

## TRANSPORTATION AND CIRCULATION IN VACAVILLE

This memorandum describes the existing transportation system in the Vacaville General Plan study area, identified on Figure 1. It evaluates existing conditions for streets and roadways, public transit, bicycle and pedestrian transportation, and other modes of travel; describes the regulatory framework governing transportation in the city; and describes the City's current policy and methodology used to assess impacts to transportation infrastructure. Appendix A provides a list of references used in this memorandum.

### *A. Existing Conditions*

This section describes the existing transportation and circulation systems in the study area. Planned transportation improvements are also discussed.

#### **1. Roadway System**

Vacaville is bisected diagonally by Interstate 80, which serves as the primary regional connector. Besides the interstate highway system, the city has a hierarchy of streets which serve different functions, including arterial, collector, and local streets. Vacaville's roadway system and classifications are shown in Figure 1. The General Plan Update will review and potentially revise these roadway classifications.

##### **a. Regional Facilities**

Vacaville is served by two freeways, Interstate 80 and Interstate 505, which are part of the interstate highway network. Interstate 80, which primarily has four travel lanes in each direction in the study area, extends southwest through Fairfield and Vallejo, and crosses the Carquinez Bridge and the Oakland Bay Bridge to terminate at Highway 101 in San Francisco. It also extends northeast through Dixon and Davis, over the Sacramento River to Sacramento and beyond. There are ten interchanges along Interstate 80 in Vacaville:

- ◆ Lagoon Valley Road
- ◆ Cherry Glen/ Pleasants Valley Road
- ◆ Alamo Drive
- ◆ Davis Street

- ◆ Cliffside Drive/Mason Street
- ◆ Allison Drive/Monte Vista Avenue
- ◆ Nut Tree Road/Interstate 505
- ◆ Leisure Town Road
- ◆ Meridian Road
- ◆ Midway Road

Interstate 505 links Interstate 80 to Interstate 5, a major north-south freeway serving the west coast of the United States. It has two travel lanes in each direction. In addition to the interchange at Interstate 80, access to Interstate 505 is provided in Vacaville at Vaca Valley Parkway and Midway Road.

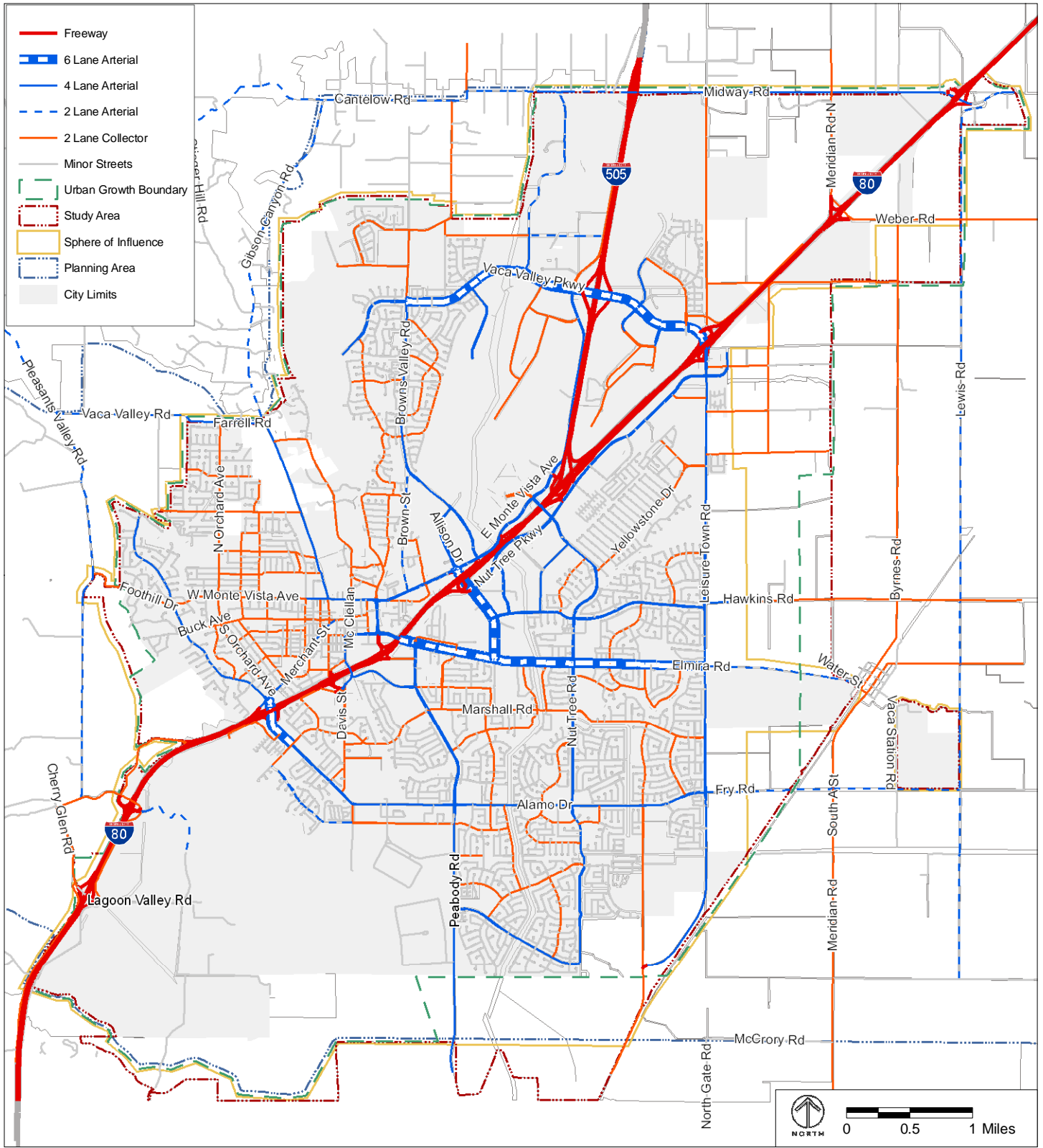
Routes of “regional significance” are identified in the Solano County Congestion Management Plan (CMP). The 2009 CMP identifies the following local roadway segments within the Vacaville city limits as routes of regional significance:

- ◆ Vaca Valley Parkway between Interstate 505 and Interstate 80
- ◆ Elmira Road between Leisure Town Road and east city limits
- ◆ Peabody Road between California Drive and south city limits

b. Local Street and Road System

The local street and roadway system is composed of three classifications, each serving a different function. The California Road System (CRS) maps, published by the California Department of Transportation (Caltrans) and approved by the Federal Highway Administration (FHWA), provide the State and federal recognized functional classification of roadways. The CRS maps are used in the California Vehicle Code to identify roadways that require engineering surveys to establish speed limits. The classifications also dictate the design criteria for roadway improvements.

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Source: City of Vacaville General Plan, Transportation Element, Figure 6-1, December 2007

FIGURE 1  
 ROADWAY CLASSIFICATIONS

The roadway classifications in the existing Vacaville General Plan may differ from the classifications presented in the CRS maps. For instance, Brown Street is classified as a major collector street in the CRS maps, while it is designated as an arterial in the General Plan. The differences in the two classifications will be assessed as part of the General Plan Update process.

*i. Arterials*

Arterials link residential and commercial districts with the freeway network and provide intercity connections. These roadways can be either divided or undivided, and generally carry the heaviest amount of traffic among the three classifications. While the majority of arterials in Vacaville consist of four travel lanes, there are also two-lane arterials, such as Brown Street and portions of California Drive, and six-lane arterials, such as portions of Elmira Road and Vaca Valley Parkway.

*ii. Collectors*

Collectors are designed to connect neighborhoods with arterials. All collector streets in Vacaville have two travel lanes. Some examples of collectors are Orchard Avenue, Marshall Road, and Vanden Road.

*iii. Local Streets*

Local streets are intended to serve adjacent land uses only. They carry little through traffic and generally have low traffic volumes.

*c. Existing Traffic Operations*

This section provides information on the existing operating conditions for selected roadways and selected intersections throughout the city. Level of Service (LOS) describes the operating conditions experienced by persons on a transportation system. For motorized vehicles, level of service is a qualitative measure of the effects of a number of factors, including speed and travel time, traffic interruptions, freedom to maneuver, driving comfort, and convenience. Levels of service are designated LOS A through F, from best to worst, which cover the entire range of traffic operations that might occur. LOS A through E generally represent traffic volumes at less than roadway capacity,

while LOS F represents conditions where traffic demands exceed capacity and the flow of traffic breaks down, resulting in stop-and-go conditions and long queues of vehicles.

As shown in Table 3 in Section 4.a below, the existing Vacaville General Plan has established a citywide goal of LOS C at all intersections, interchanges, and road links, but allows for LOS D, LOS E, and LOS F under specified circumstances. Different methodologies are used to evaluate level of service for different facility types, including freeways, multi-lane rural highways, two-lane rural highways, urban arterial corridors, signalized intersections and unsignalized intersections. The levels of service for roadways are based on methodologies in the *2000 Highway Capacity Manual* (HCM), while the levels of service for intersections are based on volume/capacity ratios and the Circular 212 Planning Method, which is described in Section B.4.a.ii.<sup>1</sup> The General Plan Update will evaluate the operational analysis methodologies for each facility type, establish the procedures to assess level of service for roadway segments and intersections, and evaluate analysis periods (e.g. AM, Midday, and PM Peak Hours).

*i. Existing Roadway Operations*

Traffic operations are regularly evaluated for roadways on the designated Solano County CMP system in Vacaville and throughout Solano County. Levels of service for the roadway segments presented in this section were compiled from the CMP report dated October 2009, and are shown in Table 1. The roadway level of service was assessed based on methodologies outlined in the HCM as specified by the Solano Transportation Authority.

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<sup>1</sup> Transportation Research Board, 1980, *Interim Materials on Highway Capacity*, Transportation Research Circular 212, Washington, D.C.

TABLE I **ROADWAY LEVEL OF SERVICE – PEAK FLOW DIRECTION**

	<b>From (Post Mile)</b>	<b>To (Post Mile)</b>	<b>PM Peak LOS</b>
<b>Freeway</b>			
Interstate 80	East of Lagoon Valley Rd/ Cherry Glen Rd (23.034)	East of Pleasants Valley Rd/Rivera Rd (24.08)	D
Interstate 80	East of Pleasants Valley Rd/Rivera Rd (24.08)	East of I-505 EB onramp (28.359)	C
Interstate 80	East of I-505 EB onramp (28.359)	Between Midway Rd EB on/off ramps(32.691)	C
Interstate 80	Between Midway Rd EB on/off ramps (32.691)	Between Dixon Av EB on/off ramps (35.547)	C
Interstate 505	Interstate 80 (0)	Between Midway Rd on/off ramps (3.075)	B
<b>Arterial</b>			
Peabody Rd	Southern City Limit	California Drive	C
Vaca Valley Pkwy	Interstate 80	Interstate 505	D
Elmira Road	Leisure Town Rd	Eastern City Limit	C

Source: Solano Transportation Authority, *Solano County Congestion Management Program*, October 2009.

As shown in Table 1, the roadway segment along Vaca Valley Parkway between Interstate 80 and Interstate 505 operated at LOS D in the peak flow direction during the afternoon (PM) peak hour. While this service level is better than the operating standard of LOS E set forth by the CMP, it is below the City’s citywide goal of LOS C. The General Plan Update will verify the current LOS for Vaca Valley Parkway using the analysis methodology for roadway segment LOS calculations that will be established for use in the General Plan Update, and take into account the recent improvements of Vaca Valley Parkway as a divided arterial.

As explained in Section A.1.c.ii, local intersections are generally operating at LOS C or better. Therefore, the local roadway segments between these inter-

sections are assumed to operate at acceptable levels of service. The General Plan Update will establish methodologies to assess levels of service for the local roadway network.

*ii. Existing Intersection Operations*

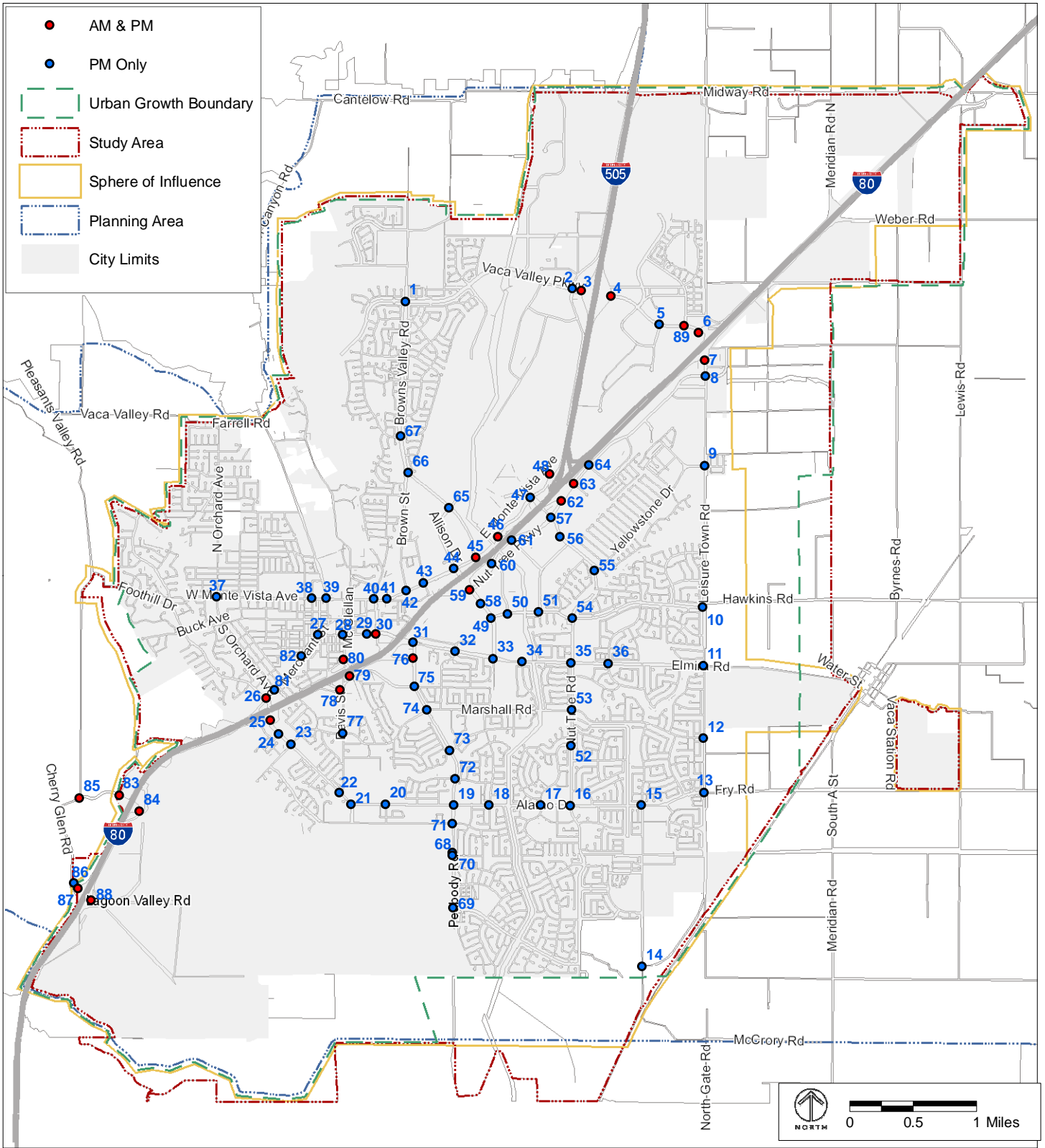
Intersection level of service results were compiled from the *City of Vacaville Infrastructure, Facilities, and Services Status Report*, dated January 2007. In accordance with the existing General Plan and as discussed in Section A.1.c above, intersection level of service was assessed based on Circular 212 Planning methodology.

Due to the recent slowdown in economic growth, studies throughout northern California have shown that traffic volumes have generally remained constant or even decreased in recent years. Therefore, the level of service results, developed based on traffic volumes collected in fall 2006, would still be applicable for current planning purposes and may even be slightly conservative.

A total of 89 intersections were included in the 2007 Infrastructure, Facilities, and Services Status Report. As shown in Figure 2, the operations at all the intersections were analyzed for the PM peak hour, while only 22 intersections, located at freeway interchanges, were assessed for the morning (AM) peak hour. The level of service results are presented in Table 2. Four intersections operated at LOS D or lower during one or both peak hours:

- ◆ **Interstate 505 Southbound Ramps/Vaca Valley Parkway.** This unsignalized intersection operated at LOS D during the PM peak hour. Design of interim improvements, including intersection widening and signalization, is currently underway.

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Source: City of Vacaville.

FIGURE 2  
 CURRENT INTERSECTIONS USED TO MONITOR CITY-WIDE TRANSPORTATION OPERATIONS

TABLE 2 **LEVEL OF SERVICE AT CITY-WIDE TRANSPORTATION OPERATIONS  
 MONITORING INTERSECTIONS (2006)**

No.	Intersection	AM Peak Hour		PM Peak Hour	
		LOS	V/C	LOS	V/C
1	* Browns Valley Rd/Vaca Valley Pkwy			A	0.41
2	E. Monte Vista Av/Vaca Valley Pkwy			B	0.61
3	#* I 505 SB Ramps/Vaca Valley Pkwy	C	0.73	D	0.84
4	I-505 NB Ramps/Vaca Valley Pkwy	B	0.65	B	0.66
5	! Vaca Valley Pkwy/Akerly-New Horizons			A	0.40
6	I-80 WB Ramps/Leisure Town Rd	A	0.34	A	0.39
7	I-80 EB Ramps/Leisure Town Rd	A	0.32	A	0.39
8	Leisure Town Rd/Orange Dr			A	0.40
9	Leisure Town Rd/Sequoia Dr			B	0.65
10	* Leisure Town Rd/Ulatis Dr			A	0.57
11	Leisure Town Rd/Elmira Rd			B	0.69
12	* Leisure Town Rd/Marshall Rd			A	0.47
13	Leisure Town Rd/Alamo Dr/Fry Rd			C	0.78
14	Vanden Rd/Leisure Town Rd			A	0.26
15	Vanden Rd/Alamo Dr			A	0.51
16	Nut Tree Rd/Alamo Dr			B	0.69
17	Alamo Dr/Bel Air Dr			A	0.54
18	Alamo Dr/Tulare Dr			A	0.52
19	Peabody Rd /Alamo Dr			B	0.61
20	Alamo Dr/Mariposa Av			B	0.62
21	Alamo Dr/Alamo Ln			B	0.63
22	Alamo Dr/Davis St			C	0.75
23	Alamo Dr/Marshall Rd			B	0.63

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TABLE 2 **LEVEL OF SERVICE AT CITY-WIDE TRANSPORTATION OPERATIONS  
MONITORING INTERSECTIONS (2006)** (CONTINUED)

No.	Intersection	AM Peak Hour		PM Peak Hour	
		LOS	V/C	LOS	V/C
24	Alamo Dr/Butcher Rd			A	0.56
25	Alamo Dr/I-80 EB Ramps	B	0.65	A	0.55
26	Alamo Dr/Merchant St	<b>D</b>	<b>0.84</b>	C	0.79
27	Merchant St/Mason St			A	0.50
28	Mason St/Davis St			B	0.63
29	Mason St/McClellan St			A	0.48
30	Mason St/Depot St	A	0.54	B	0.69
31	Peabody Rd/Mason St/Elmira Rd			C	0.74
32	Elmira Rd/Shasta Dr/Aegean Wy			C	0.71
33	Elmira Rd/Allison Dr			C	0.80
34	Elmira Rd/Beelard Dr			A	0.60
35	Nut Tree Rd/Elmira Rd			A	0.57
36	Elmira Rd/Christine Dr			A	0.40
37	Monte Vista Av/Orchard Ave			A	0.54
38	Monte Vista Av/Cernon St			B	0.66
39	Monte Vista Av/Dobbins St			<b>D</b>	<b>0.84</b>
40	E. Monte Vista Av/Depot St			C	0.75
41	E. Monte Vista Av/Scoggins Ct			A	0.42
42	E. Monte Vista Av/Brown St			A	0.44
43	E. Monte Vista Av/Callen St			A	0.40
44	E. Monte Vista Av/Allison Dr			C	0.72
45	E. Monte Vista Av/Browns Valley Rd	A	0.57	B	0.64
46	* I-80 WB Ramps/E. Monte Vista Av	A	0.28	A	0.57
47	* Nut Tree Rd/Monte Vista Av			A	0.48

TABLE 2 **LEVEL OF SERVICE AT CITY-WIDE TRANSPORTATION OPERATIONS  
 MONITORING INTERSECTIONS (2006)** (CONTINUED)

No.	Intersection	AM Peak Hour		PM Peak Hour	
		LOS	V/C	LOS	V/C
48	##* E. Monte Vista Av/Airport /I-505 SB	A	0.20	B	0.68
49	Allison Dr/Ulatis Dr			A	0.54
50	Ulatis Dr/Harbison Dr			A	0.51
51	Burton Dr/Ulatis Dr			A	0.50
52	Nut Tree Rd/Bel Air Dr			A	0.50
53	Nut Tree Rd/Marshall Rd			A	0.59
54	Nut Tree Rd/Ulatis Dr			C	0.71
55	Nut Tree Rd/Yellowstone Dr			A	0.50
56	Nut Tree Rd/Factory Stores			B	0.61
57	Nut Tree Rd/Orange Dr			B	0.62
58	Allison Dr/Travis FED. C.U.			A	0.42
59	Nut Tree Pkwy/Allison Dr	A	0.46	B	0.69
60	Nut Tree Pkwy/Harbison Dr			A	0.57
61	Nut Tree Pkwy/Helen Wy			A	0.50
62	I-80 EB Off/I-505 NB On Ramps/Orange Dr	A	0.49	C	0.73
63	Orange Dr/Lawrence Dr/I-80 EB	A	0.35	A	0.52
64	* Orange Dr/Orange Tree Cir			A	0.53
65	Browns Valley Rd/Allison Dr			A	0.46
66	Brown St/Browns Valley Rd			C	0.73
67	Browns Valley Rd/Shannon/Wrentham Dr			B	0.69
68	Peabody Rd/C.M.F.			B	0.63
69	Peabody Rd /Foxboro Pkwy			C	0.79
70	* Peabody Rd /Caldwell Dr			A	0.53
71	Peabody Rd/California Dr			A	0.57

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TABLE 2 **LEVEL OF SERVICE AT CITY-WIDE TRANSPORTATION OPERATIONS  
MONITORING INTERSECTIONS (2006)** (CONTINUED)

No.	Intersection	AM Peak Hour		PM Peak Hour	
		LOS	V/C	LOS	V/C
72	* Peabody Rd/Southwood Dr			A	0.47
73	Peabody Rd/Beelard Dr			A	0.48
74	Peabody Rd/Marshall Rd			C	0.74
75	Peabody Rd/ Berryessa Dr			B	0.67
76	Peabody Rd/ Cliffside Dr	A	0.56	C	0.78
77	* Davis St/Marshall Rd			A	0.58
78	Bella Vista Rd/Davis St	A	0.60	B	0.68
79	Davis St/Hume Wy	<b>D</b>	<b>0.90</b>	<b>F</b>	<b>1.03</b>
80	Hickory Ln/Davis St	C	0.76	C	0.77
81	Merchant St/Orchard Ave			A	0.44
82	Merchant St/Walnut Ave			A	0.33
83	* Cherry Glen Rd (N)/I-80 WB Ramps	A	0.15	A	0.15
84	* Cherry Glen Rd (N)/I-80 EB Ramps	A	0.12	A	0.14
85	Cherry Glen Rd/Pleasants Valley Rd	A	0.17	A	0.22
86	Cherry Glen Rd/LYONS			A	0.19
87	* Cherry Glen Rd (S)/I-80 WB Ramps	A	0.15	A	0.18
88	* Lagoon Valley Rd/I-80 EB Ramps	A	0.17	A	0.25
89	Kaiser & Crescent Dr/Vaca Valley Pkwy	A	0.43	A	0.43

Notes:

Based on traffic counts collected in September through November 2006.

Results include recently completed improvements at Leisure Town/I-80 EB & WB Ramps and at Monte Vista at Nut Tree, Airport/I-505 and Browns Valley intersections.

**Bold** = Intersection operates at LOS D or lower.

# = Unsignalized Freeway Ramp Intersection.

! = Signal under design or construction at time of traffic count collection.

\* = Potential Future Signal Location.

Source: City of Vacaville, January 2007, Infrastructure, Facilities, and Services Status Report.

- ◆ **Alamo Drive/Merchant Street.** This signalized intersection operated at LOS D during the AM peak hour. It provides access to and from the Interstate 80 southbound ramps. Since the analysis was performed, the traffic signal phasing has been modified and one crosswalk has been removed in order to improve the intersection operations. The City will continue to monitor this intersection and implement the Traffic Impact Mitigation Ordinance to maintain an acceptable level of service at this intersection. In addition, a future update of the transportation portion of the Development Impact Fee program will include consideration of mitigations that would improve operations at this intersection.
- ◆ **Monte Vista Drive/Dobbins Street.** This signalized intersection operated at LOS D during the PM peak hour. Since the completion of the 2007 Infrastructure Status Report, improvements have been made to provide a westbound right-turn lane and an additional southbound left-turn lane by widening the Monte Vista Avenue Bridge. The General Plan Update will reevaluate the LOS for this intersection in consideration of the recent improvements.
- ◆ **Davis Street/Hume Way.** This “T” intersection operated at LOS D and at LOS F during the AM and PM peak hours, respectively. Widening of Davis Street between Hume Way and the Interstate 80 eastbound off-ramp is scheduled to commence in summer 2010. The intersection operation is projected to improve to acceptable levels, or better, upon completion of the planned improvements.

*iii. Collision History*

Traffic collision data were obtained from the City for the three-year period between February 14, 2007 and February 13, 2010. The data includes all reported collisions compiled by the Vacaville Police Department. During the three-year period, a total of 2,009 collisions were reported on public property, ranging between 607 collisions (between February 2008 and February 2009) and 707 collisions (between February 2007 and February 2008) per twelve-month period. Fewer collisions occurred in 2010 than occurred annually 3 to 5 years ago. The data indicate that there were seven collision-related fatalities

and 757 injuries resulting from 605 incidents during the three-year period. In total, 50 incidents involved one or more pedestrians and 82 incidents involved bicycles.

Alamo Drive and Monte Vista Avenue had the highest number of total collisions in the City over the three-year period from 2007 to 2010. About 14 percent of the collisions occurred on Alamo Drive and about 10 percent occurred on Monte Vista Avenue. Prior City studies indicated higher collision rates (not totals) on Leisure Town Road when normalized by vehicle miles of travel (VMT).

Of the 2,009 collisions, about one-third occurred at intersections. Intersections with the highest number of incidents were:

- ◆ Alamo Drive and Peabody Road intersection: 30 incidents
- ◆ Peabody Road, Elmira Road, Mason Street and Aegean Way intersection: 28 incidents
- ◆ Elmira Road and Nut Tree Road intersection: 23 incidents
- ◆ Monte Vista Avenue and Allison Drive intersection: 22 incidents
- ◆ Mason Street and Depot Street intersection: 21 incidents

## **2. Public Transportation Services**

Public transportation service in Vacaville includes local and regional bus service, rail service, and taxi operations.

### **a. Bus Service**

Bus service in Vacaville is provided by Vacaville City Coach, Fairfield and Suisun Transit, and YOLOBUS. Vacaville City Coach offers local service to or from the Ulatis Cultural Center located at the corner of Ulatis Drive and Allison Drive. The Ulatis Cultural Center also serves as a transfer point for intercity routes operated by Fairfield and Suisun Transit. The Vacaville Regional Transportation Center, located at the corner of Davis Street and Hickory Lane, is another key intercity transit hub, with two nearby park and ride lots along Davis Street on either side of Interstate 80. A new intermodal transit station is under construction at the intersection of Ulatis Drive and Alli-

son Drive and will replace the transit operations at the Ulatis Cultural Center when it opens in October 2010.

A recently-completed project provided for the installation of GPS Opticom equipment at selected signalized intersections. The GPS Opticom equipment provides the ability to preempt the signal timing to give priority to approaching public safety and transit vehicles, thereby maintaining and improving on-time performance for transit service.

*i. Vacaville City Coach*

The City of Vacaville operates Vacaville City Coach, which offers fixed-route and special bus services throughout the city. A system map for City Coach is provided in Figure 3. The five fixed-routes, as described below, operate from Monday through Saturday. There is no service on Sunday. All routes run on a frequency of 30 minutes.

- ◆ Route 3 operates between the Ulatis Cultural Center and the retail centers along Nut Tree Parkway and Orange Drive including the Vacaville Premium Outlets, Wal-Mart, Sam's Club, Home Depot, Kohls, DMV, and Travis Credit Union. It runs between 7:00 a.m. and 6:00 p.m. on weekdays and 9:00 a.m. and 5:00 p.m. on Saturday.
- ◆ Route 4 operates between the Ulatis Cultural Center and Kaiser Medical Center/Genentech near New Horizons Way via Yellowstone Drive and Leisure Town Road. It runs between 7:00 a.m. and 5:30 p.m. on weekdays and 9:00 a.m. and 5:00 p.m. on Saturday.
- ◆ Route 5 provides service between the Ulatis Cultural Center and the Transit Plaza near Monte Vista Avenue and Dobbin Street via Nut Tree Road, Alamo Drive, and Merchant Street. It runs between 7:00 a.m. and 6:30 p.m. on weekdays and 9:00 a.m. and 5:30 pm on Saturday.
- ◆ Route 6 runs between the Ulatis Cultural Center and the Transit Plaza via Harbison Drive, East Monte Vista Avenue, Browns Street, and Rocky Hill. It runs between 7:00 a.m. and 6:30 p.m. on weekdays and 9:00 a.m. and 5:30 p.m. on Saturday.



- ◆ Route 8 operates between Ulatis Cultural Center and the Transit Plaza via Elmira Road, Peabody Road, Youngsdale Drive, Vanden Road, and Davis Street. It runs between 7:00 a.m. and 6:00 p.m. on weekdays and 9:00 a.m. and 5:00 p.m. on Saturday.

City Coach Special Services is provided to eligible residents as an ADA Para-transit service within Vacaville. Trips beyond the city limits of Vacaville may be specially arranged with City Coach.

*ii. Fairfield and Suisun Transit*

Fairfield and Suisun Transit (FAST) is operated by MV Transportation, a privately-held company. It offers three intercity routes through Vacaville, primarily to serve weekday commuters:

- ◆ Route 20 operates hourly service between Fairfield and Vacaville between 6:30 a.m. and 7:30 p.m. on weekdays and 9:30 a.m. and 5:30 p.m. on Saturday.
- ◆ Route 30 runs between Fairfield and Sacramento via Vacaville during the morning and afternoon peak commute periods on weekdays and between Fairfield and Davis on Saturday.
- ◆ Route 40 runs between Vacaville and Walnut Creek BART station during the morning and afternoon peak commute periods on weekdays only.

*iii. YOLOBUS*

YOLOBUS, administered by the Yolo County Transportation District, offers one fixed bus route between Vacaville and Davis via Interstate 505 and Winters. Route 220 provides three daily trips in each direction from Monday to Saturday.

*b. Rail Service*

The Capitol Corridor Rail Service, administered by the Capitol Corridor Joint Power Authority and operated by Amtrak on Union Pacific Railroad tracks, provides regional rail service to and from the Suisun/Fairfield Station, which is located about 11 miles from Vacaville. It operates 16 roundtrips on

weekdays and eleven roundtrips on weekends between Sacramento and Oakland, with some trains continuing on to San Jose to the southwest and Auburn to the northeast.

c. Taxi Service

Vacaville is served by a number of privately-operated taxi companies, including Yellow Cab of Vacaville, Veteran's Cab, and Vacaville Checker Cab.

In addition, the City of Vacaville administers the Half Fare Discount Taxi Script Program, which provides qualified individuals the opportunity to use the services of Vacaville's local Taxi Cab companies at half the regular fare. This service is provided to elderly and handicapped residents of Vacaville and the unincorporated area adjacent to Vacaville's city limits.

**3. Goods Movement**

This section describes goods movement in Vacaville.

a. Truck Routes

The City of Vacaville has established an extensive truck route network on which vehicles exceeding a gross vehicle weight rating of 5 tons ("trucks") must travel unless they are destined for or originated from points within the city. The shortest and most direct routes must be used to and from the truck routes and/or between locations within the city. The City has also established an extra legal permit process, patterned after a State process, for trucks with loads exceeding legal limits. Applications must specify truck dimensions and weights. Appropriate truck routes are conditioned and approved based on evaluating established City truck routes.

The designated truck routes are shown in Figure 4 and listed below:

- ◆ Akerly Drive from Leisure Town Road to Vaca Valley Parkway
- ◆ Alamo Drive from West Monte Vista Avenue to Merchant Street
- ◆ Bella Vista Road from Davis Street to Interstate 80
- ◆ Cotting Lane from Crocker Drive to westerly city limits
- ◆ Crocker Drive from Aldridge Road to northerly city limits



- ◆ Davis Street from Bella Vista Road to Mason Street
- ◆ Gilley Way from Leisure Town Road to Orange Drive
- ◆ Hickory Lane from Interstate 80 to Davis Street
- ◆ Hume Way from Davis Street to easterly city limits
- ◆ Mason Street from Merchant Street to McClellan Street
- ◆ McClellan Street from Interstate 80 to East Monte Vista Avenue
- ◆ Merchant Street from Interstate 80 to Mason Street
- ◆ Midway Road from westerly city limits to easterly city limits
- ◆ West Monte Vista Avenue from Alamo Drive to Orchard Avenue
- ◆ Nut Tree Road from East Monte Vista to Elmira Road

Trucks and vehicles with loads extending 3 feet in the front and 10 feet in the rear are also prohibited from traveling within the Central Business District (CBD) between noon and 6:00 p.m. except for loading and unloading purposes. The CBD is defined by Cernon Street to the west, Monte Vista Avenue to the north, McClellan Street to the east, and Mason Street to the south.

b. Freight Rail

Currently, no freight rail operates through the city. However, the Union Pacific Railroad operates the Martinez subdivision tracks to the southeast of the city, providing east-west connections from Oakland to Sacramento.

#### 4. Bicycle Facilities

The California Manual on Uniform Traffic Control Devices for Streets and Highways and the Highway Design Manual also classify bikeways into three categories. The State's class definitions are as follows:<sup>2</sup>

- ◆ **Class I Bikeway (Bike Path).** A Class I Bikeway provides completely separated right-of-way designated for the exclusive use of bicyclists and pedestrians, with crossflows by motorists minimized. Shared-use paths are also used by pedestrians (including skaters, users of manual and mo-

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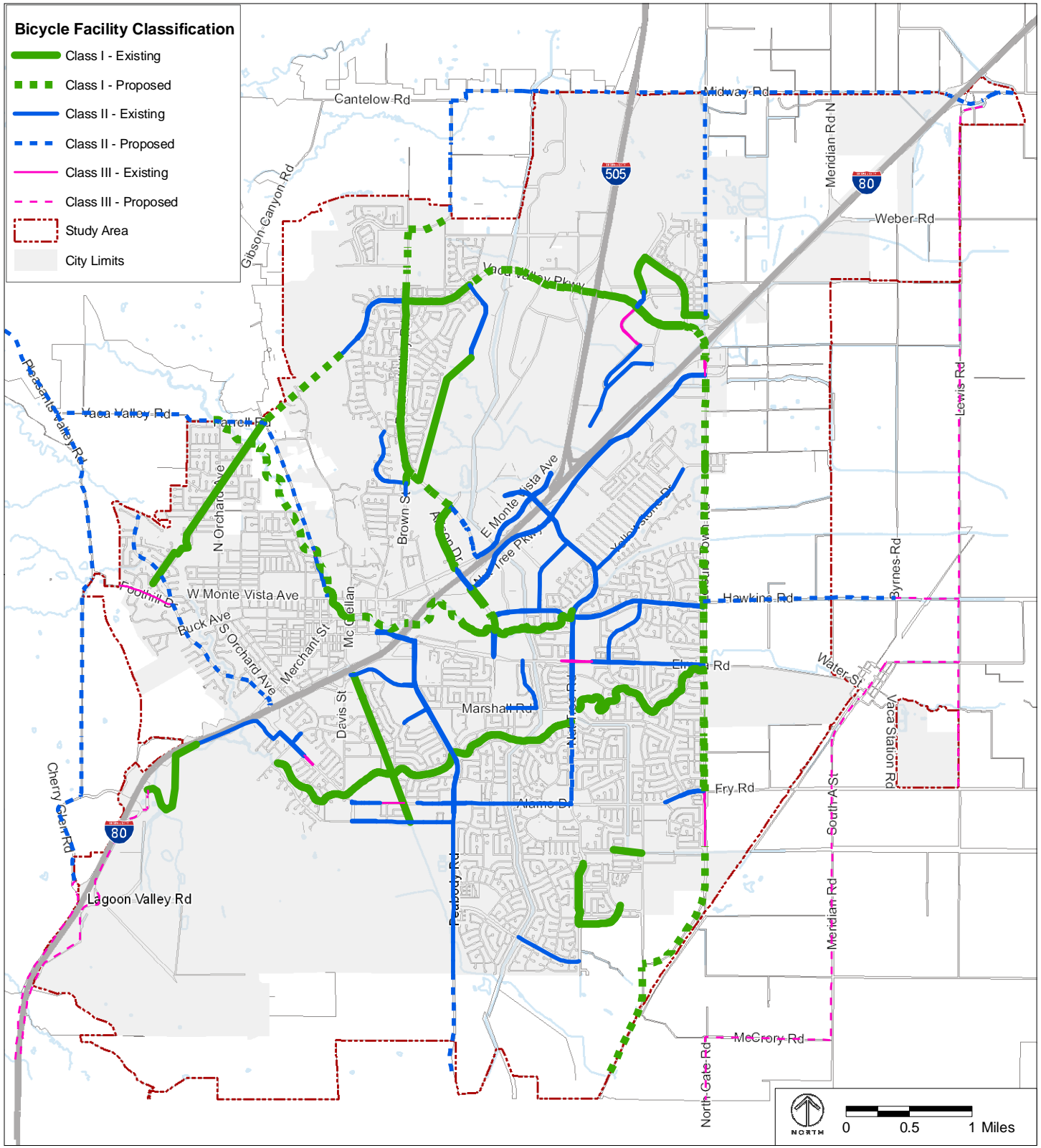
<sup>2</sup> State of California, Business, Transportation and Housing Agency, Department of Transportation, *California Manual on Uniform Traffic Control Devices for Streets and Highways, Part 9 Traffic Control for Bicycle Facilities*, January 21, 2010.

torized wheelchairs, and joggers) and other authorized motorized and non-motorized users.

- ◆ **Class II Bikeway (Bike Lane).** A Class II Bikeway provides a restricted right of way for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted.
- ◆ **Class III Bikeway (Bike Route).** A Class III Bikeway provides a right of way designated by signs or permanent markings and shared with pedestrians or motorists.

Given the topography of Vacaville, bicycling is a viable alternative to vehicle use for both recreational and non-recreational trips. A number of bicycle facilities are provided in the city, as illustrated in Figure 5. The City currently classifies bikeways into three categories: bike path, bike lane, and bike route.

- ◆ Bike paths meet the State requirements for Class I shared-use paths. These paths are dedicated off-street public paths designed and constructed for both bike and pedestrian traffic. Class I paths in the city include:
  - Nut Tree Road between Somerville Drive and Opal Way
  - Opal Way between Nut Tree Road and Newcastle Drive
  - Sommerville Drive between Colonial Circle and Vanden Road
  - Alamo Creek Bikeway along Alamo Creek between Marshall Road and Leisure Town Road
  - Southside Bikeway between Interstate 80 and California Drive
  - A path between Butcher Road and Lagoon Valley Regional Park
  - A path along Ulatis Creek from west of Allison Drive to just north of Ulatis Drive
  - Three discontinuous segments of Allison Drive between Browns Valley Parkway and Ulatis Drive



Source:  
 City of Vacaville, Public Works Engineering Department, August 2010 (Existing)  
 Solano Countywide Bicycle Plan, October 2004 (Proposed)

FIGURE 5  
 EXISTING AND PLANNED BICYCLE FACILITIES

- A path along Ulatis Creek from just north of Monte Vista Avenue through Andrews Park
  - A diagonal path between Dennis Drive and Linwood Street through residential neighborhoods
  - A path along Browns Valley Road/Brown Street between northern city limit Vaca Valley Road and Woodcrest Drive
  - Vaca Valley Road between Browns Valley Road and Allison Parkway and between Interstate 505 and just east of East Akerly Drive
  - North Village Parkway between Crescent Drive and Akerley Drive
  - Crescent Drive between North Village Parkway and Quinn Road
  - Quinn Road between Crescent Drive and Leisure Town Road
  - Leisure Town Road between Maple Road and just south of Sequoia Drive
  - A path between Allison Parkway and Browns Valley Parkway to the east of Sundance Drive and Shannon Drive
- ◆ Bike lanes meet the State requirements for striped on-street Class II bike lanes. These lanes are marked exclusively for bike travel on roadways. Bike lanes in the city include:
- Alamo Drive between Interstate 80 and La Cruz Lane, between Alamo Lane and Amapola Street, between Rosewood Drive and Nut Tree Road and between just east of Vanden Road and the eastern city limit.
  - Butcher Road between just west of Alamo Creek to Alamo Drive
  - Marshall Road between Alamo Drive and Ogden Way between Burlington Drive and Peabody Road, and between Isabella Drive and Beelard Drive
  - Beelard Drive between Elmira Road and Marshall Road

- Elmira Road between Depot Street and Peabody Road and between just east of Nut Tree Road and Leisure Town Road
- Nut Tree Road between its northern terminus and Marshall Road
- Ulatis Drive between Allison Drive and Leisure Town Road
- Burton Drive between Nut Tree Road and Ulatis Drive
- Allison Drive between Ulatis Creek and Elmira Road and between Monte Vista Avenue and Nut Tree Parkway
- Nut Tree Parkway/Orange Drive between Allison Drive and Leisure Town Road
- Monte Vista Avenue between Browns Valley Parkway and County Airport Road
- Yellowstone Drive between Nut Tree Road and Sequoia Drive
- Christine Drive between Ulatis Drive and Elmira Road
- Peabody Road between Elmira Road and Vanden Road
- Foxboro Parkway between Putah South and eastern city limit
- California Drive between Alamo Lane and Peabody Road
- Dobbins Street between Hemlock Street and Cernon Street
- Hume Way between Southside Bikeway and Peabody Road
- Woodcrest Drive between Wrentham Drive and Brown Street
- Brown Street between Woodcrest Drive and Markham Avenue
- Vaca Valley Road between its western terminus and Browns Valley Road
- Allison Parkway (full extent)
- Grassland Drive (full extent)
- North Village Parkway between Vaca Valley Road and Akerly Drive

◆ Bike routes meet the State’s requirements for Class III on-street bike routes. These routes must be signed or marked and bicycle riders must share the roadway with vehicles. Many of the Class III bike routes shown on the existing Bike Path Map are actually substandard Class II bike lanes that are either signed or striped but do not meet all Class II striping and signing requirements, or where a Class II bike lane only exists on one side of the street. The City is currently working on upgrading Class III signs and marking to add more routes to the system. Bike routes in the city include:

- Leisure Town Road between Alamo Drive and Purple Martin Drive and between Interstate 80 and Orange Drive
- Alamo Drive near its intersection with La Cruz Lane and between Alamo Lane and Southside Bikeway
- Elmira Road near its intersection with Nut Tree Road
- Foothill Drive between Alamo Drive and just east of Pleasants Valley Road
- Dobbins Street near its intersection with Ulatis Creek
- New Horizon Way between Vaca Valley Parkway and Grassland Drive

In addition, the City has assigned secondary uses to existing well sites and other small parcels that are 1 acre and smaller in size. These sites are developed for passive recreation, known as bike rests. The bike rests are located along bicycle routes. Vacaville currently has one bike rest located at Nut Tree Road, south of Marshall Road.

## 5. Pedestrian Facilities

Vacaville has a well-established pedestrian network. Sidewalks with raised curb and gutter are typically provided along arterials and collectors, as well as in newer residential developments. In some older residential neighborhoods west of Downtown, sidewalks are intermittently interrupted by landscaping and other obstructions and roll curbs are generally provided. The City re-

quires a minimum sidewalk width of 4.5 feet to 9.5 feet depending on the land use type. Narrower sidewalks are allowed for residential areas as compared to commercial districts. Nonetheless, a 4-foot minimum of clear, uninterrupted area is required on all sidewalks. The minimum width for an ADA-compliant sidewalk is 3 feet (clear width). In addition, passing spaces for wheelchairs must be provided at a minimum of 200 feet intervals for any sidewalk less than 5 feet wide.

Most major intersections in the city have marked crosswalks and countdown pedestrian crossing signals that can be activated by pedestrians. Pedestrian curb ramps are located at most intersections. The provision of high-contrast, truncated domes (i.e. textured ground surface indicators to assist vision-impaired pedestrians) is more sporadic. Such detectable warnings, which comply with ADA requirements, are notably deficient in the Downtown, where there is high pedestrian traffic.

## 6. Parking

On-street parking is generally allowed on both sides of the street with the exception of some collector and arterial roadways. Per Chapter 14.09.128 of the City's Land Use and Development Code, the City requires the following amounts of off-street parking, based on land use:

- ◆ Residential: 1.75 to 2 spaces per unit
- ◆ Commercial: 1 space per 250 to 350 square feet
- ◆ Institutional: varying requirements depending on use

Due to these requirements, off-street parking is abundant and demand for on-street parking is low. In some of the older neighborhoods, where on-site parking is more limited, a higher number of on-street spaces are used.

A recent parking study commissioned by the City, the *2008-2009 Downtown Parking Study* (TJKM), found that the existing parking supply is adequate to meet the demand in the Downtown. In addition to the 931 on-street curb-side parking spaces, the City operates 13 parking lots in the Downtown, totaling 949 spaces. While the on-street parking spaces in the core retail areas

along Main Street, Parker Street, and Dobbins Street are effectively full during the peak parking periods, spaces are available within one or two blocks. The study recommended that time limit changes be made at some public parking lots to better serve the needs of retail customers and short-term users.

#### **7. Americans with Disabilities Act (ADA)**

The City of Vacaville works to ensure that people with disabilities have access to City programs, services, activities, and facilities. The ADA Coordinator for the City of Vacaville coordinates the City's efforts to comply with all applicable federal, State, and local laws. The City has adopted a Transition Plan, which outlines structural changes required for accessibility, and conducted a Self-Evaluation to determine which City services, activities, and programs are accessible. In addition, the City has established an ADA Advisory Committee, which is tasked to serve as a liaison between the disabled community and the City of Vacaville. Comprised of representatives from the disabled community in Vacaville, business owners, and City employees, the Committee is charged with assisting in the prioritization of recommendations in the Transition Plan, contributing to and participating in the Self-Evaluation, and discussing ADA-related issues within the city.

#### **8. Planned and Proposed Transportation Improvements**

As explained further in Section B.3, there are a number of plans that identify future transportation improvements in the region. The improvements discussed in this section were identified in the 2009 Regional Transportation Plan (discussed in Section B.3.a.i), the project list in the 2009 Comprehensive Transportation Plan (discussed in Section B.3.c), the 2004 Countywide Bicycle Plan (discussed in Section B.3.c), the 2007 Interstate 80/ Interstate 680/ Interstate 780 Major Investment & Corridor Study Final Report, the City's Capital Improvement Program, the transportation portion of the City's Development Impact Fee Program, and by City staff. The status of each project is provided in parentheses if information is available.

a. Regional Roadway Facilities

The following regional roadway facility improvements are planned or proposed:

◆ **Interstate 80 Projects:**

- *HOV Lanes.* Construct new high-occupancy vehicle lanes (HOV) between Interstate 505 and Yolo County line. (In planning phase.)
- *Interstate 505 Weave Correction.* Construct weave corrections for westbound traffic at the interchange ramp and eliminate lane drop. (In planning phase.)<sup>3</sup>
- *Alamo Drive-Merchant Street Westbound On-Ramp.* Widen bridge over Alamo Creek and extend westbound on-ramp to provide acceleration/merge lane. (In planning phase.)
- *Mason Street Westbound On-Ramp.* Extend westbound on-ramp to provide acceleration/merge lane. (In planning phase.)
- *Davis-Hickory Street Westbound On-Ramp.* Extend westbound on-ramp to provide acceleration/merge lane. (In planning phase.)
- *Cliffside Drive Eastbound On-Ramp.* Widen bridge over Mason Street and extend eastbound on-ramp to provide acceleration/merge lane. (In planning phase.)
- *Davis Street Eastbound.* Widen bridge over Davis Street and extend eastbound on-ramp to provide acceleration/merge lane. (In planning phase.)
- *Lagoon Valley Road Ramp Modifications and Signal.* Widen interchange ramps and bridge to accommodate left-turn storage for both eastbound and westbound on- and off-ramps and provide pedestrian access on the

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<sup>3</sup> The weaving area is a segment of the freeway between two interchange ramps, where vehicles merge onto or out of the basic travel lanes. This segment is generally shorter than 2,500 feet in length. Lane drop means elimination of a lane; for instance, from four travel lanes to three travel lanes. The location of the lane drop is usually a point of conflict as vehicles merge onto the available lanes.

- bridge; install traffic signals. (On hold pending funding from Lower Lagoon Valley developer.)
- *Pena Adobe Road Interchange.* Relocate Rivera Road south and Cherry Glen Road west of their current locations in order to convert the Pena Adobe Road interchange into a Caltrans Type L-9, partial cloverleaf interchange. The intersection of Cherry Glen Road, Pena Adobe Road and Rivera Road would be signalized. (Will review with the General Plan Update.)
  - *Midway Road Interchange.* Convert the Midway Road interchange into a Caltrans standard Type L-9 partial cloverleaf interchange, which will necessitate the relocation of Oday Road. (Will review with the General Plan Update.)
  - *Meridian/Weber Road interchange.* Convert the Meridian/Weber Road interchange into a Caltrans Type L-7 two-quadrant cloverleaf interchange south of Interstate 80 and a Type L-9 partial cloverleaf interchange north of Interstate 80. (Will review with the General Plan Update.)
- ◆ **Vaca Valley/Interstate 505 Southbound Interim Improvements.** Widen Vaca Valley Parkway to provide a protected westbound left-turn lane and an eastbound right-turn lane and widen southbound off-ramp to provide a southbound right-turn lane; provide signalization at the southbound ramp intersection. (Construction scheduled to begin in March 2011. Funded by Local Development Impact Fee Program.)
- ◆ **Interstate 505/Vaca Valley Road Interchange.** Widen existing overcrossing with protected turn pockets and to accommodate pedestrians and Class II bike lane, and modify interchange to provide partial cloverleaf design. (Identified as needed for cumulative development; priority depends on level of area development. Transportation portion of Development Impact Fee Program funds a four-lane overcrossing with slip ramps, but existing General Plan identified need for a six-lane overcrossing. Number of lanes and schedule for construction will be part of Development Impact Fee Update.)

- ◆ **Jepson Parkway.** Construct a new four-lane expressway between Route 12 and Interstate 80 along Walters Road, Cement Hill Road, Vanden Road, and Leisure Town Road, and include a Class I bike/pedestrian path. In Vacaville, Jepson Parkway follows Vanden Road and Leisure Town Road alignments. (A concept plan and environmental assessment has been completed. A portion of the parkway has been completed; the Vacaville portion is in the preliminary design phase. Partly funded by Development Impact Fee Program.)
- ◆ **Orange Drive Extension.** Extend Orange Drive as a four-lane divided arterial to the Weber/Meridian Road interchange. (Identified as needed for cumulative development in existing General Plan; priority depends on level of area development. Future Traffic Impact Fees project.)

b. Local Street and Road System

The following local street and road system improvements are planned or proposed:

- ◆ **Video Detection Installation.** Install video detection at selected intersections. (Video detection is being installed at all City traffic signals over time to enhance bicycle and motorcycle detection.)
- ◆ **Pedestrian Signal Improvements.** Install audible pedestrian push buttons for signals in the vicinity of transit facilities and install countdown pedestrian signal at all City-controlled traffic signals.
- ◆ **Davis Street Widening.** Widen Davis Street to two lanes in each direction between Hickory Lane and Bella Vista Avenue. (Construction to begin in summer 2010. Funded by Development Impact Fee Program.)
- ◆ **Vaca Valley Road Widening.** Widen Vaca Valley Road to a four-lane divided road with protected turn pockets from Interstate 505 to Browns Valley Parkway and to a six-lane divided road with protected turn pockets from Interstate 505 to Crescent Drive. (Funded by area development as condition of approval.)
- ◆ **California Drive Extension and Interstate 80 Overcrossing.** Extend California Drive as a four-lane arterial from Marshall Road to Pena

Adobe Road and construct new four-lane overcrossing at Interstate 80. (Identified in existing General Plan and funded by Development Impact Fee Program.)

- ◆ **Midway Road Widening.** Widen Midway Road to provide four lanes in each direction between Putah South Canal and Interstate 80. (Identified in existing General Plan. Funded by adjacent development as condition of approval.)
- ◆ **Vaca Valley Parkway Extension.** Extend Vaca Valley Parkway from Gibson Canyon Road to Wrentham Drive and accommodate bicycle facility. (Identified in existing General Plan and funded by Development Impact Fee Program.)
- ◆ **Browns Valley Road Widening.** Widen Browns Valley Road between Allison Drive and the northern city limits. (Identified in existing General Plan; Development Impact Fee Program includes widening from Allison Drive to Wrentham Drive.)
- ◆ **Midway Road Intersection Improvements.** Improve the intersection of Midway Road and Interstate 505 to accommodate projected demand. (Future Traffic Impact Fees Project.)
- ◆ **East Monte Vista Avenue and Depot Street Intersection Improvements.** Modify intersection to provide two westbound left-turn lanes. (Future Traffic Impact Fees Project.)
- ◆ **California Drive Widening.** Widen California Drive at Alamo Road (Future Traffic Impact Fees Project.)

c. Alternative Modes

The following improvements for alternative modes of transportation are planned or proposed:

- ◆ **Vacaville/Fairfield Multi-Modal Rail Station.** Construct a new commuter rail station at the southeast corner of Peabody Road and Vanden Road in northeast Fairfield along Amtrak's Capitol Corridor. The station would be the focal point of a transit-oriented development with up to 3,000 dwelling units within a ½-mile radius of the station. (Environ-

mental Impact Report is certified; design phase is initiated. Opening is currently scheduled for 2014; City of Fairfield is lead agency.)

- ◆ **Vacaville Intermodal Station.** Complete phase 2 of the project which includes the construction of a 400-vehicle parking garage structure adjacent to the intermodal station. (In design phase.)
- ◆ **Ulatis Creek Bike Path.**
  - Construct Class II bike lane and Class I bike path along Ulatis Creek between Ulatis Drive and Leisure Town Road. (Design and environmental assessment phase began in March 2010.)
  - Construct Class I bike path along Ulatis Creek between Allison Drive and Interstate 80. (Preliminary design and environmental assessment phase initiated.)
- ◆ **Elmira Road Bike Path.** Construct Class I bike path along old Southern Pacific Railroad right-of-way on north side of Elmira Road between Leisure Town Road and Edwin Drive. (In planning and design phase as part of a grant application.)
- ◆ **Creekwalk Extension.** Extend the Creekwalk east to McClellan Street along the north side of Ulatis Creek. (Construction begun; estimated completion by June 2010.)
- ◆ **Other Bikeways.** Future bikeway improvements shown in Figure 6-3 of the existing General Plan (Vacaville-Bikeways) will be assessed as a part of the General Plan Update.

### *B. Regulatory Framework*

The transportation system in Vacaville is regulated by a number of agencies on the federal, State, and local levels. In addition to the City of Vacaville, which is responsible for constructing and maintaining non-State and non-federal transportation facilities in the city, major federal, State, regional and County regulatory bodies pertinent to Vacaville's transportation system are described below. This section also summarizes federal, State, and local laws,

policies, and regulations that apply to transportation and circulation in and around Vacaville.

### **1. Federal Agencies and Regulations**

This section summarizes federal agencies and laws that pertain to transportation in Vacaville.

#### **a. Federal Highway Administration**

The Federal Highway Administration (FHWA) is the agency of the United States Department of Transportation (DOT) responsible for the federally-funded roadway system, including the interstate highway network and portions of the primary State highway network, such as Interstate 80. FHWA funding is provided through the Safe, Accountable, Flexible, Efficiency Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU can be used to fund local transportation improvements in Vacaville, such as projects to improve the efficiency of existing roadways, traffic signal coordination, bikeways, and transit system upgrades. This law will expire at the end of 2010.

#### **b. Americans with Disabilities Act**

The Americans with Disabilities Act (ADA) provides comprehensive rights and protections to individuals with disabilities. The goal of the ADA is to assure equality of opportunity, full participation, independent living, and economic self-sufficiency. To implement this goal, the United States Access Board has created accessibility guidelines for public rights-of-way. The guidelines address various issues, including roadway design practices, slope and terrain issues, pedestrian access to streets, sidewalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way. As discussed in Section A.7, the City of Vacaville complies with the ADA and has established an ADA Coordinator and an ADA Advisory Committee.

## 2. State Agencies, Regulations, and Policies

This section summarizes State agencies, regulations, and policies that pertain to transportation in Vacaville.

### a. California Department of Transportation

The California Department of Transportation (Caltrans) is the primary State agency responsible for transportation issues. One of its duties is the construction and maintenance of the State highway system. Caltrans has established standards for roadway traffic flow and developed procedures to determine if State-controlled facilities require improvements. For projects that may physically affect facilities under its administration, Caltrans requires encroachment permits before any construction work may be undertaken. For projects that would not physically affect facilities, but may influence traffic flow and levels of services at such facilities, Caltrans may recommend measures to mitigate the traffic impacts of such projects. Caltrans facilities within the Vacaville study area include Interstate 80 and Interstate 505.

Additionally, the following Caltrans procedures and directives are relevant to transportation improvements in Vacaville:

- ◆ **Level of Service Target.** Caltrans maintains a target level of service at the transition between LOS C and LOS D for all of its facilities.<sup>4</sup> Where an existing facility is operating at less than the LOS C/D threshold, the existing measure of effectiveness should be maintained.<sup>5</sup>
- ◆ **Caltrans Project Development Procedures Manual.** This manual outlines pertinent statutory requirements, planning policies, and implementing procedures regarding transportation facilities. It is continually and incrementally updated to reflect changes in policy and procedures. For example, the most recent revision incorporates the Complete Streets policy from Deputy Directive 64-R1, which is detailed below.

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<sup>4</sup> Level of service is explained further in Section A.1.c.

<sup>5</sup> California Department of Transportation, December 2002, *Guide for the Preparation of Traffic Impact Studies*.

- ◆ **Caltrans Deputy Directive 64.** This directive requires Caltrans to consider the needs of non-motorized travelers, including pedestrians, bicyclists, and persons with disabilities, in all programming, planning, maintenance, construction, operations, and project development activities and products. This includes incorporation of the best available standards in all of the Department’s practices.
- ◆ **Caltrans Deputy Directive 64-RI.** This directive requires Caltrans to provide for the needs of travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities and products on the State highway system. Caltrans supports bicycle, pedestrian, and transit travel with a focus on “complete streets” that begins early in system planning and continues through project construction and maintenance and operations.
- ◆ **Caltrans Director’s Policy 22.** This policy establishes support for balancing transportation needs with community goals. Caltrans seeks to involve and integrate community goals in the planning, design, construction, and maintenance and operations processes, including accommodating the needs of bicyclists and pedestrians.
- ◆ **Environmental Assessment Review and Comment.** Caltrans, as a responsible agency under the California Environmental Quality Act (CEQA), is available for early consultation on projects to provide guidance on applicable transportation analysis methodologies or other transportation related issues, and is responsible for reviewing traffic impact studies for errors and omissions pertaining to the State highway facilities. In relation to this role, Caltrans published the *Guide for the Preparation of Traffic Impact Studies* (December 2002), which establishes the Measures of Effectiveness as described under “Level of Service Target” above. The Measures of Effectiveness are used to determine significant impacts on State facilities. The Guide also mandates that traffic analyses include mitigation measures to lessen potential project impacts on State facilities and to meet each project’s fair share responsibility for the impacts. However, the ultimate mitigation measures and their implementations

are to be determined upon consultation between Caltrans, the City of Vacaville, and the project proponent.

b. Complete Streets Act of 2008

The California Complete Streets Act (Assembly Bill 1358) requires cities and counties, when updating their general plans, to ensure that local streets meet the needs of all users. This law will take effect in January 2011. Therefore, the Vacaville General Plan Update will be subject to this Act.

c. California Transportation Commission

The California Transportation Commission (CTC) consists of nine members appointed by the Governor. CTC is responsible for the programming and allocation of funds for the construction of highway, passenger rail, and transit improvements throughout the state, including in the Vacaville study area. CTC is also responsible for managing the State Transportation Improvement Program (STIP) and the State Highway Operation and Protection Program (SHOPP) funding programs.

d. Assembly Concurrent Resolution 211

Assembly Concurrent Resolution 211, enacted in 2002, acknowledges the importance of bicycling and walking to the State of California. The Resolution encourages all cities, such as Vacaville, to “implement the policies of... the United States Department of Transportation’s design guidance document on integrating bicycling and walking when building their transportation infrastructure.”

**3. Regional Agencies, Plans and Policies**

This section summarizes regional agencies, plans, and policies that pertain to transportation in Vacaville.

a. Metropolitan Transportation Commission

The Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating, and financing agency for the nine-county Bay Area, including Solano County. It also functions as the federally-mandated metro-

politan planning organization (MPO) for the region. MTC authors the regional transportation plan and has established policy regarding the accommodation of pedestrians and bicyclists, both of which apply to the Vacaville study area.

*i. Regional Transportation Plan*

The majority of federal, State, and regional financing available for transportation projects is allocated at the regional level by MTC. The current regional transportation plan, known as *Transportation 2035*, was adopted by MTC on April 22, 2009. *Transportation 2035* specifies a detailed set of investments and strategies throughout the region from 2010 through 2035 to maintain, manage, and improve the surface transportation system, specifying how anticipated federal, State, and local transportation funds will be spent. The projects included in the 2035 Plan that will most directly affect Vacaville are:

- ◆ Construction of a new Fairfield/Vacaville Multimodal Train Station at the southeast corner of Peabody Road and Vanden Road in northeast Fairfield for Capitol Corridor intercity rail service.
- ◆ Construction of a ten-bay bus carousel and a 220-space parking lot (Phase 1) and a 400-space parking garage (Phase 2) at the Vacaville Intermodal Station.
- ◆ Construction of Jepson Parkway from Route 12 to Interstate 80 Leisure Town Road Interchange.
- ◆ Widening of Interstate 80 to add an express lane in each direction from the Yolo County line to State Route 37.

Transportation 2035 also allocates funding for the maintenance of local streets and roads as well as improvements to local interchanges and auxiliary lanes in Solano County.

*ii. MTC Policy on Routine Accommodation of Pedestrians and Bicyclists in the Bay Area*

Projects funded all or in part with regional funds (e.g. federal, State Transportation Improvement Program, bridge tolls) must consider the accommodation of bicycle and pedestrian facilities, as described in Caltrans Deputy Directive

64. These recommendations do not replace locally-adopted policies regarding transportation planning, design, and construction. Instead, these recommendations facilitate the accommodation of pedestrians, including wheelchair users, and bicyclists into all projects where bicycle and pedestrian travel is consistent with current adopted regional and local plans. Transportation projects that use regional funds in the Vacaville study area are subject to this policy.

b. Association of Bay Area Governments

The Association of Bay Area Governments (ABAG) is the regional planning agency for the nine-county Bay Area, including Solano County. It primarily deals with land use, housing, environmental quality, and economic development issues, which are often closely connected to transportation.

c. Solano Transportation Authority

The Solano Transportation Authority (STA) has been designated as the CMP agency to address congestion issues in Solano County and the seven cities within the county, including Vacaville. It is responsible for countywide transportation planning, programming transportation funds, managing and providing transportation programs and services, delivering transportation projects, and setting transportation priorities.

The STA Board of Directors adopted the Solano County Comprehensive Transportation Plan (CTP 2030) in June 2005. The Plan envisions, directs, and prioritizes the transportation needs of Solano County through 2030. The CTP incorporates a number of plans and studies prepared by STA:

- ◆ Solano Yolo BikeLinks Map (2009)
- ◆ North Connector Transportation for Livable Communities Concept Plan (October 2007)
- ◆ Solano Travel Safety Plan (Phase 1 adopted in July 2005, Phase 2 underway)
- ◆ Solano Countywide Pedestrian Plan (October 2004; currently being updated)

- ◆ Solano Transportation for Livable Communities Plan (October 2004)
- ◆ Solano Countywide Bicycle Plan (October 2004)
- ◆ Jepson Parkway Concept Plan (May 2000)
- ◆ Napa/Solano Regional Traffic Model

As the designated Congestion Management Agency, STA worked with jurisdictions within the county, including Vacaville, to identify locations where periodic congestion monitoring would occur as required by the State's CMP legislation. Level of service standards are established for CMP routes of regional significance that connect communities with each other and with the State highway system. Besides Interstate 80 and Interstate 505, the CMP system in Vacaville includes Peabody Road from California Drive south to the Vacaville city limits, Vaca Valley Parkway between Interstate 80 and Interstate 505, and Elmira Road east of Leisure Town Road.

d. Air Quality Districts

There are two air quality districts that address air pollution in the Vacaville study area. Since a primary source of air pollution in the Vacaville region is from motor vehicles, air district regulations affect transportation planning in the study area. The Yolo-Solano Air Quality Management District (YSAQMD), established by a joint powers agreement between Yolo and Solano Counties, is responsible for protecting human health and property from the harmful effects of air pollution throughout the majority of the Vacaville study area. The Bay Area Air Quality Management District (BAAQMD) is a public agency tasked with regulating air pollution in the nine-county Bay Area, including the southwest portion of Solano County. BAAQMD's goals include reducing health disparities due to air pollution, achieving and maintaining air quality standards, and implementing exemplary regulatory programs and compliance of federal, State and regional regulations.

#### 4. Vacaville Policies and Regulations

This section summarizes City policies and regulations that pertain to transportation in Vacaville.

a. Vacaville General Plan

The City of Vacaville's current General Plan contains guiding and implementing policies that are relevant to transportation and circulation in the study area. These guiding and implementing policies are included in the Transportation Element and presented in Table 3.

*i. Road Segment Level of Service*

The Transportation Element of the existing General Plan establishes maximum thresholds for LOS C for two-way hourly flow and maximum thresholds for LOS C and LOS D for one-way directional hourly flow, as shown in Table 4. The City generally has distinct directional traffic patterns during peak hours. The level of service thresholds take into account the peak directional flow and factor the two-way capacity as appropriate to establish the directional capacity for each segment level of service. For planning level analysis, existing and projected directional volumes have been compared to the segment capacities established by General Plan.

*ii. Intersection Level of Service*

The City's current methodology for calculating level of service at intersections for planning studies is based on the Planning Method from the Transportation Research Board's Circular 212.<sup>6</sup> This methodology compares traffic demands on critical conflicting movements to the available capacity at a street intersection to determine the volume to capacity ratio (V/C). It then assigns a level of service based on the V/C, as presented in Table 5.

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<sup>6</sup> Transportation Research Board, 1980, *Interim Materials on Highway Capacity*, Transportation Research Circular 212, Washington, D.C.

TABLE 3 **CITY OF VACAVILLE GENERAL PLAN POLICIES RELEVANT TO TRANSPORTATION AND CIRCULATION**

Policy Number	Policy Content
Policy 6.1-G 1	Strive to maintain LOS C as the minimum standard at all intersections, interchanges, and road links. Design improvements to provide for LOS C in the year 2025 based on the City's development forecast.
Policy 6.1-G 2	LOS D, for a particular intersection, interchange or road link, shall be allowed by a decision maker on a project as an interim level of service where improvements are programmed by the City which will improve the level of service to LOS C or better. LOS D may also be approved by the City as an allowable standard by the City Council or designee for infill areas or situations where existing development or other practical considerations limit improvements.
Policy 6.1-G 3	<p>LOS E or LOS F for a particular intersection, interchange or road link may be allowed by the City Council on the basis of one of the following findings:</p> <p><u>Finding 1</u></p> <ul style="list-style-type: none"> <li>◆ The interchange, intersection or road link that will experience the projected lower level of service is an infill or isolated area; and</li> <li>◆ There is no practical and feasible way to mitigate the lower level of service; and</li> <li>◆ The project resulting in the lower level of service is of clear, overall public benefit.</li> </ul> <p><u>Finding 2</u></p> <ul style="list-style-type: none"> <li>◆ A capital improvement project is reasonably scheduled to be completed which will improve the projected level of service to LOS D or better; and</li> <li>◆ The interim impact of the projected traffic congestion is offset by the public benefits of the project.</li> </ul> <p><u>Finding 3</u></p> <ul style="list-style-type: none"> <li>◆ The City has entered into a development agreement which legally commit the City to approve the proposed project.</li> </ul>
Policy 6.1-G 4	Maintain the Standard Specification for Public Improvements document for the City's roadway network, including private streets.
Policy 6.1-I 1	Design roadway improvements and evaluate development proposals based on LOS standards prescribed in Policy 6.1-G1, 6.1-G2, 6.1-G3.

TABLE 3 **CITY OF VACAVILLE GENERAL PLAN POLICIES RELEVANT TO TRANSPORTATION AND CIRCULATION (CONTINUED)**

<b>Policy Number</b>	<b>Policy Content</b>
Policy 6.1-I 2	Implement, to the extent feasible, Transportation Element improvements prior to deterioration in levels of service below the stated standard. Development approvals should require reasonable demonstration that traffic improvements necessary to serve the development without violating the standard will be in place in time to accommodate trips generated by the project.
Policy 6.1-I 3	Ensure that traffic improvements necessary to serve the development without violating the level of service standards of the Transportation Element will be in place in time to accommodate trips generated by the project through continued implementation of the City's Traffic Impact Mitigation program.
Policy 6.1-I 4	Improve circulation facilities as needed to maintain traffic levels of service and safety on major arterials.
Policy 6.1-I 5	Continue to update the Traffic Impact Fee program to reflect the adopted General Plan and existing land uses to ensure that the LOS standards are met.
Policy 6.1-I 6	In order to ensure that adequate roadway capacity is provided for the buildout of the General Plan and that new developments do not preclude the construction of adequate circulation facilities, require all new development to provide right-of-way improvements consistent with the Transportation Element, the City's computerized traffic model and the Standard Specifications.
Policy 6.1-I 7	Consider, in policy plans for new, outlying areas, the long-term growth in through-traffic and potential development in adjacent areas beyond the year 2025 to determine arterial street right-of-way requirements.
Policy 6.2-G 1	Work with the California Department of Transportation (Caltrans) and Solano Transportation Authority (STA) to achieve timely construction of programmed freeway and interchange improvements.
Policy 6.2-G 2	Coordinate, to the extent feasible, transportation system improvements with neighboring jurisdictions.
Policy 6.2-G 3	Provide adequate capacity on arterial roadways to meet LOS standards and to avoid traffic diversion to local roadways or the freeway. Frontage roads, or parallel roadway facilities, should be provided adjoining the freeways wherever possible in order to avoid traffic diversions on the freeways.
Policy 6.2-G 4	Locate high traffic-generating uses so that they have direct access or immediate secondary access to arterial roadways.
Policy 6.2-G 5	Maintain the City's funding system that will enable funding for completion of arterial roadway and interchange capacity improvements prior to the full occupancy of project(s) requiring these improvements.

TABLE 3 **CITY OF VACAVILLE GENERAL PLAN POLICIES RELEVANT TO TRANSPORTATION AND CIRCULATION (CONTINUED)**

Policy Number	Policy Content
Policy 6.2-I 1	Maximize the carrying capacity of arterial roadways by controlling the number of intersections and driveways, minimizing residential access and requiring sufficient on-site parking to meet the needs of each project.
Policy 6.2-I 2	Formulate and implement a program to levy fees based on traffic characteristics of approved major residential and nonresidential development.
Policy 6.2-I 3	Encourage Caltrans to widen and upgrade I-80 through Vacaville. In new development areas adjoining I-80 and I-505, require major building setbacks and require offers-of-dedication to permit the long-term planning and widening of the freeways.
Policy 6.2-I 4	Complete a joint planning effort with the City of Fairfield to prepare an inter-jurisdictional traffic analysis which will evaluate the impact of traffic both through and between the cities of Fairfield and Vacaville. The analysis shall include an evaluation of existing traffic impacts and future inter-jurisdictional, sub-regional and regional traffic impacts. The analysis shall also determine appropriate mitigation measures for these impacts which may include the development and implementation of a traffic impact mitigation fee assessed to mitigate the traffic impacts caused by either city.
Policy 6.2-I 5	Promote intra-regional travel connecting Vacaville, Fairfield, Suisun City and Solano County by designating Leisure Town Road from Vanden Road to Orange Drive as Vacaville's portion of the proposed Jepson Parkway.
Policy 6.2-I 6	To improve traffic flows on major arterial streets, continue to implement the computerized coordination of traffic signals at major intersections during daily peak travel periods.
Policy 6.2-I 7	To improve emergency vehicle response times, continue to implement the emergency vehicle traffic signal control system (Opticom or an approved equivalent) on major response routes.
Policy 6.3-G 1	Design local roadways and implement traffic-control measures to maintain LOS C on local streets.
Policy 6.3-G 2	Design new collector roadways and implement traffic-control measures where feasible to maintain LOS C on these new collector roadways.
Policy 6.3-G 3	Discourage through-traffic on local roadways.
Policy 6.3-G 4	Designate truck routes, and discourage unnecessary through-traffic in residential areas through circulation system design and planning.
Policy 6.3-I 1	Avoid adding traffic to roadways carrying volumes above the standards.

TABLE 3 **CITY OF VACAVILLE GENERAL PLAN POLICIES RELEVANT TO TRANSPORTATION AND CIRCULATION (CONTINUED)**

<b>Policy Number</b>	<b>Policy Content</b>
Policy 6.3-I 2	Design local roadways as short, discontinuous roadways to discourage use by through-traffic.
Policy 6.3-I 3	Control access to auto-oriented commercial areas by use of median strips and frontage roads to assure safety and minimize traffic conflicts.
Policy 6.4-G 1	Establish a minimum 20 percent trip reduction goal during peak time periods for a transportation systems management (TSM) program for new and existing uses in new and existing employment areas.
Policy 6.4-G 2	Cooperate with the local business community and development community to voluntarily implement TSM measures that will enable the community to meet the 20 percent trip reduction goal and continue a positive and supportive business environment.
Policy 6.4-G 3	Assist employers to implement TSM programs to reduce peak-period trip generation.
Policy 6.4-G 4	Cooperate with public agencies and other entities to promote local and regional public transit serving Vacaville.
Policy 6.4-I 1	Implement TSM measures to achieve a 20 percent trip reduction goal and continue to fund adequate administration to promote and achieve compliance with the TSM program.
Policy 6.4-I 2	Assist major employers to adopt TSM programs which will reduce peak-period trip generation by 20 percent or more from the vehicle trip generation currently observed at similar sites without a TSM program.
Policy 6.4-I 3	Favor TSM programs that limit vehicle use over those that extend the commute hour.
Policy 6.4-I 4	The transit routes and service should be designed to meet the State required fare box matching revenues.
Policy 6.4-I 5	Encourage construction of regional rail facilities, including a regional rail stop that will serve Vacaville. Encourage the expansion of an intercity public transit/bus system to link Vacaville with neighboring communities.
Policy 6.4-I 6	Require facilities for future transit use when designing improvements for roadways.
Policy 6.4-I 7	Design local transit to plan for local bus routes that improve service for potential riders. This includes improvements such as bus turnouts and shelters and related facilities.
Policy 6.4-I 8	Work with Caltrans to identify and evaluate sites for rideshare parking and establish standards for such site development.
Policy 6.4-I 9	Support and encourage Caltrans to preserve options for future transit use when designing improvements for interstate and State routes.

TABLE 3 **CITY OF VACAVILLE GENERAL PLAN POLICIES RELEVANT TO TRANSPORTATION AND CIRCULATION (CONTINUED)**

Policy Number	Policy Content
Policy 6.4-I 10	Continue to designate bike lanes and construct cross-city bike routes designated in the General Plan to facilitate non-motorized home-to-work trips.
Policy 6.4-I 11	Remove physical barriers to improve access to transit facilities for the elderly, handicapped and other transit-dependent groups.
Policy 6.5-G 1	Establish a comprehensive network of on- and off-roadway bike routes to encourage the use of bikes for commute, recreational and other trips.
Policy 6.5-G 2	Require major employers to provide support facilities to encourage use of bikes for commute purposes.
Policy 6.5-G 3	Develop bike and pedestrian routes that provide access to schools, historic sites, governmental services, major commercial centers, parks and regional open space.
Policy 6.5-G 4	Ensure safe, pleasant and convenient pedestrian paths, sidewalks, and trails to accommodate all segments of the population.
Policy 6.5-G 5	Continue to support programs to improve the mobility of the elderly and handicapped, remove existing architectural barriers, and require that new development be accessible to those with physical impairments.
Policy 6.5-G 6	Designate new bike routes only where necessary to connect Vacaville's bikeway system with existing bike routes designated by Solano County.
Policy 6.5-I 1	Use available rights-of-way and creek banks for public use as trails, bikeways or walkways.
Policy 6.5-I 2	Incorporate bike storage and other support facilities into TSM plans at employment sites and public facilities.
Policy 6.5-I 3	Provide adequate public and private bicycle parking and storage facilities as part of new multifamily and non-residential developments. Design standards in the off-street parking section of the Land Use and Development Code require bicycle racks be installed in retail areas, major employment center, public facilities and apartments.
Policy 6.5-I 4	Develop a series of continuous pedestrian walkways within Downtown and residential neighborhoods.
Policy 6.5-I 5	Develop a program to remove all barriers to disabled persons on arterial and collector streets.
Policy 6.5-I 6	New and existing on-street bicycle lanes shall be striped, signed and maintained to encourage their use.
Policy 6.6-G 1	Maintain and improve Nut Tree Airport for general aviation.

TABLE 3 **CITY OF VACAVILLE GENERAL PLAN POLICIES RELEVANT TO TRANSPORTATION AND CIRCULATION (CONTINUED)**

Policy Number	Policy Content
Policy 6.6-G 2	Ensure that land uses in the vicinity of Nut Tree Airport or potentially affected by Travis Air Force Base are compatible with airport operations and are consistent with the Airport Land Use Plan for both airports.
Policy 6.6-I 1	Continue to implement the "Airport/Land Use Compatibility Plan for the Nut Tree Airport" (Nut Tree ALUP) through the Land Use and Development Code regulations adopted by the City.
Policy 6.6-I 2	Continue to refer development proposals within the Nut Tree Airport Compatibility District to the County Airport Land Use Commission per the Nut Tree ALUP and the Solano County Airport Land Use Compatibility Review Procedures.
Policy 6.6-I 3	Aviation easements shall continue to be required to be granted to Solano County for all development within the Nut Tree Airport Compatibility District. Residential renters and purchasers shall be notified that they are in the vicinity of an airport per the adopted City ordinance.
Policy 6.6-I 4	Continue to implement the "Comprehensive Airport Land Use Plan, Travis Air Force Base" through the City's adopted zoning regulations.
Policy 6.6-I 5	Continue to refer development proposals within the Travis Airport Compatibility District to the County Airport Land Use Commission per the Travis ALUP and the Solano County Airport Land Use Compatibility Review Procedures.

Source: Vacaville General Plan, 1990.

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TABLE 4 **GENERAL PLAN SEGMENT CAPACITIES BY CLASSIFICATION**

Segment Classification	LOS C Total Two-Way Capacity	Calculated Directional LOS C Capacity	Calculated Directional LOS D Capacity	Calculated Directional Capacity
8-Lane Freeway	12,000	6,600	7,425	8,250
6-Lane Freeway	8,000	4,400	4,950	5,500
6-Lane Divided Arterial	4,500	2,700	3,038	3,375
4-Lane Divided Arterial	3,500	2,100	2,363	2,625
4-Lane Arterial	2,500	1,500	1,688	1,875
2-Lane Arterial	1,500	900	1,013	1,125
Collector	1,000	600	675	750

Notes:

Calculated LOS C directional capacity is based on an assumed split of 60%/40% on local streets and 55%/45% on freeways.

Calculated directional capacity assumed LOS C to be 80% of available capacity and LOS D to be 90% of capacity.

Source: City of Vacaville, *General Plan Transportation Element*, December 2007, Figure 6-1.

TABLE 5 **INTERSECTION LEVEL OF SERVICE CRITERIA**

LOS	Volume to Capacity Ratio
A	0.00 to 0.60
B	>0.60 to 0.70
C	>0.70 to 0.80
D	>0.80 to 0.90
E	>0.90 to 1.00
F	> 1.00

Source: City of Vacaville Land Use and Development Code, Chapter 14.13.180 – Traffic Impact Mitigation Ordinance.

The trend for transportation analysis is moving toward applying operational analysis for planning studies based on the methodology outlined in the Highway Capacity Manual (HCM).<sup>7</sup> The HCM operational analysis procedures calculate an average stopped delay per vehicle at a signalized intersection or an average total delay per vehicle for each controlled movement at an unsignalized intersection, and assigns a level of service designation based upon the delay. The HCM operational method for signalized intersections also provides a calculation of the V/C of the critical movements at the intersection.

The General Plan Update will evaluate level of service methodologies, including the current Circular 212 Planning Method and operational analysis methods from the HCM. The evaluation will establish the methodologies to be applied in the General Plan Update and the subsequent application of these methodologies to establish conformity with the updated General Plan policies.

b. Vacaville Municipal Code

The City's Municipal Code includes regulations that govern the transportation system. Regulations that are of particular relevance to the General Plan Transportation and Circulation Update are summarized below.

In addition to the regulations described below, the Land Use and Development Code establishes a comprehensive truck route network and identifies off-street parking requirements for each type of land use.

i. *Transportation System Management Ordinance*

The City's Transportation System Management Ordinance (Chapter 10.60 of the Municipal Code) has established requirements for employers to promote alternative commute modes, such as transit, ridesharing, bicycling, and walking, and to reduce the total number of vehicle trips in order to proactively manage congestion and vehicle emissions. The Ordinance is applicable to

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<sup>7</sup> Transportation Research Board, 2000, *Highway Capacity Manual*, Washington, D.C.

major employers and major projects of 100 or more employees and to minor employers and projects of 25 to 99 employees.

Major employers/projects are required to obtain a transportation management certificate. To obtain the certificate, employers must submit a transportation management plan, which specifies measures to achieve an average vehicle ridership goal of 1.35 during the peak period of commute trips. A status report and, if necessary, additional measures are to be submitted annually for certificate renewal. If the employers can demonstrate achievement of the established goals during two consecutive years, a two-year renewal certificate may be obtained.

Minor employers/projects are required to post information describing the benefits of transit, ridesharing, bicycling, and walking, and to provide practical information on these alternative mode options. In addition, such information is to be provided to newly-hired employees. A transportation coordinator must be designated; this coordinator is responsible for the dissemination of alternative commute information, such as ridesharing and transit schedules.

Legislation enacted since adoption of the existing General Plan TSM ordinance makes conformance with these requirements largely voluntary.

*ii. Traffic Impact Mitigation Ordinance*

The City's Traffic Impact Mitigation Ordinance (Chapter 14.13.180 of the Municipal Code) establishes a procedure to assess and mitigate the potential impacts of proposed development projects on the transportation system. Section 14.13.180.070 establishes traffic impact standards, which specifically allow City decision-makers to allow and accept LOS D without mitigation improvements. This standard is more lenient than that indicated in the General Plan, where Policy 6.1-G1 has established a minimum standard of LOS C for all intersections, road links, and interchanges. The Traffic Impact Mitigation Ordinance also provides for LOS E and LOS F approval under defined circumstances similar to those identified in General Plan Policy 6.1-G 3.

The implementation of the City’s Traffic Impact Mitigation Ordinance for development projects found to meet trip generation thresholds established in the Ordinance has required the provision of traffic studies. Traffic studies are required to analyze traffic under three conditions: Existing Conditions, Existing Conditions plus projects that have been approved (Existing + Approved Projects Conditions) and a 20- to 25-year projection. Transportation improvements required to mitigate impacts are based on results of this analysis. Right-of way dedication is required for roadway improvements identified in the current General Plan for traffic conditions associated with buildout of all allowable land uses. Conditions of approval for development projects providing transportation improvements are based on short term impacts (Existing and Approved Projects) and the 20-year projections.

*C. Implications for the General Plan Update*

Based on the information contained in this memorandum, the General Plan Update process should consider the following:

- ◆ Vacaville’s roadway system and classifications should be reviewed and updated if needed. Specifically, differences in roadway classifications between the General Plan and the CRS maps should be assessed to determine if changes to the CRS maps’ functional classification should be requested.
- ◆ The operational analysis methodologies for each type of transportation facility should be reviewed.
- ◆ Procedures to assess level of service for roadway segments and intersections should be updated, if needed. This evaluation should also establish the need to include an analysis of hour(s) outside the PM peak period (4:00 to 6:00 p.m.).
- ◆ Consider LOS standard(s) and definition of LOS goals.
- ◆ Since there have been improvements to roadways since some of the roadway operations data were collected, the General Plan Update should reevaluate existing level of service with the improvements in place.

- ◆ Future bikeway improvements in Vacaville should be considered based on Figure 6-3 of the existing General Plan and other input and information collected through the General Plan Update process.
- ◆ The General Plan Update should consider potential opportunities provided by planned transit improvements, such as the Vacaville Intermodal Station and the Vacaville/Fairfield Multi-Modal Rail Station, and their coordination with Vacaville City Coach service.
- ◆ Consider General Plan policy needed for conformance with Complete Streets.
- ◆ Consider General Plan policy to address contribution of transportation to greenhouse gas reduction.
- ◆ Include an evaluation of transportation operations for the current General Plan and updated General Plan alternatives.
- ◆ Evaluate current implementation of General Plan transportation policy that requires transportation improvements for 20-25 year projections and right-of way for future General Plan conditions.
- ◆ Need for subsequent update of transportation portion of Development Impact Fee Program applying, methodology and transportation policy consistent with updated General Plan.
- ◆ Based on proposed General Plan transportation policy updates, establish any revisions to Municipal Code needed related to transportation, including but not limited to, review of the Traffic Impact Mitigation and Transportation System Management sections of Municipal Code.

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A P P E N D I X A

TRANSPORTATION AND  
CIRCULATION TECHNICAL  
MEMORANDUM REFERENCES





## APPENDIX A

The following references were used for the Transportation and Circulation technical memorandum:

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