides of Cordelia Road and Pennsylvania Avenue.
  - Physical barriers between Planning Area No. 1 and Planning Area No. 3 to designed to prevent jaywalking. Use signs to direct pedestrians to the nearby crosswalks.

- High visibility crosswalks at the Pennsylvania Avenue and Cordelia Road/Cordelia Street intersection.
  - Adequate pedestrian-scale lighting along Project Site frontages and on-site.
  - On-site markings or signage to notify drivers of pedestrians traveling between off-site pedestrian facilities or on-site parking facilities and building access points.
  - At the rail spurs, prohibit bicyclists from crossing tracks with the use of signs or physical barriers.
- Bicycle Facilities List.
    - Continuous bicycle facilities of at least four feet at the Project Site frontages along both sides of Cordelia Road and Pennsylvania Avenue with even surface pavement, appropriate signage, delineation, and other features to improve the bicycle transportation conditions.
    - Bicycle parking facilities near the site access points.
    - On-site markings or signage to notify drivers of bicyclists traveling between bicycle parking facilities and building access points.
    - At the rail spurs, prohibit bicyclists from crossing tracks with the use of signs or physical barriers.

***Significance after Mitigation***

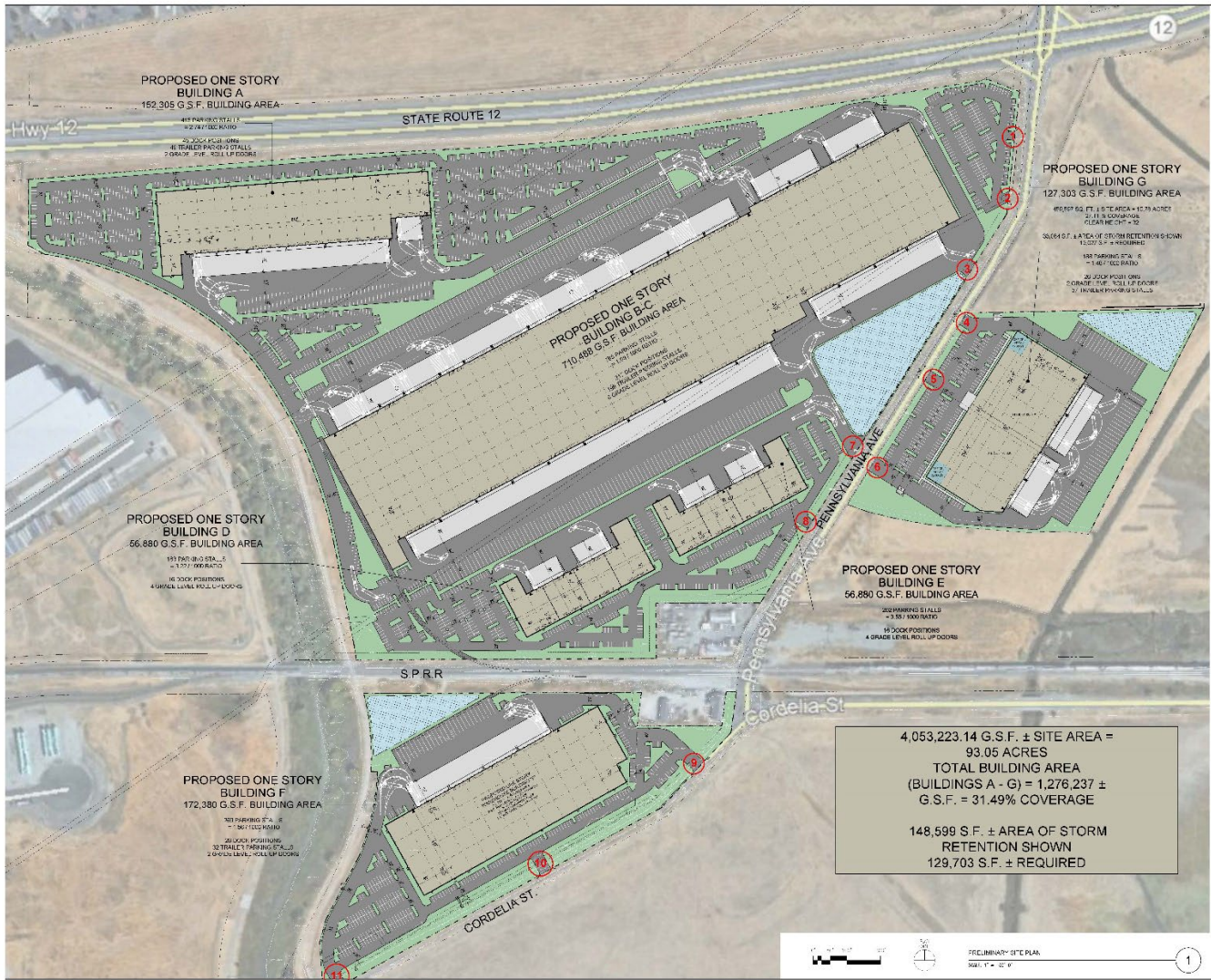
Implementation of Mitigation Measure 4.12-3 would improve on-site and Project area pedestrian and bicycle transportation conditions by providing adequate facilities to connect to the existing and future multimodal transportation network. This impact would be **less-than-significant with mitigation**.

**Impact 4.12-5 Emergency Access.** *The Project proposes multiple ingress, egress, and on-site circulation paths around buildings. Therefore, this impact would be less-than-significant.*

The Project proposes a complete on-site circulation network with multiple ingress and egress. The final site plan must be approved by the Suisun City Fire Department to ensure the emergency access routes meet requirements to facilitate the safe movement of emergency vehicles. This impact would be **less-than-significant**.

***Mitigation Measures***

No mitigation measure required.



Source: RMW Architecture Interiors and Fehr & Peers

**Exhibit 4.12-5. Project Site Plan**

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