



Chapter 10

Transportation

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CITY OF SUISUN CITY GENERAL PLAN

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Introduction

This report creates a foundation for updating the goals, policies, and programs of the Circulation and Transportation Element of the *Suisun City General Plan*.

Environmental Setting

Following is a summary of the current transportation conditions in the Suisun City area.

Roadway Network

The current Suisun City General Plan defines four classifications of streets as follows (see Exhibit Trans-1):

- **Freeway/Expressway.** Freeways are high speed/high capacity facilities serving regional travel needs. These are characterized by the elimination of all at-grade street crossings, with interchanges as the only access points. Pedestrian and bicycle travel are typically prohibited. Expressways have slightly less restricted access and may have somewhat lower speeds, depending on the number of access points allowed. Crossover access is generally restricted to at least half-mile intervals, and only at signalized or grade-separated intersections. Direct access to commercial uses is also severely restricted. No direct access is allowed to residential uses. If pedestrian and/or bicycle access is allowed, lanes or sidewalks are provided to separate foot and bicycle traffic from motorized traffic.
- **Arterials.** Arterial streets serve as the principal network for traffic flow. They connect areas of major traffic generation. Arterial streets function primarily to carry cross-town traffic. Thus, they also provide for the collection and distribution of traffic to and from collector streets which serve residential, commercial, and industrial areas. Direct access should be highly restricted. If designated for use by non-motorized modes of travel, separate sidewalks and bicycle lanes should be provided. Arterial streets are typically designed to carry from 4,500 to 25,000 vehicles per day, with a right-of-way varying from sixty feet to 100 feet wide. Curb-to-curb width will also vary with the width of rights-of-way. Median strips which provide channelized traffic flow and landscaping may also be provided.
- **Collector Streets.** Collector streets provide for traffic movement between arterial and minor streets and movement within and between neighborhoods and major activity centers. They also provide limited direct access to abutting property. Collector streets typically carry from 500 to 7,500 vehicles per day, with rights-of-way varying from 60 to 70 feet and curb-to-curb width from 36 to 52 feet. Sidewalks are typically provided for pedestrian travel. Separate bicycle lanes may or may not be provided.
- **Local Streets.** Local streets provide for localized traffic movements within residential areas and access to abutting property. Local streets are typically designed to carry up to 500 vehicles per day, with 50-foot rights-of-way and a minimum of 36 feet between curbs. This may be reduced where there are few lots fronting the street or when the development pattern justifies a lesser width. Sidewalks may or may not be provided for pedestrians. The following describes the expressways, arterials, collector streets, and local streets in Suisun City.

Expressways

State Route 12 is an STA Route of Regional Significance and the major east-west corridor through Suisun City. It functions as a 4-lane expressway from its junction with I-80 west of Suisun City, to Walters Road at the eastern city limits. East of this section, it narrows to a two-lane rural major arterial. Access to Suisun City is provided at the Civic Center Drive interchange, at signalized intersections at Marina Boulevard, Sunset Avenue/Grizzly Island Road, Emperor Drive/Lawler Ranch Parkway, and Walters Road/Lawler Ranch Parkway. As a state highway, SR 12 is operated by Caltrans. The County Congestion Management Program LOS standard for SR 12 within Suisun City is F; the 2007 monitoring showed the segments within the City operating at LOS D or better. STA is the Congestion Management Agency for Solano County.

Arterials

Walters Road is a 4-lane north-south arterial linking SR 12 with Air Base Parkway in Fairfield. It is a Route of Regional Significance. The STA level-of-service standard for Walters Road is LOS E. In 2001, this section operated at LOS B; later measurements are not available. Walters Road forms the southern portion of the planned Jepson Parkway, a future travel corridor that is currently in the planning and environmental review stage. The Jepson Parkway Concept Plan defines a four-lane parkway connecting Walters Road at SR 12 to the Leisure Town interchange on I-80 in Vacaville. The purpose of the corridor is to provide improved intra-county mobility for residents of Solano County.

Other north-south arterial streets in Suisun City are:

- Sunset Avenue (4 lanes)
- Marina Boulevard (North of SR 12) (2 lanes)
- Main Street (2 lanes)

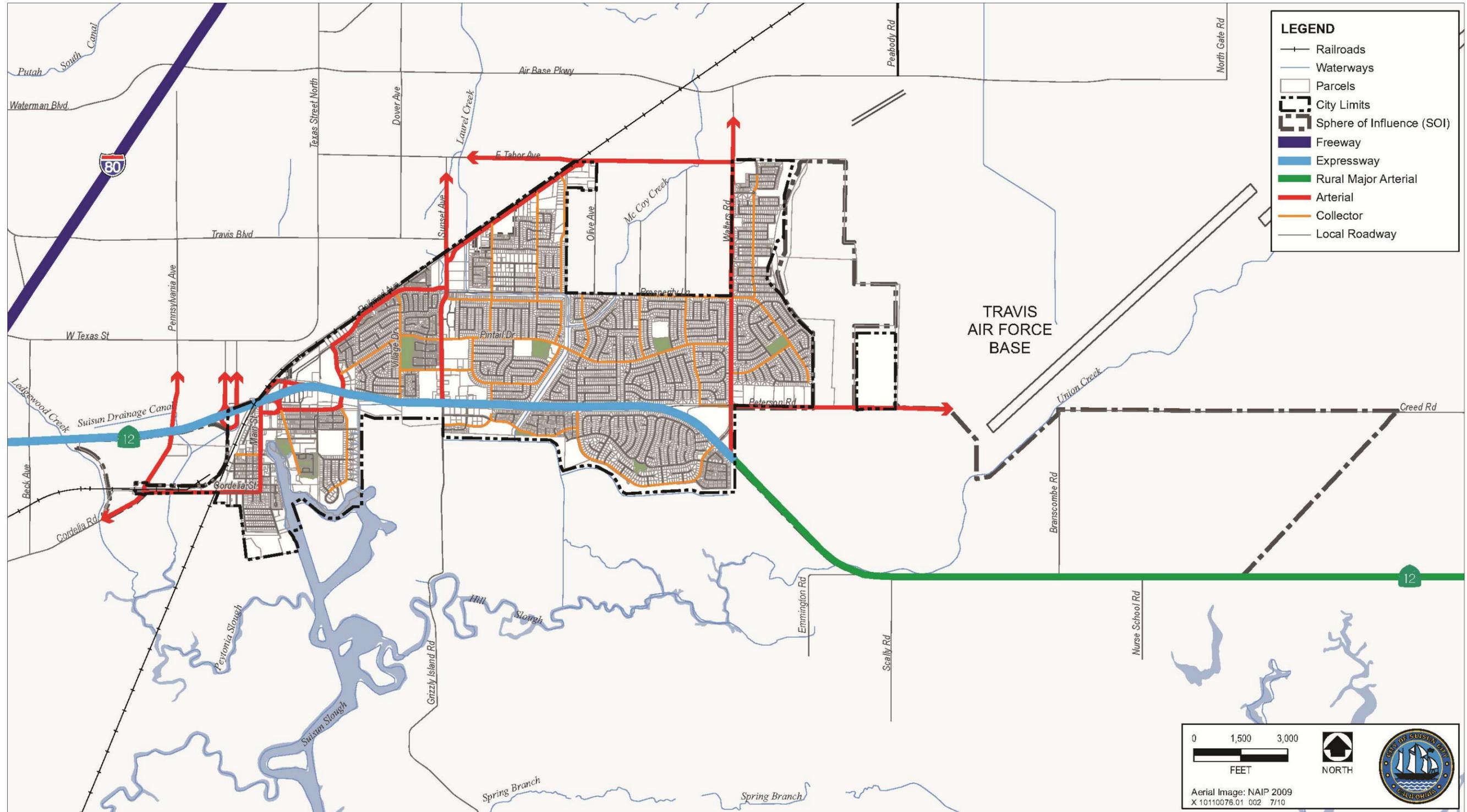
Other east-west arterial streets in Suisun City are:

- Cordelia Street (2 lanes)
- Railroad Avenue between Marina Boulevard and Sunset Boulevard (4 lanes)
- Railroad Avenue between Sunset Boulevard and East Tabor Street (2 lanes)
- East Tabor Avenue (2 lanes)
- Peterson Road (2 lanes)
- Lotz Way (2 lanes)

Collector Streets

All collector streets in Suisun City are two lanes. East-west collector streets include:

- Sacramento Street
- Merganser Drive
- Wigeon Way
- Pintail Drive



Source: Fehr & Peers 2010

Exhibit TRANS-1

Existing Roadway Network



- Canvasback Drive
- Montebello Drive
- Buena Vista Avenue
- Bella Vista Drive
- Prosperity Lane
- McLellan Drive
- Gunter Drive

North-south collector streets include:

- Civic Center Boulevard
- Marina Boulevard south of SR 12
- Village Drive
- Blossom Road
- Worley Road
- Humphrey Drive
- Cackling Drive
- Fulmar Drive
- Capistrano Drive
- Tolenas Avenue
- Woodlark Drive
- Bluejay Drive
- Yosemite Way
- Lawler Ranch Parkway
- Emperor Drive
- Charleston Street

Local Streets

Any roads or streets in Suisun City not classified as expressway, arterial, or collector streets are considered local streets.

Existing Traffic Volumes

Daily traffic counts were conducted in March 2010 and late August 2010 on key roadways in Suisun City. The most recent available counts for SR 12, from 2009, were obtained from Caltrans. Table Trans-1 shows the daily AM peak hour and PM peak hour traffic volumes. The AM peak hour typically occurs between 7:00 and 9:00 AM, and the PM peak hour typically occurs between 4:00 and 6:00 PM. The most common peak hours are 7:30 – 8:30 AM and 5:00 – 6:00 PM, but individual locations vary.

Table Trans-1 also lists the peak hour roadway capacities from the STA Solano-Napa Travel Demand Model. These capacities are planning-level capacities designed to allow

the model to assign traffic reasonably well on a regional and sub-regional basis, and do not necessarily reflect the actual capacities of individual roadways, which are affected by many factors such as lane widths, presence of medians, bike lanes, on-street parking, signalized intersection spacing, etc. However, they provide a rough guide to the capacities for the roadways in Table Trans-1. Generally, the roadway volumes fall well under the capacities on most of the roadways counted.

Transit

Transit services in Suisun City include passenger rail, provided by Amtrak, and bus service provided by three agencies – Greyhound, Fairfield and Suisun Transit, and the Rio Vista Delta Breeze.

Amtrak

The Suisun/Fairfield Amtrak Station is located in downtown Suisun City on Main Street between Spring Street and SR 12. Amtrak's Capitol Corridor route, which travels along Union Pacific Railroad's right-of-way, stops at the Suisun Station. The Capitol Corridor route operates westbound at 40- to 120-minute headways weekdays and 90- to 125-minute headways on weekends. The westbound route directly connects Suisun City with Martinez, Richmond, Berkeley, Emeryville, San Francisco, Oakland, Hayward, Fremont, Santa Clara, and San Jose. Eastbound, the Capitol Corridor route operates at 40- to 120-minute headways weekdays and 90- to 120-minute headways on weekends. The eastbound route directly connects Suisun City with Davis, Sacramento, Roseville, Rocklin, and Auburn. Connections to Amtrak California Thruway buses or other transit services are available at many stations along the route. In total, 32 passenger trains (16 westbound, 16 eastbound) pass through and stop at Suisun Station on weekdays, and 22 total trains (11 westbound, 11 eastbound) pass through and stop each Saturday, Sunday, and holidays. In July 2008, 59% of departing trips were in the westbound direction. However, the single most popular station destination from Suisun City was Sacramento, to the east. In Amtrak's 2009 Fiscal Year (October 1st-September 30th), there were 165,283 total boardings and alightings at the Suisun Station.

Greyhound

Greyhound Lines operates motorcoach buses between Sacramento and Oakland, some of which stop at the Suisun City Amtrak station to unload and pick up passengers. Every day, three to four Sacramento-bound coaches and three to four Oakland-bound coaches stop in Suisun City.

Fairfield and Suisun Transit (FAST)

FAST operates four local and one intercity route through Suisun City. The local routes are lines 2, 5, 6, and 8. The intercity route is line 90, which connects Suisun City to the Bay Area Rapid Transit (BART) commuter rail system. FAST local lines do not operate on Sundays and line 90 operates only on weekdays.



**Table TRANS-1
Existing (2010) Roadway Volumes (Two-Way)**

Roadway	Between	And	# Lanes/Peak Hour Capacity	Daily Volume	AM Peak Hour Volume	PM Peak Hour Volume
SR 12	Woodlark Drive	Walters Road	4 / 5,600	23,158	n/a	n/a
SR 12	Civic Center Blvd.	Marina Blvd.	4 / 8,000	44,000	n/a	n/a
SR 12	Marina Blvd.	Sunset Ave.	4 / 5,600	36,000	n/a	n/a
SR 12	Sunset Avenue	Lawler Center Drive	4 / 5,600	30,500	n/a	n/a
SR 12	Walters Road	Scally Road	4 / 5,600	15,500	n/a	n/a
SR 12 EB Ramps	SR 12	Lotz Way	1 / 2,300	5,241	282	441
Main Street	SR 12 WB Ramp	SR 12	2 / 1,600	4,969	310	384
Main Street	Driftwood Drive	Common Street	2 / 1,600	5,060	290	458
N. Texas Street	Wyoming Street	E. Bell Avenue	4 / 3,600	14,843	1,322	1,289
Pennsylvania Avenue	Illinois Avenue	SR 12	4 / 3,600	10,993	629	895
Sunset Avenue	Merganser Drive	SR 12	4 / 3,600	13,110	723	1,050
Sunset Avenue	E. Tabor Avenue	Sunset Court	4 / 1,800	12,726	763	1,053
Sunset Avenue	Railroad Avenue	Railroad Avenue	4 / 3,600	31,292	2,003	2,282
Walters Road	Petersen Road	SR 12	4 / 3,600	14,108	969	1,222
Walters Road	McLellan Drive	Prosperity Lane	4 / 3,600	14,465	1,085	1,157
Walters Rd.	Air Base Pkwy	Walters Court	4 / 3,600	20,861	1,541	1,769
Cordelia Street	Pennsylvania Avenue	West Street	2 / 1,800	2,156	135	221
E. Tabor Avenue	Clay Bank Road	Railroad Avenue	2 / 1,800	9,709	898	768
E. Tabor Avenue	Olive Avenue	Davis Drive	2 / 1,800	8,920	843	712
E. Travis Blvd.	N Texas Street	Chamberlain Drive	4 / 3,600	20,237	1,508	1,718
Petersen Road	Walters Road	Perimeter Road	2 / 1,800	961	87	122
Railroad Avenue	Blossom Avenue	Worley Road	2 / 1,800	6,019	415	526
Railroad Avenue	Birchwood Court	Village Drive	4 / 3,200	7,840	656	528
Branscombe Road	Creed Road	SR 12	2 / 1,000	121	6	9
Emperor Drive	Harlquin Way	SR 12	2 / 1,600	5,455	361	502
Lawler Ranch Pkwy	SR 12	Mayfield Way	2 / 1,600	4,672	363	389
Marina Blvd.	SR 12	Lotz Way	2 / 1,600	5,031	631	445
Bella Vista Drive	Walters Road	Charleston Street	2 / 800	3,353	287	305
Pintail Drive	E. Wigeon Way	Emperor Drive	2 / 1,600	6,124	415	520
Prosperity Lane	Langley Way	Walters Road	2 / 1,600	3,108	341	224

Notes:

AM peak hour volumes are the highest-volume hour between 7:00 and 9:00 AM; PM peak hour volumes are the highest-volume hour between 4:00 and 6:00 PM.

Peak hour capacities taken from the STA Solano-Napa Travel Demand Model, and do not necessarily reflect the actual capacities of certain roadway segments.

All volumes from counts conducted in March 2010 and late August 2010, except SR 12 segments, for which year 2009 data from Caltrans (the latest available data) is reported.

Source: Fehr & Peers, September 2010

The number 2 line operates with 30-minute headways Monday through Saturday on a looping route that begins and ends at the Westfield Mall in Fairfield. The Suisun City portion of the route includes many stops along Pintail Drive.

The number 5 line operates with 30-minute headways weekdays and 60-minute headways Saturdays. The route begins and ends at the Westfield Mall in Fairfield and includes stops near Crystal Middle School, Suisun City Hall, and the Suisun Amtrak Station.

The number 6 line operates with 30-minute headways weekdays and 60-minute headways Saturdays. The route begins and ends at the Westfield Mall in Fairfield and serves numerous locations in the eastern portion of Suisun City.

The number 8 line operates with 60-minute headways Monday through Saturday. The route begins and ends at Westfield Mall in Fairfield and serves one stop on Walters Road and the Suisun Amtrak Station. The route also includes a stop at the Fairfield Transportation Center, a key local transportation hub with connections to many intercity buses.

The number 90 line connects the Suisun City Amtrak Station with the El Cerrito Del Norte BART station in El Cerrito. Not all 90-line buses stop at the Suisun City Amtrak Station, in which case they begin or terminate at the line's only other stop, the Fairfield Transportation Center. The line is targeted toward commuters travelling to more central Bay Area locations in the morning and returning to Fairfield and Suisun City in the evening. As such, during weekday peak AM and PM periods, line 90 operates frequently, with 10- to 30-minute headways. The 90-line does not run on weekends and maintains very limited service from Suisun City to El Cerrito BART after the morning peak period has concluded.

In addition to the aforementioned fixed routes, FAST operates demand-response paratransit service in the Suisun City and Fairfield areas.

Rio Vista Delta Breeze

Suisun City is served by one Rio Vista Delta Breeze route, line 50, which travels between Fairfield, Suisun City, Rio Vista, and Isleton. Three Fairfield-bound and five Isleton/Rio Vista-bound line 50 buses stop at the Suisun Amtrak Station each weekday morning. On weekends, one afternoon bus in each direction stops at the Suisun Amtrak Station.

Goods Movement

Freight passes through Suisun City via the UP tracks (rail) or SR 12 (trucks). Between the western and eastern city limits, SR 12 traffic consists of 6% truck traffic (based on year 2000 counts). The UP trains through Suisun City are part of a major freight line that runs from the Port of Oakland to Chicago, IL. In addition, the California Northern Railroad operates a short-line freight route that connects to the main UP tracks at a junction in Suisun City. In 2001, this route supported 17,499 train car loads of freight.

Waterborne Transportation

The Suisun Slough Channel provides water access between Suisun City, the Sacramento River, Suisun Bay, San Pablo Bay, and San Francisco Bay. The Army Corps of Engineers is responsible for maintaining the Slough and its navigability, while the Suisun City Police Department polices the waterway as necessary. The Suisun City Marina and Solano Yacht Club provide an interface between the Downtown area and



the Channel, with 150 boat slips. City-owned boat launch ramps exist along Kellogg Street. The Channel sees measurable boat traffic, particularly during weekends and the summer months when water-bound recreational activity peaks. The U.S. Coast Guard patrols waterways, but not all waterways on a regular and continuous basis.

Bicycle Facilities

Bicycle facilities are categorized into three classes:

- Class I bikeways (bike paths) provide a completely separate right-of-way and are designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian cross-flows minimized. Class I paths provide a minimum width of four feet per lane (or six feet per lane if facility is shared with pedestrians).
- Class II bikeways (bike lanes) provide a restricted right-of-way, and are designated for the use of bicycles with a striped lane on a street or highway. Current City standards call for a minimum bike lane width of six feet from the face of the curb on each side of the street or a five-foot striped lane to the outside of any on-street parking areas.
- Class III bikeways (bike routes) provide for right-of-way designated bike signs or pavement markers for shared use with pedestrians or motor vehicles. These routes are established along through routes likely to be used by bicyclists where a path or lane is not feasible.

Exhibit TRANS-2 shows the existing bike routes in Suisun City. These include a Class I path along the north side of SR 12 between Walters Road and the Suisun Amtrak Station (the Central County Bikeway); a bicycle-pedestrian path around the northern portion of the Suisun Slough Channel; and Class II bike lanes along Sunset Avenue, Railroad Avenue between Sunset and Marina, and on Waters Road between SR 12 and the northern city limit. Bicycle lanes are striped on Marina Boulevard between SR 12 and Railroad Avenue, but they lack the bicycle stencils and signs required for Class II bike lanes.

The Solano Countywide Bicycle Plan (October 2004) includes several additional planned bike routes both within Suisun City and connecting the city to the surrounding region. These include:

- An extension of the Central County Bikeway, a Class I path, east to Rio Vista
- A Class I path along McCoy Creek between SR 12 and East Tabor Avenue
- Class II bike lanes on Grizzly Island Road south of SR 12
- Class II bike lanes on Cordelia Road between Suisun City and Cordelia
- Class II bike lanes on Main Street north of Cordelia Road
- A Class III bike route along Pintail Drive between Sunset Avenue and Walters Road

Pedestrian Facilities

Pedestrians are served by sidewalks on most, but not all, of the arterials, collectors and local streets in the city. Crosswalks with pedestrian push-buttons are provided at major signalized intersections. Pedestrians can also make use of the paths located north of SR 12 and around the north side of the Suisun Slough Channel. A pedestrian overcrossing of the railroad tracks serves pedestrian travel between downtown Suisun City and

Fairfield, with the Suisun City entrance located just east of Main Street and north of the Suisun/Fairfield Train Station. This grade-separated crossing is a great benefit to downtown pedestrian safety; however, the 2002 Suisun Railroad Avenue Pedestrian Safety Study found that unauthorized and unsafe crossings of the heavily-trafficked UP tracks are common along Railroad Avenue at Marina Boulevard, Blossom Avenue, and Worley Road.

Pedestrian activity is concentrated primarily in the downtown, particularly near the Suisun/Fairfield Amtrak Station; at shopping centers on Lotz Way and Sunset Avenue; and near public facilities including schools and the Suisun City library.

The STA's Congestion Management Program (October 2009) identifies five pedestrian-oriented areas in Suisun City, including the downtown and the waterfront around Suisun Slough Channel. It notes three planned pedestrian/Transportation for Livable Communities projects in the city, for a total cost of \$2.7 million

Regulatory Setting

Several regional agencies oversee and influence transportation planning in the Suisun City area. The following is a brief overview of these agencies.

Solano Transportation Authority (STA)

The STA, created in 1990 under a Joint Powers Agreement among its members, is Solano County's state-designated Congestion Management Agency (CMA). The STA is charged with coordinating and providing transportation planning and services among the County and cities within its jurisdiction: Benicia, Dixon, Fairfield, Rio Vista, Suisun City, Vacaville, and Vallejo. The STA is comprised of one representative from each of these seven cities and one from Solano County. It has the authority to program federal, state (including CA Congestion Management Program), and regional funds.

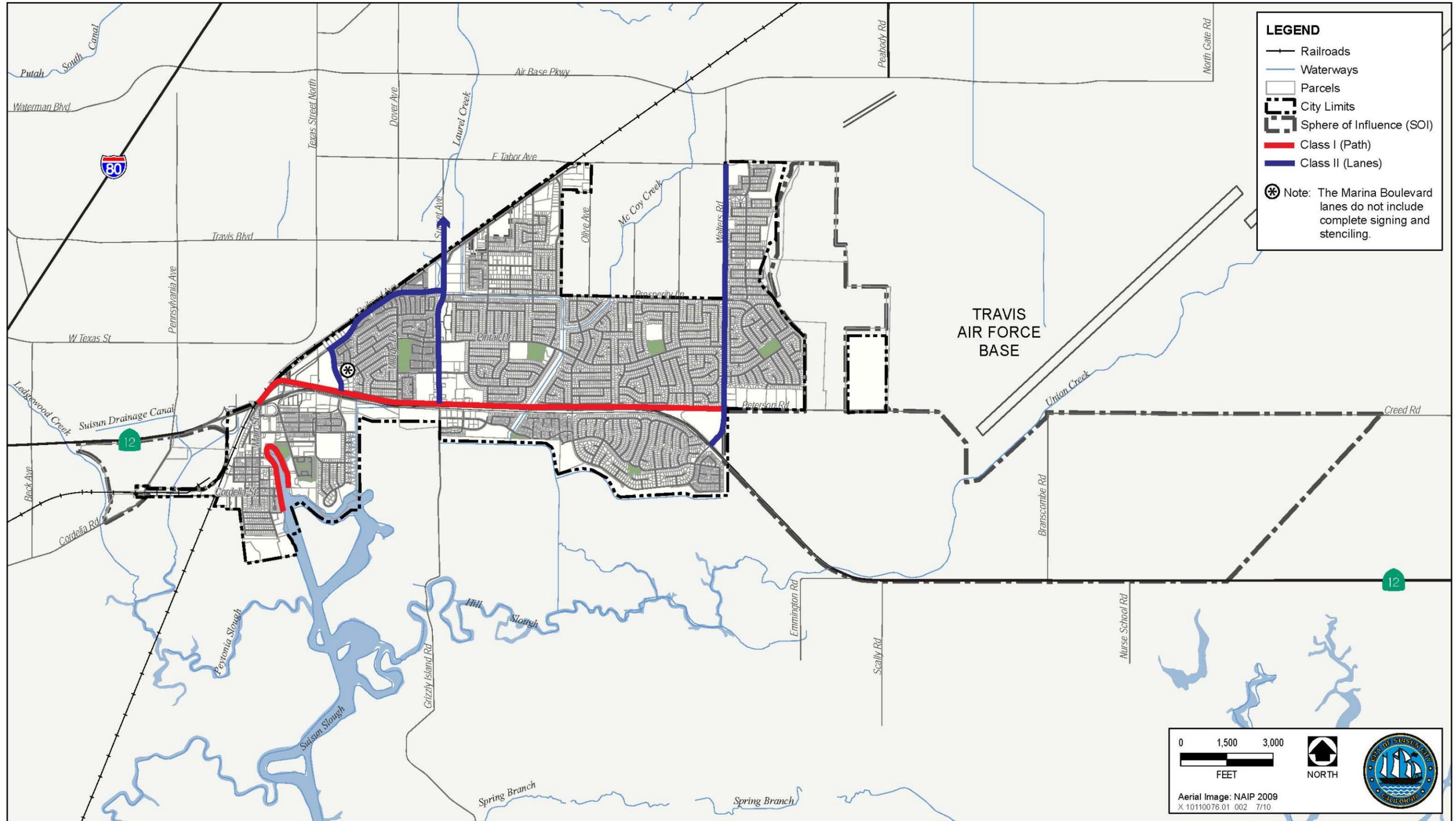
There are a large number of committees within the STA that produce transportation and policy recommendations for the STA board to review and adopt into countywide transportation planning documents.

Metropolitan Transportation Commission (MTC)

MTC is the federally-designated Metropolitan Planning Organization (MPO) for the nine-county San Francisco Bay Area (including Solano County). MTC is responsible for updating the Regional Transportation Plan (RTP) and distributing state and federal grants to local agencies planning projects compatible with the RTP.

California Department of Transportation (Caltrans)

Caltrans is the state agency responsible for managing and supporting several aspects of California transportation infrastructure including highways, freeways, intercity rail services, mass transit, and airports. Caltrans also programs state transportation funds. Suisun City and Solano County are part of Caltrans District 4, which manages SR 12, a major travel corridor through the City.



Source: Fehr & Peers 2010
Exhibit TRANS-2

Existing Bicycle Facilities



Railroads

Union Pacific Railroad Company (UP) owns and operates mainline railroad right-of-way between Sacramento and the Bay Area. A portion of this heavily-trafficked right-of-way passes along Railroad Ave in the northwestern border of Suisun City. The Suisun City section of this railroad serves both freight and passenger (Amtrak) trains. The California Northern Railroad (CFNR) operates short-line freight service between Schellville, CA and Suisun City under a lease agreement with UP.

General Plan Issues and Opportunities

Some of the main issues to consider in the General Plan Update related to circulation include:

- **Level of Service.** Page 53 of the 1992 General Plan indicates the City’s goal to “develop a street and highway system [that] provides for both local and regional vehicular circulation needs, while maintaining a level of service “E” on public streets, wherever feasible.” However, page 56 of the Circulation Element indicates that traffic volumes may exceed the City’s LOS “C” objective. Through this General Plan Update, the Circulation Element should be revised to clarify the City’s policies related to traffic level of service. It may also be helpful for the Circulation Element to provide guidance on the thresholds which would be used to determine if a traffic impact study is needed for a development project, and also the thresholds of significance for traffic impacts, for purposes of CEQA review of projects in the future.
- **Capitol Corridor Opportunities.** Regional rail transit service is available in Suisun City from the downtown Amtrak station. The local Amtrak station represents an important asset both relative to economic development opportunities, as well as a major transportation facility. Both work trips and recreational trips are available to City residents and employees by rail. The area around the City’s Amtrak station is a Priority Development Area. One key issue for the City to consider in the context of this General Plan Update is the development and redevelopment of complementary land uses in the area around the Amtrak station. FOCUS is a regional development and conservation strategy led by ABAG and the Metropolitan Transportation Commission, with support from the Bay Area Air Quality Management District and the Bay Conservation and Development Commission. It provides a list of Priority Development Areas and Priority Conservation Areas to promote planning and development of complete communities, which are generally designed to provide a variety of housing options, jobs, shops, services and amenities close to rail stations, ferry terminals, and bus stops. FOCUS is a voluntary, incentive-based (i.e., supplies planning funds) program.
- **Connecting to Destinations.** There are constraints to both east-west and north-south connectivity between Suisun City and Fairfield. It is important to consider opportunities for both vehicular and non-vehicular connections. Providing better connectivity to destinations can reduce overall travel demand, which improves air quality. Improved connectivity is normally an important issue for emergency service providers, as well. Overall travel demand can be measured in vehicle miles traveled (VMT).

- **Reducing Travel Demand.** The City's General Plan policies can encourage shifts in travel to transit, bike, and walk modes, improve local street connectivity, and provide a better match between local housing, jobs, and destinations. Extensive research has shown that land use and transportation planning techniques can reduce vehicle trips, increase non-automobile mode share, reduce trip lengths, and reduce VMT. Increases in density and development intensity are correlated with reduced vehicle travel (on a per unit or square foot basis). Mixing complementary land uses in a neighborhood setting increases internal trip “capture.” Many different urban design approaches are used to increase transportation connectivity and provide high-quality bicycle, pedestrian, and transit facilities, increasing the attractiveness of non-automobile modes of travel. Should the City consider these options in order to improve mobility, reduce household transportation costs, improve air quality, protect public health, and enhance local livability?