# Chapter 5D. Traffic and Circulation

#### INTRODUCTION

The evaluation of the operating characteristics of the existing circulation system within the City's planning area is the initial task in defining the impacts of the proposed land use alternatives for the proposed General Plan update. To understand the existing travel patterns and conditions, all major aspects of transportation in Davis have been inventoried and analyzed. This chapter discusses roadway classifications, traffic volumes and corresponding levels of service (LOS), as well as bicycle routes, transit routes, truck routes, and rail and air service.

#### **SETTING**

#### Streets and Highways

#### **Roadway Functional Classification**

The existing General Plan Transportation and Circulation Element contains five roadway functional classifications ranging from Major Arterials to Cul-de-sacs. While a majority of the roadways in the planning area can be categorized under the functional classifications provided below, it should be noted that not all of the planning areas' roadways can be categorized under the five classifications. A description of each of these roadway classifications is described below.

**Major Arterial.** A major arterial is defined as a continuous street, existing or proposed, located to serve arterial traffic and designated to minimize access to abutting property via driveways, alleys, and business entrances. Streets feeding into major arterials should be spaced at one-quartermile intervals. Major arterials should not penetrate neighborhoods and should be planned to minimize through traffic in residential neighborhoods and adjacent to schools.

**Minor Arterial.** A minor arterial is a continuous street, existing or proposed, located to provide a direct route between, but not through, separate neighborhoods. Minor arterials should be planned to minimize through traffic in residential neighborhoods and adjacent to schools.

**Collector Street.** A collector street is a noncontinuous street, existing or proposed, located to collect traffic from local streets and distribute it to minor and major arterials. The difference,

other than size, between a collector and an arterial is that a collector penetrates a neighborhood, while an arterial does not.

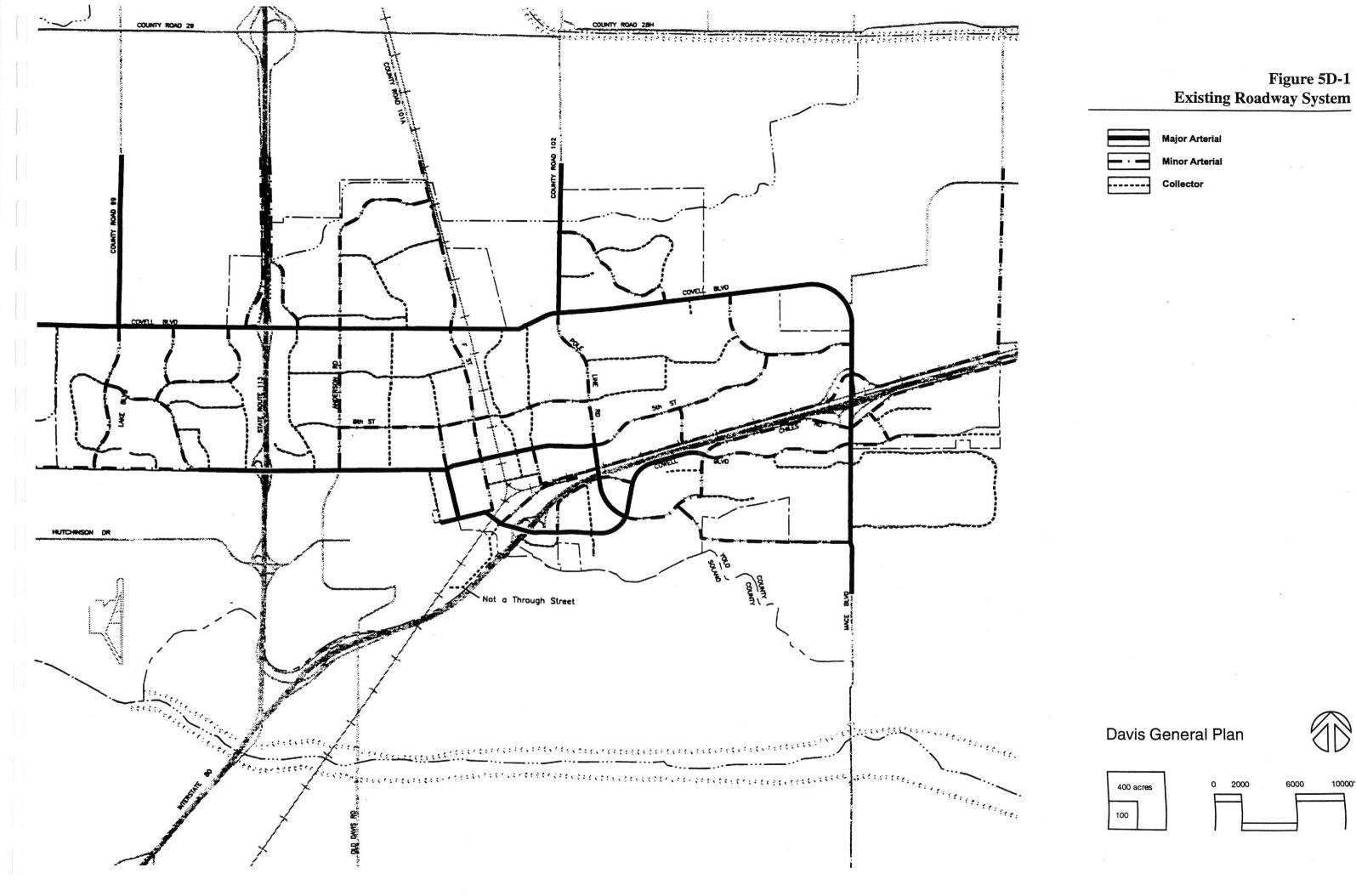
**Local Street.** A local street is a roadway, other than a collector or arterial, providing access to abutting property. The design of local streets should not facilitate or encourage through traffic.

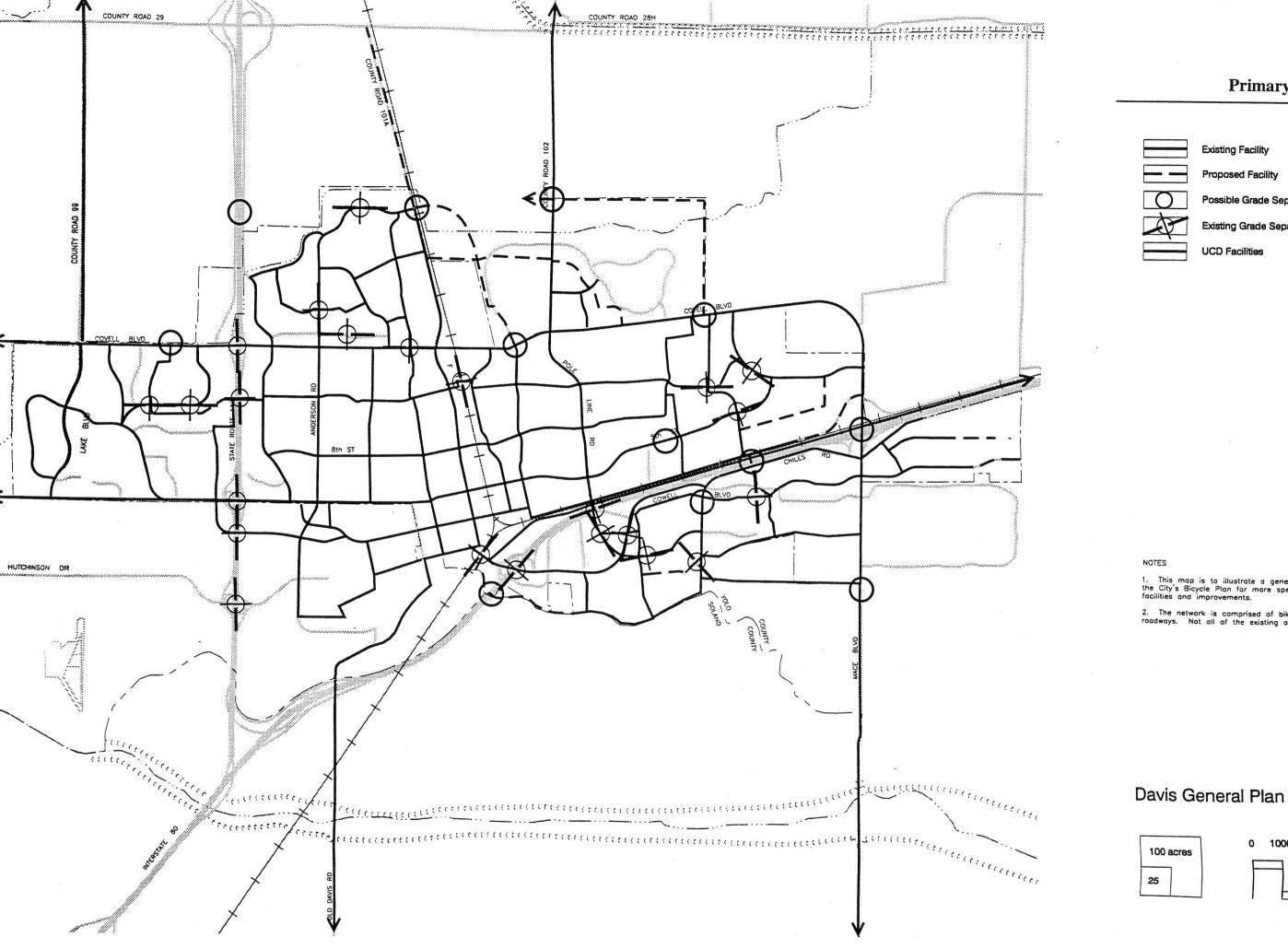
**Cul-de-Sac.** A cul-de-sac is a local street terminating in a turning area and generally not exceeding 400 feet in length.

Table 5D-1 provides a summary of the existing freeways, arterials, and collector roadways. Figure 5D-1 illustrates these facilities that currently serve the City of Davis.

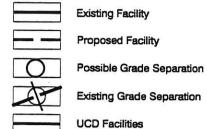
Table 5D-1. Functional Classifications of Existing and Proposed Roadways

Roadway	Limits (if applicable)
Freeways/Highways	
Interstate 80	
State Route 113	
Major Arterials	
Covell Boulevard	
Russell Boulevard	Arlington to B Street
Fifth Avenue	B Street to Pole Line Road
First Avenue	A Street to E Street
Richards Boulevard -	First Street to Research Park Drive (west)
Cowell Boulevard	Research Park Drive (west) to Chiles Road
County Road 99	North of Covell Boulevard
B Street	First Street to Fifth Street
County Road 102/Pole Line Road	North of Covell Boulevard
Pole Line Road	Fifth Street to Cowell Boulevard
Mace Boulevard	Covell Boulevard to 1/2 mile south of Montgomery Avenue
Minor Arterials	
Lake Boulevard	Covell Boulevard to Russell Boulevard
Arlington Boulevard	
Denali Drive	
Shasta Drive	
Russell Boulevard	West of Arlington Boulevard
John Jones Road/County Road 99D	
Sycamore Lane	North of Covell Boulevard
Anderson Road	
Eighth Street	Anderson Road to Pole Line Road
B Street	Fifth Street to Eighth Street
F Street	First Street to Covell Boulevard
F Street/County Road 101A	North of Covell Boulevard



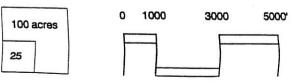


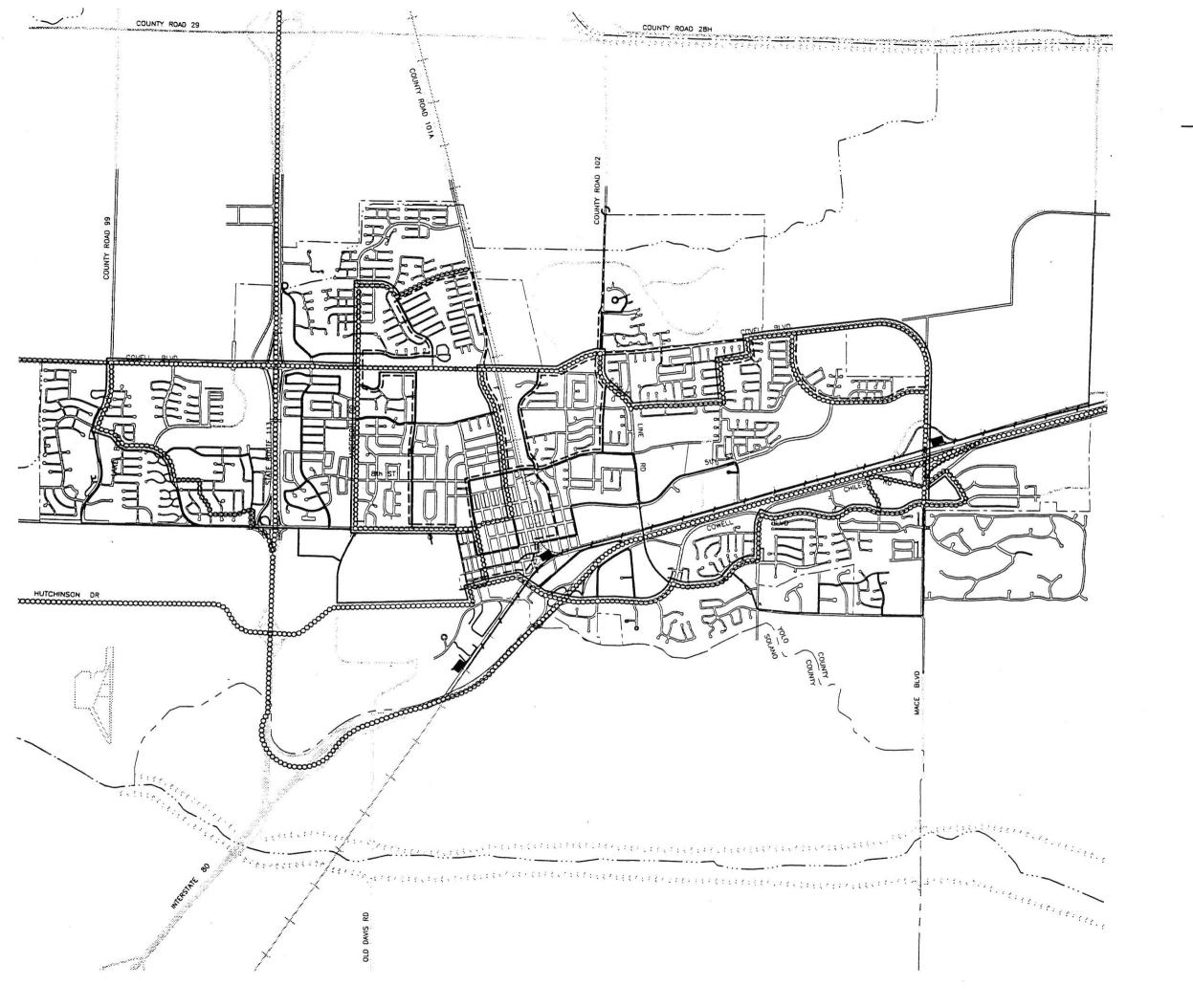
## Figure 5D-2 **Primary Bicycle Network**



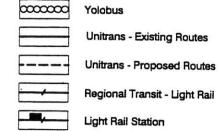
- This map is to illustrate a general bicycle network only. See the City's Bicycle Plan for more specific information on rautes, facilities and improvements.
- 2. The network is comprised of bike paths, bike lanes and shared roadways. Not all of the existing or proposed network is shown.



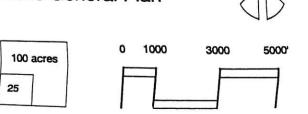




# Figure 5D-3 Transit Routes



Davis General Plan



8:00 a.m. to 8:00 p.m., Saturdays; and from 8:00 a.m. to 5:00 p.m., Sundays. Fares are \$1.25 for the general public and \$1.00 for seniors and people with disabilities (24-hour advance reservations are required). Since 1990, the annual ridership has been approximately 10,500, but increased to nearly 11,426 in 1995-1996.

Davis Senior Transit is also a City-operated, demand-response system. Service is provided using one 16-passenger vehicle. Serving senior citizens (over 55) and persons with disabilities on a space-available basis, Davis Senior Transit provides service to Woodland from Monday through Friday and to Sacramento on the second and fourth Tuesdays of the month. Fares are not charged, but donations are suggested at \$3.00 per round trip to Woodland and \$5.00 to Sacramento.

#### **Truck Routes**

Trucks in excess of 3 tons of gross vehicle weight are required to travel on designated routes, to the fullest extent feasible, to avoid streets not suited for truck traffic. Allowances are made for trucks making local deliveries, such as to construction sites and businesses. Existing designated truck routes are as follows:

- Russell Boulevard, from Highway 113 to B Street
- Fifth Street, from B Street to Pole Line Road
- First Street, from B Street to Richards Boulevard
- Richards Boulevard, from First Street to Research Park Drive
- Cowell Boulevard, Research Park Drive to Pole Line Road
- B Street, from First Street to Fifth Street
- L Street, from Second Street to Fifth Street
- Second Street, from L Street to Mace Boulevard
- Covell Boulevard, from Pole Line Road to Mace Boulevard
- Pole Line Road, from Covell Boulevard to the north City limits
- Pole Line Road, from Fifth Street to Cowell Boulevard
- Mace Boulevard, from Covell Boulevard to the south City limits

#### Rail and Air Service

The Amtrak rail and Greyhound bus companies operate from the historic railroad station in the core area. Capitol Corridor trains arrive and depart the station daily on travel through Davis between Roseville/Sacramento and the Bay Area. One Coast Starlight train arrives and departs daily with service via Sacramento to Seattle. One California Zephyr arrives and departs daily providing interstate service. There are also four daily bus connections to rail service out of Stockton. Approximately 145 passengers are served daily from the Davis station. The station is a multimodal terminal for various modes of travel, including rail, bus, and bicycle.

The Sacramento Regional Transit District has prepared a study of the feasibility of various light rail routes in the region, including a planning route between Davis and Sacramento. The planning route was shown along the side of the railroad tracks used by Amtrak, with possible stations on the UC Davis campus opposite Mrak Hall, at the Amtrak Depot, and at Mace Boulevard. Funding for light rail service between Davis and Sacramento is not available at present and would be subject to regional priorities based on ridership and the costs of providing service.

The only airport in the planning area is the UC Davis Airport, which serves general aviation. The Yolo County Airport, approximately 1 mile east of the planning area, is a general aviation airport serving private planes.

The Sacramento International Airport is located 12 miles northwest of downtown Sacramento, approximately 20 miles northeast of the City. Ten major national and international carriers and four commuter airlines serve it. There are approximately 135 arriving and departing flights daily, serving approximately 14,000 passengers. Yolobus offers public transit service to the airport from Davis, and private airport shuttles also provide service between Davis and the airport.

#### IMPACTS AND METHODOLOGY

This section presents an assessment of transportation impacts that focuses on three specific issues, as listed below:

- Streets and Highways. This impact analysis evaluates the City's planned roadway system against traffic conditions in the future to assess the required improvements needed to achieve the LOS standard in the General Plan update.
- Transit. This section outlines the planned transit system and highlights improvements needed to achieve the desired LOS.
- Bikeways. This analysis describes future impacts on the City's planned bikeway system.

#### Travel Forecasting Methodology/Assumptions

The following section provides a brief overview of the traffic modeling performed to assess the impacts related to implementation of any of the four alternatives presented in the General Plan update. Details on existing conditions, model assumptions, and model runs can be found in Appendix B, "Traffic Study".

#### **Development Assumptions**

The development of future transportation system needs and impacts is based on the results of a newly calibrated traffic demand model that was developed for the City for the General Plan update. This model translates land use data into roadway traffic volume projections. Model inputs are estimates of development (i.e., the number of single-family and multiple-family dwelling units and either square footage or acreage of various categories of nonresidential uses) and descriptions of the roadway system as noted below.

#### **Land Use Assumptions**

The level of development assumed for 2010 varies by the alternative selected. In this EIR, four development alternatives were assessed and described in Chapter 3, "Project Description." Based on the information provided in Chapter 3 and development assumptions for each of the sites being studied and the in-fill development in the planning area, development intensity was developed and assigned to Traffic Analysis Zones (TAZs) in the traffic model. Table 5D-7 compares total daily trip generation forecasts for the overall land uses included under each land use map alternative. These totals include residential and non-residential uses, as well as UC Davis. As shown, in comparison to the current General Plan (i.e., Alternative 2) the reduced buildout scenario (i.e., Alternative 3) would generate about 96% of the trips resulting from Alternative 2. Alternatives 4 and 5 would generate 104% and 105%, respectively.

Table 5D-7. Comparison Of Total Daily Trip Ends

	1998 Land		2010 La	and Use	
	Use	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Total number of trips generated Percentage of Existing General	418,059	612,190	587,782	639,315	640,090
Plan – Alternative 2, percent	68	100	96	104	105

#### **Future Transportation Network Assumptions**

The future "base" roadway system is defined for the initial evaluation of all of the alternative scenarios. This involves defining roadway improvements that would be implemented by 2010. Figures 5D-4 and 5D-5 show the planned street designations and lane configurations for 2010.

In addition to these network improvements, planned roadways that will serve the sites being studied were added to the existing roadway network for the appropriate alternative. For example, access to Oeste campus site via Lake Boulevard (under Alternative 4) and access to the Davis technology campus and intervening land sites (under Alternative 5) were added to the base roadway

network for these alternatives. In addition to these new roadways, the Mace Boulevard modification for motorists accessing I-80 from southbound Mace Boulevard was changed to become a loop ramp.

#### **Applicable Policies**

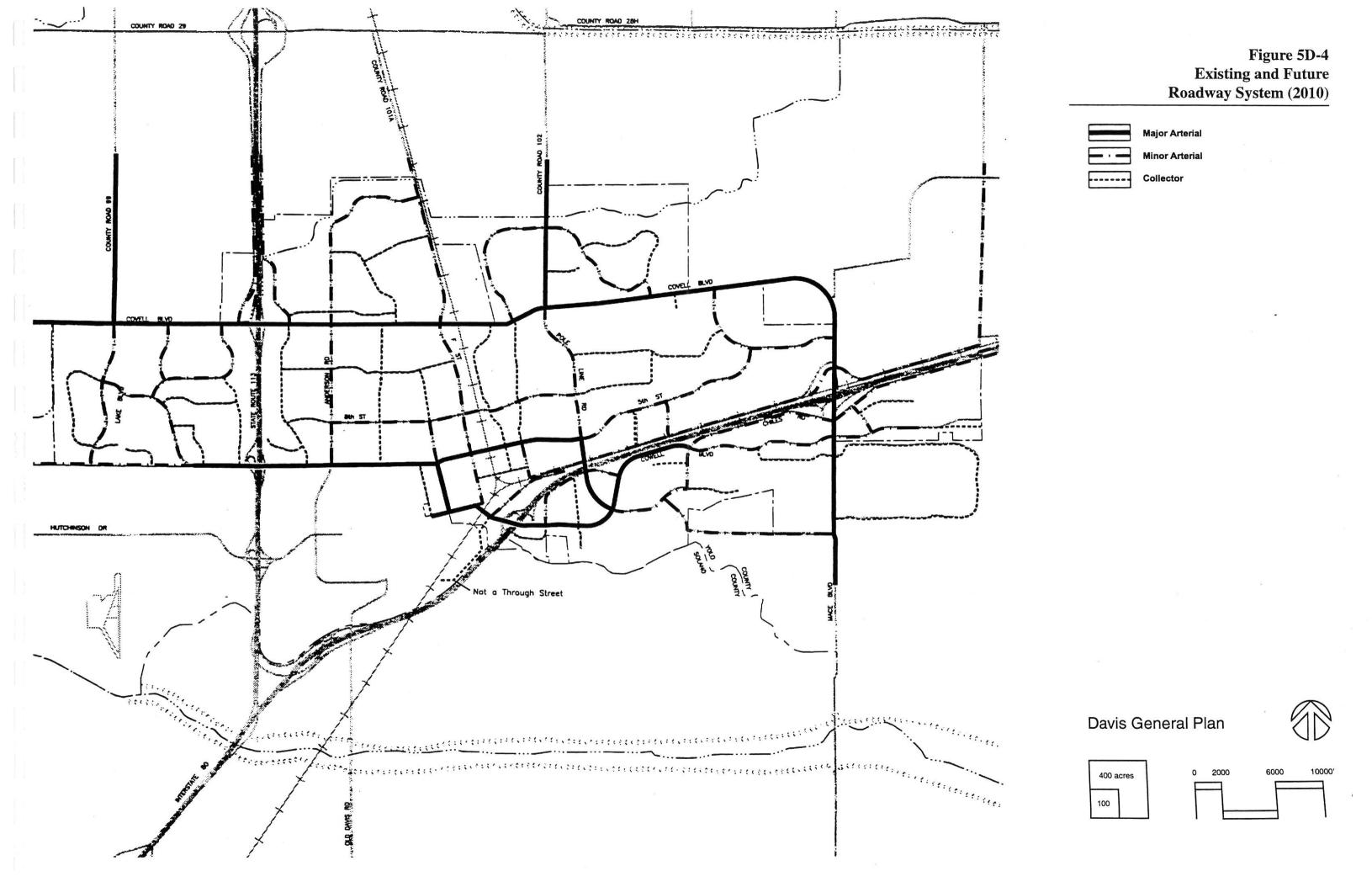
The existing and proposed General Plans identify goals, policies, standards, and actions that are designed to reduce or eliminate potential environmental impacts that may be related to the implementation of each plan. In the assessment of traffic and circulation impacts, Alternative 2 assumes implementation of the existing General Plan and the goals, policies, standards, and actions it contains. A comparison of the major policy differences between the current General Plan and the General Plan update is contained in Chapter 3, "Project Description".

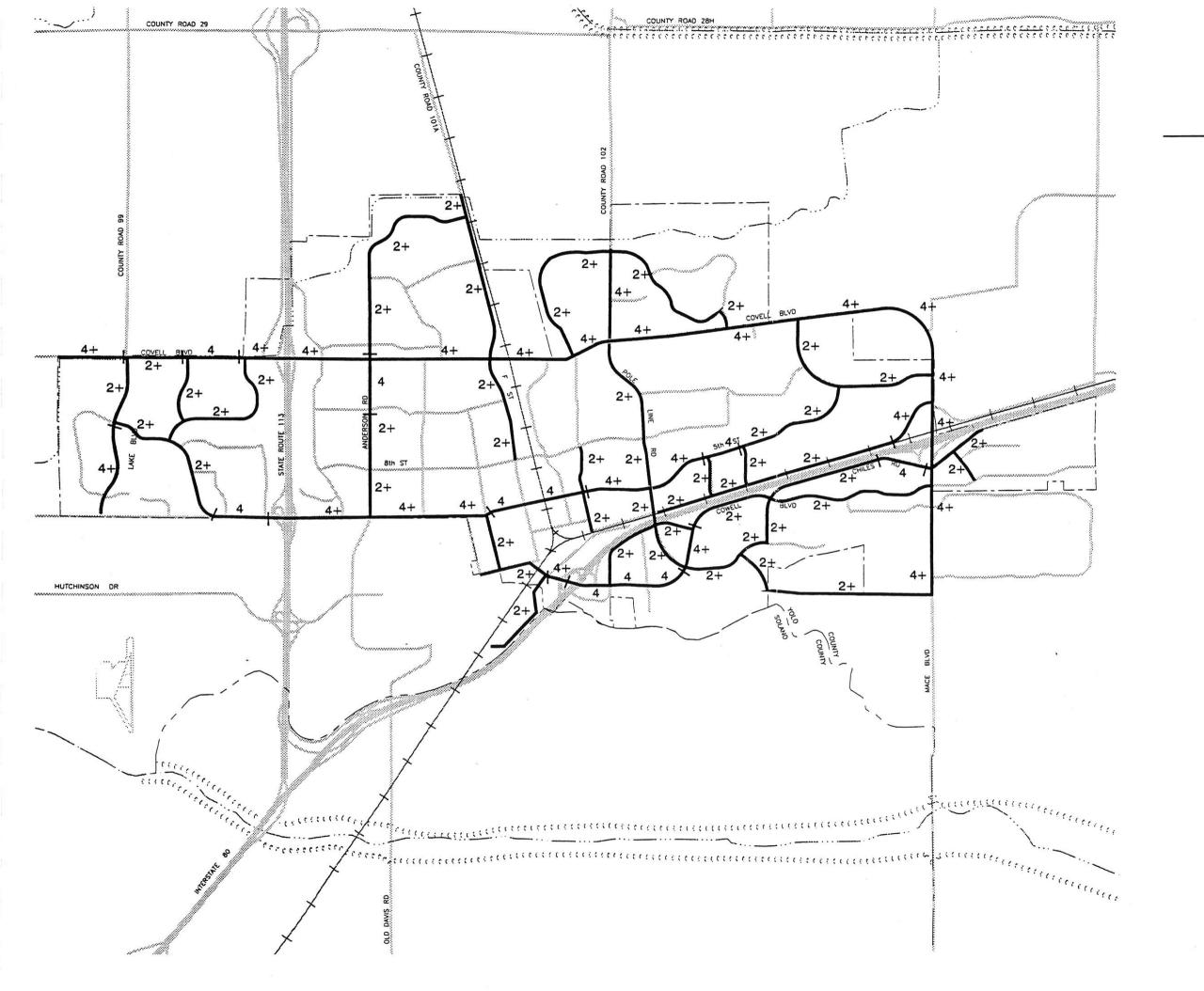
In the evaluation of the traffic and circulation impacts associated with Alternatives 3 through 5, it is assumed that the goals, policies, standards, and actions identified in the General Plan update will be implemented with all future projects. The following is a list of the goals, policies, standards, and actions that affect the impacts assessed in this chapter.

#### **General Standards**

The General Plan update identifies three guiding standards relating to the planning area's streets and bikeways. These standards were incorporated into the assessment of impacts. The tables and figures referred to in these statements can be found in the General Plan update.

- Standard MOB 0.1. The City of Davis shall have a network of vehicle circulation routes consisting of major arterials, minor arterials, collectors, local streets and cul-desacs, as shown in Figure 16. Definitions and suggested widths of each type of street are shown in Table 6. Lane widths are shown in Table 7. Planned street widenings are shown in Table 8. Lane configurations planned for 2010 are shown in Figure 17 in the General Plan update.
- Standard MOB 0.2. Streets, bike paths, bike lanes and trails should generally conform to the City guidelines, as shown in Tables 6 and 7 of the General Plan Update.
  - a. Unless preempted by the County Congestion Management Plan, LOS E for automobiles is sufficient for arterials and collectors (both intersection and segment operations) during peak-hour traffic (e.g., rush hour). LOS D for automobiles is sufficient for arterials, collectors, and major intersections during nonpeak-hour traffic. (See Glossary and Definitions for definition of "Major Intersections".) Neighborhood plans or corridor plans can allow for an LOS F at peak times if approved by the City Council. LOS F is acceptable during peak hours in the core area.





# Figure 5D-5 2010 Planned Lane Configurations

Streets With More Than 2 Lanes

Number of Lanes

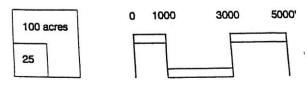
+ With Turn Lanes

#### NOTES

- The number of lanes shown refelect through/travel lanes.
- Streets not showing number of lanes are two lane streets.
  There are no through streets planned for greater than
  4 lanes.
- The number of lanes shown does not reflect turn lanes at or near intersections.

# Davis General Plan





- b. Davis streets shall have no more than four through automobile lanes, plus a single left-hand turning lane, even if this requirement reduces LOS. Additional turning lanes may be added for safety or design considerations.
- Standard MOB 0.3. Class II bicycle lanes shall be provided along all collector and arterial streets. Class I bike paths also may be provided where appropriate except where physically infeasible.

#### **Roadways and Motor Vehicles**

The General Plan update identifies goals, policies, standards, and actions relating to the planning area's roadways and motor vehicle usage. These goals and policies were incorporated into the assessment of impacts. The tables and figures referred to in these statements can be found in the General Plan update.

**GOAL MOB 1**. Provide attractive streets designed to serve a broad spectrum of travel modes as well as automobiles. A multimodal street is illustrated in Figure 18.

- Policy MOB 1.2. Encourage the use of alternative transportation modes.
- Policy MOB 1.4. Develop a traffic-calming program and implement traffic-calming
  measures, where appropriate and feasible, to minimize the impacts on the use of local
  streets by vehicular traffic and to maintain, or as necessary enhance, livability of the
  neighborhoods. Consider traffic-calming measures along collector and minor arterial
  streets, where appropriate and feasible, to slow speeds where needed. Examples of
  assorted traffic-calming treatments are shown in Figure 20.
- Policy MOB 1.5. Build new intersections and redesign existing intersections to maximize pedestrian and bike convenience and safety relative to automobile needs.
- **Policy MOB 1.7.** Preserve and enhance the Richards Boulevard underpass as an entrance to Davis and the core area, while maintaining the historical character of the structure. Provide for the smoothest possible flow of automobile, bicycle, and pedestrian traffic by implementing transportation demand management measures.

### **Parking**

The General Plan update identifies goals, policies, standards, and actions relating to the planning area's parking capacity. These goals and policies were incorporated into the assessment of impacts.

**GOAL MOB 2.** Balance the needs to provide adequate parking in residential and commercial developments with the desire to limit automobile travel.

• Policy MOB 2.1. Use parking as a transportation system management technique.

#### **Dedicated Bicycle and Pedestrian Facilities**

The General Plan update identifies goals, policies, standards, and actions relating to the planning area's dedicated bicycle and pedestrian facilities. These goals and policies were incorporated into the assessment of impacts. The tables and figures referred to in these statements can be found in the General Plan update.

**GOAL MOB 3.** Increase walking and the use of nonpolluting forms of transportation, including bicycles.

- Policy MOB 3.1. Develop a continuous trails and bikeway network for both recreation and transportation that serves the core area, neighborhoods, employment centers, schools, and other institutions; minimizes conflicts between pedestrians, bicyclists, equestrians, and automobiles; and that minimizes impacts on wildlife. Greenbelts and green streets should serve as the backbone of much of this network. Figure 23 shows the City's existing and planned primary bicycle network.
- **Policy MOB 3.5.** Develop a system of trails at the periphery of the City and within the City for recreational use and to allow walkers and bicyclists to reach open space and natural areas.

#### **Transit**

The General Plan update identifies goals, policies, standards, and actions relating to the planning area's transit system and facilities. These goals and policies were incorporated into the assessment of impacts. The tables and figures referred to in these statements can be found in the General Plan update.

GOAL MOB 4. Reduce automobile use by improving transit service and encouraging transit use.

#### **Transportation Demand Management**

The General Plan update identifies goals, policies, standards, and actions relating to transportation demand management of the planning area. These goals and policies were incorporated into the assessment of impacts. The tables and figures referred to in these statements can be found in the General Plan update.

**GOAL MOB 5.** Develop alternative transportation solutions which will help alleviate peak-hour congestion.

• **Policy MOB 5.1.** Develop and maintain a trip-reduction program designed to achieve a 10 percent reduction by 2010 in motor vehicle trips per capita relative to 1987 levels, or higher if so required by EPA, ARB, or the YSAQMD.

#### Safety and Noise

The General Plan update identifies goals, policies, standards, and actions relating to the transportation safety and noise in the planning area. These goals and policies were incorporated into the assessment of impacts. The tables and figures referred to in these statements can be found in the General Plan update.

GOAL MOB 6. Increase safety of and decrease noise from transportation throughout the City.

• Policy MOB 6.1. Safety and noise concerns should take priority over traffic flow in roadway planning.

#### **Transportation Policy Making**

The General Plan update identifies goals, policies, standards, and actions relating to transportation policy making in the planning area. These goals and policies were incorporated into the assessment of impacts. The tables and figures referred to in these statements can be found in the General Plan update.

GOAL MOB 7. Address transportation policy making in a balanced, objective way.

- **Policy MOB 7.1.** Create a City government structure regarding transportation that addresses all modes in a balanced, integrated fashion.
- **Policy MOB 7.3.** Develop a system of trails at the periphery of the City and within the City for recreational use and to allow walkers and bicyclists to reach open space and natural areas.

#### Summary of Impacts Related to Land Use Map Alternatives

This chapter evaluates traffic and circulation impacts related to the General Plan update and establishment of a new junior high school, including the four land use map alternatives. For this evaluation, impacts have been assessed in six categories. Table 5D-8 provides an overview of the significance findings made for the General Plan update project and each of the sites being studied

under each alternative. The table also shows the impacts related specifically to the establishment of a new junior high school site under the heading "Signature Site" for Alternatives 4 and 5. The following paragraphs provide a brief summary of each impact.

- Impact TC-1. Consistency with General Plan Policies. Consistency with the policies stated in the existing General Plan (Alternative 2) and the General Plan update (Alternatives 3 through 5) were evaluated. Alternative 2 was found to be consistent. Alternatives 3 and 4 were found to be consistent with policies designed to accommodate a variety of different transportation modes, and provide for a more efficient circulation system. Alternative 5 was found to be inconsistent with a number of alternative transportation mode policies due to it isolated location from the City center and other City development. Alternatives 3 through 5 were found to be inconsistent with the CMP for three roadway segments.
- Impact TC-2. Impacts on Roadway System. This impact was designed to evaluate how each land use map alternative would impact the City of Davis' roadway system. Each land use alternative was found to cause a significant and unavoidable impact by increasing traffic volumes due to the projected land use growth.
- Impact TC-3. Impacts to Bicyclists and Pedestrians. This impact was designed to evaluate how each land use map alternative would impact bicyclists and pedestrians in the City of Davis. Although the risk (rate) of being in an accident as a bicyclist or pedestrian would not increase, the higher levels of automobile traffic and bicycle/pedestrian traffic may result in a higher number of overall accidents. Although the risk does not increase, the potential for a higher number of accidents was seen as a significant and unavoidable impact. Alternative 5 was also found to have an impact on planned bicycle/pedestrian facilities since the current General Plan update does not show an extension of the bicycle network to the proposed Davis Technology Campus or Intervening Lands sites. Mitigation was proposed to reduce this impact to a less than significant level (TC-3.1).
- Impact TC-4. Impacts to Transit Services. This impact was designed to evaluate how each land use map alternative would impact transit services in the City of Davis. For Alternatives 2 through 4, the General Plan provides adequate planning and implementation of transit facilities and was, therefore, found to cause a less than significant impact. For Alternative 5, the Davis Technology Campus or Intervening Lands sites were found to not be conducive of convenient and efficient transit services, and were therefore determined to have a significant and unavoidable impact.
- Impact TC-5. Impacts to Truck Routes. This impact was designed to evaluate how each land use map alternative would impact truck routes within the City of Davis. Because truck traffic within the City is relatively low, each land use alternative was found to cause a less than significant impact on roadway operations within the City.

• Impact TC-6. Impacts to Rail and Air Services. This impact was designed to evaluate how each land use map alternative would impact rail and air service within the City of Davis. Each land use map alternative was found to have no adverse impact on the construction or operation of light rail services, or on regional or local air traffic.

Table 5D-8. Summary of Traffic and Circulation Impacts by Land Use Map Alternative

					Sites	s Bei	ing S	tudi	ed	-		
Project Impacts	Project Mitigations	Overall General Plan	Nishi/Gateway	Covell Center	Signature Site	Mace Ranch	Under 2nd Street	Sutter-Davis	Oeste Campus	Davis Technology	Intervening Lands	In-fill
Alternative 2. Buildout to 2010 Using Existing General Plan				As y								
TC-1. Consistency with General Plan Policies	Not required	LS	LS	LS		LS	LS					LS
TC-2. Impacts on the Roadway System	TC-2.1 TC-2.2	SU	SU	SU		SU	SU					SU
TC-3. Impacts to Bicyclists and Pedestrians	N/A	SU	SU	SU		SU	SU					SU
TC-4. Impacts to Transit Services	Not required	LS	LS	LS		LS	LS					LS
TC-5. Impacts to Truck Routes	Not required	LS	LS	LS		LS	LS					LS
TC-6. Impacts to Rail and Air Services	Not required	NI	NI	NI		NI	NI					NI
Alternative 3. Reduced Buildout Scenario						3.45						
TC-1. Consistency with General Plan Policies	TC-1.1	S		S		S	S					S
TC-2. Impacts on the Roadway System	TC-2.1 TC-2.2	SU		SU		SU	SU					SU
TC-3. Impacts to Bicyclists and Pedestrians	N/A	SU		SU		SU	SU				1	SU
TC-4. Impacts to Transit Services	Not required	LS		LS		LS	LS					LS
TC-5. Impacts to Truck Routes	Not required	LS		LS		LS	LS					LS
TC-6. Impacts to Rail and Air Services	Not required	NI		NI		NI	NI					NI
Alternative 4. Community Expansion Scenario with Oeste Campus	The state of											
TC-1. Consistency with General Plan Policies	TC-1.1	S	S	S	S	S	S	S	S		-	S
TC-2. Impacts on the Roadway System	TC-2.1 TC-2.2	SU	SU	SU	SU	SU	SU	SU	SU			SU

Table 5D-8. Summary of Traffic and Circulation Impacts by Land Use Map Alternative

					Site	es Be	eing	Stud	lied			
Project Impacts	Project Mitigations	Overall General Plan	Nishi/Gateway	Covell Center	Signature Site	Mace Ranch	Under 2nd Street	Sutter-Davis	Oeste Campus	Davis Technology	Intervening Lands	In-fill
TC-3. Impacts to Bicyclists and Pedestrians	N/A	SU	SU	SU	SU	SU	SU	SU	SU			SU
TC-4. Impacts to Transit Services	Not required	LS	LS	LS	LS	LS	LS	LS	LS			LS
TC-5. Impacts to Truck Routes	Not required	LS	LS	LS	LS	LS	LS	LS	LS			LS
TC-6. Impacts to Rail and Air Services	Not required	NI	NI	NI	NI	NI	NI	NI	NI			NI
Alternative 5. Community Expansion Scenario with Davis Technology Campus											93	
TC-1. Consistency with General Plan Policies	TC-1.1	SU	S	S	S	S	S	S		SU	SU	S
TC-2. Impacts on the Roadway System	TC-2.1 TC-2.2	SU	SU	SU	SU	SU	SU	SU		SU	SU	SU
TC-3. Impacts to Bicyclists and Pedestrians	TC-3.1	SU	SU	SU	SU	SU	SU	SU		SU	SU	SU
TC-4. Impacts to Transit Services	Not required	SU	LS	LS	LS	LS	LS	LS		SU	SU	LS
TC-5. Impacts to Truck Routes	Not required	LS	LS	LS	LS	LS	LS	LS		LS	LS	LS
TC-6. Impacts to Rail and Air Services	Not required	NI	NI	NI	NI	NI	NI	NI		NI	NI	NI
SU = Significant unavoidable S = Significant, but can be reduced to less that significant with mitigations included	LS n NI N/A	= \ =	No	imp	an sig act vaila		cant				IV.	

#### **Project Impacts**

#### Impact TC-1. Consistency with General Plan Policies

#### Significance Criteria

- A significant impact would occur if a land use map alternative or one of its components would conflict with the environmental plans and goals of the local community or other planning regulations.
- For alternatives 3 through 5, a significant impact would occur if a policy change in the General Plan update would result in a substantial adverse change in the environment related to traffic and circulation.
- A significant impact would occur if policies proposed were not in compliance with the Congestion Management Plan adopted by Yolo County.

Impacts of the proposed project related to General Plan consistency were assessed with application of the above significance criteria. Table 5D-9 provides an overview/comparison of the level of impact associated with the General Plan under the four land use map alternatives evaluated in this EIR. A more detailed discussion of each alternative is described below.

Table 5D-9. General Plan Policy Consistency under Each Land Use Map Alternative

Alternative 2	Alternative 3	Alternative 4	Alternative 5
Consistent with mobility-related locational policies	<ul> <li>Consistent with mobility-related locational policies</li> <li>Overall positive changes in mobility policies to address traffic and safety issues</li> </ul>	<ul> <li>Consistent with mobility-related locational policies</li> <li>Overall positive changes in mobility policies to address traffic and safety issues</li> </ul>	<ul> <li>Inconsistent with mobility-related locational policies</li> <li>Overall positive changes in mobility policies to address traffic and safety issues</li> </ul>

Alternative 2. Buildout to 2010 Using Existing General Plan. The existing General Plan contains policies that encourage the use of corridor plans to mitigate road impacts, encourage the development of trip reduction programs, and emphasize the use of bikeways. Development proposed under this alternative complies with these policies in the existing General Plan and no policies affect the locational aspects associated with the land use diagram. Therefore, this is considered to be a *less than significant* impact.

The currently adopted CMP that covers the City's planning area contains LOS standards for eight roadway segments as follows:

•	B Street (1 <sup>st</sup> Street to 5 <sup>th</sup> Street)	LOS E
•	Covell Boulevard (west City limits to Highway 113)	LOS D
•	Covell Boulevard (Highway 113 to Pole Line Road)	LOS E
•	Covell Boulevard (Pole Line Road to County Road 180)	LOS D
•	1 <sup>st</sup> Street (B Street to Richards Boulevard)	LOS E
•	Pole Line Road (Covell Boulevard to north City limits)	LOS D
•	Richards Boulevard (1st Street to County Road 180)	LOS E
•	Russell Boulevard (Highway 113 to B Street)	LOS E

As defined by the policies in the existing General Plan, roadways are to have a LOS of D or better. Since the existing General Plan is more restrictive than the adopted CMP, the existing General Plan would be considered in compliance with the CMP. Therefore, no adverse impact (*no impact*) would occur related to CMP compliance.

Alternative 3. Reduced Buildout Scenario. Implementation of Alternative 3 would only allow growth and development in the City to 2010 for projects that are already entitled and additions in Covell Center (Variation 3, business park). For these projects, application of the policies in the General Plan update are assumed.

The mobility goals, policies, standards, and actions contained within the General Plan update are intended to reduce traffic and circulation impacts for residents of the community. These policies are designed to accommodate the planning areas' existing and future roadway network and parking needs, encourage the use of alternative modes of transportation (e.g., bicycle routes, etc.), and ensure that safety and noise concerns take priority over traffic flow in the planning of area roadways. Development proposed under this alternative complies with these policies in the existing General Plan and no policies affect the locational aspects associated with the land use diagram. Therefore, this is a *less than significant* impact.

In preparing the General Plan update, City staff has identified the primary areas of policy where the proposed update differs from the existing General Plan. A list of these major changes is listed in Chapter 3 under a section labeled "New, Expanded, or Modified Goals and Policies in the General Plan Update". From this list, the following statements represent new policy direction (in bold type) associated with traffic and circulation topics.

- Reduced level of service for roads:
  - Current plan: "C" on new streets and "D" on existing streets
  - Update: "D" during non-peak hours, "E" during peak hours, and "F" during peak hour in the core area

The effect of changing acceptable levels of service on roadways will be to accept higher levels of congestion (in particular, within the core area) especially near intersections. However, this increase is offset to some small extent by other policy changes in the General Plan update. For instance, reduction of automobile use through promoting alternative modes of transportation (Goal MOB 3), improving public transit (Goal MOB 4), continuing to use transportation demand management techniques, and the encouragement telecommunications as a form of transportation that would contribute to a reduction in traffic and air quality impacts to the planning area (Goal TECH 2). Other goals and policies are targeted at increasing safety and reducing indirect traffic impacts (e.g., noise, and air quality), such as Action MOB 1.2a and Policy MOB 1.4 that discusses traffic calming, and Policy MOB 1.9 which prohibits through trucks in the City outside of truck routes. Implementation of these and other goals, policies, standards, and actions to reduce traffic and circulation impacts would help to reduce traffic increases associated with development of the land use diagram. Therefore, these changes in policy were found to be a less than significant policy impact.

The effects of Standard MOB 0.2b will be to limit the number of lanes that planning area roadways could add (no more than four) to accommodate traffic increases associated with new development. Implementation of the various land use map alternatives and their associated developments would increase traffic volumes on local roadways and contribute to both roadway segment and intersection congestion. Standard MOB 0.2b would narrow the City's options to address roadway congestion by limiting the number of streets that could be widened beyond four lanes in an effort to accommodate additional development related traffic. These physical impacts to the City's circulation system are more fully described below under the discussion for Impact TC2. While this standard is consistent with the City's objectives to promote the compact city and maintain the City's overall desired urban form, adoption of this standard and its associated physical impacts is a decision presented for consideration by the City.

The third criterion listed relates to compliance with the adopted CMP. Under the proposed General Plan update, the City has lowered the acceptable LOS standard to LOS E for peak hour traffic. Using the list provided under Alternative 2, above, it can be seen that the City's standards are lower than those in the CMP for three roadway segments. This disconnect in policy between the City's General Plan and the CMP is assessed as a *significant* impact.

Alternative 4. Community Expansion Scenario with Oeste Campus. The mobility goals, policies, standards, and actions contained within the General Plan update are intended to reduce traffic and circulation impacts for residents of the planning area. These policies are designed to accommodate a variety of different transportation modes, and provide for a more efficient circulation system. Under this alternative land uses proposed would not be inconsistent with the locational policies in the General Plan update. Therefore, this is a *less than significant* impact.

Related to the second significance criteria (impacts related to policy changes), changes in policy will have an overall positive effect on traffic issues (the same as described above for Alternative 3, above), and would result in a *less than significant* environmental impact.

The third criterion listed relates to compliance with the adopted CMP. Under the proposed General Plan update, the City has lowered the acceptable LOS standard to LOS E for peak hour traffic. Using the list provided under Alternative 2, above, it can be seen that the City's standards are lower than those in the CMP for three roadway segments. This disconnect in policy between the City's General Plan and the CMP is assessed as a *significant* impact.

Alternative 5. Community Expansion Scenario with Davis Technology Campus. Similar to the discussion provided above under Alternative 4, the mobility goals, policies, standards, and actions contained within the General Plan update are intended to reduce traffic and circulation impacts for residents of the planning area. Unlike the other alternatives evaluated, this land use map alternative was found to be inconsistent with the locational policies in the General Plan update. For instance, MOB 1.2 (encourage use of alternative transportation), GOAL MOB 3 (increase walking and other nonpolluting forms of transporations), and GOAL MOB 4 (improve tranist service) are all impacted by the distance and relative isolation of the Intervening Lands and Davis Technology Campus sites. The development of these sites is contrary to policy direction in the General Plan update related to transportation issues, and is therefore considered to have a *significant and unavoidable* impact.

Related to the second significance criteria (impacts related to policy changes), changes in policy will have an overall positive effect on traffic issues (the same as described above for Alternative 3, above), and would result in a *less than significant* environmental impact.

The third criterion listed relates to compliance with the adopted CMP. Under the proposed General Plan update, the City has lowered the acceptable LOS standard to LOS E for peak hour traffic. Using the list provided under Alternative 2, above, it can be seen that the City's standards are lower than those in the CMP for three roadway segments. This disconnect in policy between the City's General Plan and the CMP is assessed as a *significant* impact.

#### **Mitigation Measures**

Expansion of the City to the Intervening Lands and Davis Technology Campus sites are a decision presented for consideration by the City, and can not be mitigated without modifying the character of the alternatives proposed. Therefore, impacts associated with Alternative 5 and consistency with locational policies in the General Plan update remains *significant and unavoidable*. Alternatives 3 through 5 were determined to not be in compliance with the adopted CMP program. Mitigation for this impact would entail modifying one or both plans. Since the LOS policy is related to a major community design concept, the City is proposing to work with the County to adjust the CMP to match proposed City policies (Mitigation TC-1.1). With this change, this impact will be

reduced to a *less than significant* level. Impacts related to Alternatives 2 through 4 for other issues were found to be *less than significant*, and no mitigation is required.

#### TC-1.1. Work with County to Modify CMP Standards (Alternatives 3 through 5)

The City will work with Yolo County to revise the current CMP to bring it into compliance with the City's policies on circulation.

Funding Source:

City-sponsored change

Implementing Party:

City-sponsored change

Monitoring Agency:

Davis City Council
Initiate change within one year following adoption of General

Plan update

#### Impact TC-2. Impacts on the Roadway System

#### Significance Criteria

Timing:

- Under Alternative 2, the proposed land use map alternative was determined to have a significant impact if the ADT would reach an LOS of E or F.
- Under Alternatives 3 through 5, the proposed land use map alternative was determined to have a significant impact if the alternative exceeded standards contained in the General Plan update as stated in Standard MOB 0.2. In general, a significant impact on roadway segments will occur if ADT volumes reach LOS F in roadways outside the City's core area.

Impacts of the proposed project related to the roadway system were assessed with application of the above significance criteria. Table 5D-10 provides an overview/comparison of the level of impact associated with the roadway system under the four land use map alternatives evaluated in this EIR. A more detailed discussion of each alternative is described below.

Table 5D-10. Impacts on Roadway System under Each Land Use Map Alternative

Alternative 2	Alternative 3	Alternative 4	Alternative 5
Substantial increases in	• Substantial increases in	• Substantial increases in	• Substantial increases in
traffic volumes	traffic volumes	traffic volumes	traffic volumes

Using the traffic demand model (Appendix B, "Traffic Study"), trips generated by area development were loaded onto the street system under all four alternatives. Table 5D-11 compares future traffic projections under each of the four alternatives. In addition, this table presents the unmitigated LOS for each of these roadway segments. Study roadways that are projected to exceed the City's LOS E threshold are highlighted, except under Alternative 2 where locations exceeding the current LOS D threshold are noted.

Alternative 2. Buildout to 2010 Using Existing General Plan. Implementation of Alternative 2 would cause substantial increases in traffic volumes due to the projected land use growth. As shown on Table 5D-11, 13 roadway segments will be significantly impacted by buildout of the existing General Plan. Therefore, this alternative will have a *significant and unavoidable* impact on specific roadways in the planning area.

Alternative 3. Reduced Buildout Scenario. Implementation of Alternative 3 would cause substantial increases in traffic volumes due to the projected land use growth. However, as shown on Table 5D-11, only three roadway segments will be significantly impacted by buildout of this alternative. Since these three segments exceed the significance criteria, this alternative will have a *significant and unavoidable* impact on specific roadways in the planning area.

Alternative 4. Community Expansion Scenario with Oeste Campus. Implementation of Alternative 4 would cause substantial increases in traffic volumes due to the projected land use growth. As shown on Table 5D-11, 13 roadway segments will be significantly impacted by buildout of this alternative. Since these 13 segments exceed the significance criteria, this alternative will have a *significant and unavoidable* impact on these specific roadways in the planning area.

Alternative 5. Community Expansion Scenario with Davis Technology Campus. Implementation of Alternative 5 would cause substantial increases in traffic volumes due to the projected land use growth. However, as shown on Table 5D-11, 11 roadway segments will be significantly impacted by buildout of this alternative. Since these 11 segments exceed the significance criteria, this alternative will have a *significant and unavoidable* impact on these specific roadways in the planning area.

#### Mitigation Measures

Roadway improvements for Alternatives 2, 3, 4, and 5 are presented on Tables 5D-12, through 5D-15, respectively. Table 5D-12 presents the improvements needed on the roadway segments that will be significantly impacted under Alternative 2. Tables 5D-13, 5D-14, and 5D-15 present the improvements needed on the roadway segments to achieve LOS E or better for study segments that will be significantly impacted by Alternatives 3, 4, and 5, respectively. While these impacts are significant, many of them can be mitigated with roadway improvements. Table 5D-12 presents the roadways that operate below the LOS D threshold, and Tables 5D-13, 5D-14, and 5D-15 present the roadways that operate below the LOS E threshold. As shown, most of the study roadways

Table 5D-11. Unmitigated Level of Service Comparison

	Lab	le on-i	. Chim	ngaleu 1	יבאבו חו	Table 3D-11. Unfillingated bevel of Service Comparison	Ompan	SOII					Page 1 of	of 5
								Year 2010	2010					
			Alto (Exist	Alternative 2 (Existing General Plan)	2 eral	Alte (R	Alternative 3 (Reduced)	e _	Alte (C	Alternative (OESTE)	4	Alte	Alternative (PG&E)	v.
Location	Street Plan Class Lanes	Plan Lanes	ADT	V/C	TOS	ADT	V/C	ros	ADT	V/C	TOS	ADT	V/C	TOS
North-South														
Anderson Road F Street to Catalina Drive	ÄΞ	2+	2,900	0.20	A A	2,850 4,450	0.20	44	3,200	0.23	44	2,950 4,600	0.21	<b>&lt; &lt;</b>
Catalina Drive to Covell Boulevard Covell Boulevard to Villanova Drive Villanova Drive to 8th Street	ZZZ	4 + + +	13,300 11,200 13,000	0.47	AOD	12,700 10,900 13,400	0.45	AOD	13,200 10,700 13,300	0.46 0.75 0.94	DBA	13,600 11,400 13,200	0.48 0.80 0.93	AOD
8th Street to Russell Boulevard B Street 14th Street to 8th Street 8th Street to Russell Boulevard	SE:	700	6,450	0.51	ABA	6,000	0.47	ABB	6,900	0.55	ABh	6,700	0.56	B B
Russell Boulevard to First Street California Avenue	Wa Co	7+7	16,300	0.35	A A	4,550	0.36	4 A	4,600	0.37	4	4,700	0.37	A
South of Russell Boulevard Catalina Drive Grande Avenue to Covell Boulevard	లి	2	1,550	0.12	A	1,650	0.13	A	1,550	0.12	A	1,550	0.12	A
F Street Grande Avenue to Covell Boulevard Covell Boulevard to 14 Street 14th Street to 8th Street 8th Street to 5th Street	ZZZZZ	2 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2	7,600 <b>14,000</b> 12,900 8,900	0.54 0.99 0.91 0.63 0.76	CBDMA	7,350 12,700 11,700 8,950 11,500	0.52 0.89 0.82 0.63 0.81	DBCDA	7,950 13,800 12,600 8,800 10,700	0.56 0.97 0.89 0.62 0.75	CBDEA	8,100 14,000 12,800 8,900 10,800	0.57 0.99 0.90 0.63 0.76	CBDEA
5th Street to 1st Street Howard Way South of Russell Boulevard	S	2	7,800	0.62	В	7,550	09.0	4	7,500	09.0	A	7,500	09.0	V
J Street Covell Boulevard to 8th Street 8th Street to 3rd Street	<u> </u>	2	3,700 2,450	0.29	44	3,700	0.29	44	3,750	0.30	44	3,750	0.30	Y Y
L Street County Rd 102/Pole Line to Covell Covell Boulevard to 8th Street 8th Street to 5th Street	Wi CO Wi	2 + 5 5 + 5 5 + 5 5 + 5 5 5 5 6 6 6 6 6 6	12,700 9,400 10,900 11,000	0.94 0.75 0.87 0.79	CDCD	7,300 9,100 9,400 10,200	0.51 0.72 0.75 0.75	BOOM	13,600 9,950 11,000 10,300	0.96 0.79 0.87 0.73	BCCC	13,700 9,750 11,000 10,500	0.96 0.77 0.87 0.74	E C C B
Lake Boulevard/County Road 99 North of Covell Boulevard Covell Boulevard to Arlington Boulevard Arlington Boulevard to Russell	Ma Mi Mi	5+ + + + +	2,700 6,500 3,550	0.16 0.46 0.12	444	2,600 6,450 3,500	0.15 0.45 0.12	444	1 <b>7,500</b> 9,300 3,650	1.02 0.65 0.13	ABE	2,950 7,150 3,550	0.17 0.50 0.12	444

Page 2 of 5

1st Street

								Vear 2010	2010				201	
			Alto	Alternative 2	2									
			(Existi	(Existing General Plan)	ıral	Alte (R	Alternative 3 (Reduced)	3	Alte (C	Alternative 4 (OESTE)	4	Alte	Alternative (PG&E)	S
	Street Plan	1	TUV	J/\(\Lambda\)	301	TUV	J/A	301	ADT	J/A	1.05	ADT	J/A	SOT
Location	CIASS LA			2	227								2	
East-West (continued)														
5th Street		4	000	92.0	ر	23 900	0.70	д	25 400	0 74	۲	25 500	0.75	C
B Street to L Street			10,000	0.75	) 🛮	17,800	0.50	4	19,700	0.58	<b>A</b>	19,500	0.57	<b>A</b>
L Street to Pole Line Road		. 4	0,200	0.30	¢ C	19,000	0.67	e m	20,500	0.72	Ö	20,400	0.72	Ö
Fole Line Rd to Juniper round			15.000	1.06	E.	13,700	0.96	E	15,100	1.06	H	14,800	1.04	A
Fast of Peña	Mi 2		8,350	0.59	A	7,100	0.50	A	7,100	0.50	A	6,750	0.48	A
8th Street			000	0.70	p	0.850	0.67	д	11 200	0.77	۲	11 100	0.78	Ü
Anderson to F Street		4 C	11,000	0.70		0,000	0.70	<u>m</u>	11,700	0.82	Ω	11,700	0.82	D
F Street to J Street			9.850	69.0	B	7,950	0.56	V	10,100	0.71	S	10,000	0.70	В
J Sureet to L Sureet			8.200	0.58	ď	7,950	0.56	A	8,300	0.58	A	8,200	0.58	Ą
East of Pole Line Road	3		4,050	0.32	A	3,850	0.31	A	4,100	0.33	A	4,000	0.32	A
14th Street Oak Avenue to F Street	, o)	2 ,	4,100	0.33	A	4,100	0.33	A	4,250	0.34	A	4,300	0.34	A
Arlington Boulevard Lake Boulevard to Russell Boulevard	Mi 2	2+	5,800	0.41	A	5,650	0.40	A	8,900	0.63	В	6,400	0.45	A
Chiles Road		2+	4,600	0.32	V	4,950	0.35	Ą	4,850	0.34	A	5,150	0.36	A
1-80 EB Ramps to Mace Boulevard	Mi		15,800	0.56	V	15,900	0.56	₹.	17,300	19.0	В	18,100	0.64	m F
Mace Boulevard to Intervening Lands			6,050	0.42	∢.	5,800	0.41	۷.	5,250	0.37	∢ <	14,700	1.0 4.1	<b>4</b> (
Intervening Lands to PG&E			6,050	0.42	∢.	5,800	0.41	∢.	5,250	0.37	∢ <	10,100	0.71	ء د
PG&E to Webster Ramps			6,050	0.42	V	2,800	0.41	A	2,250	0.37	V	9,200	0.00	a
County Road 31 West of Lake Boulevard	Ma	4	9,250	0.27	A	8,950	0.26	A	11,200	0.33	A	10,200	0.30	A
County Road 32A Fast of Mace Boulevard	Mi	2	7,550	0.53	A	6,800	0.48	Α	9,450	0.67	В	10,400	0.73	C

								Year 2010	2010					I
		ā.	Alt	Alternative 2	2									
			(Exist	(Existing General Plan)	eral	Alter (Re	Alternative 3 (Reduced)	~	Alte (O	Alternative 4 (OESTE)	4	Alter (P	Alternative 5 (PG&E)	
	Street		TU		301	TUV	JIM	301	TUV	J/A	301	Tu		301
Location	CIASS	Lanes	ADI	2	ros	ADI	1	202	ADI	7	202	ADI		3
East-West (continued)														
Covell Boulevard									N. art. about	A CONTRACTOR				
Lake Boulevard to Denali	Ma	7+	15,300	0.89	D	15,100	0.88	Ω	19,100			16,100		Q
Denali to Shasta Drive	Ма	4+	21,200	0.61	В	20,900	19.0	В	24,500			22,100		В
Shasta Drive to F Street	Ma	+	33,000	0.96	(1)	32,600	0.95	D	38,100		ᅜ	35,800	1.02	H
F Street to Sycamore Lane	Ma	++	31,500	0.92	Ω	30,600	0.89	Ω	34,800			33,700		Ш
Sycamore to Pole Line (overxing)	Ma	++	28,300	0.83	ပ	28,100	0.82	C	30,200			29,700		ပ
Pole Line to Alhambra Drive	Ma	++	21,000	0.61	A	19,000	0.56	K	21,300	0.62		21,700		A
Alhambra Drive to Mace Boulevard	Ma	4+	10,100	0.29	A	008,6	0.29	A	9,950	0.29		10,700		A
Cowell Boulevard														
Research Park Drive (W) to Pole Line Road	Ma	++	15,100	0.44	A	14,900	0.44	Ą	14,900	0.44		15,400	0.45	Ą
Pole Line Road to Research Park (E)	Ma	+	9,800	0.29	A	10,000	0.29	A	10,000	0.29		10,700		A
Research Park (E) to Chiles Road	Ma	<b>5</b> +	6,550	0.38	A	6,150	0.36	A	6,950	0.41	A	7,700		Ą
Chiles Road to Mace Boulevard	Mi	7+	4,000	0.28	A	3,950	0.28	A	4,050	0.29		6,250	1	А
Hutchison Drive	į	,	,		(			(				•		í
State Route 113 to La Rue Rd	Ī	7	11,200	0.79		10,900	0.77	0	11,700	0.82		11,800	0.83	
08-1	ſ	¢	0	(	•				000			000		¢
East of Webster	Fwy	×	143,500	0.57	V.	141,600	0.56	∢.	146,800			145,800		Α.
Webster to Mace	Fwy	×	132,100	0.52	A	131,100	0.52	V	135,000			135,800		A
Mace Boulevard to Olive Drive	Fwy	∞	130,600	0.52	A	130,000	0.51	A	134,400	0.53	A	136,200	0.54	A
Olive Drive to Richards Boulevard	Fwy	∞	126,200		A	125,600	0.50	A	129,600			131,100		A
Richards Boulevard to SR 113	Fwy	∞	132,700		A	129,800	0.51	V	135,700			136,400	923	A
West of SR 113	Fwy	8	125,500	0.50	A	124,500	0.49	A	128,000			128,400		V
Lillard Drive														
Pole Line Rd to Drummond	Ä	7+	10,100	0.71	В	9,750	0.68	В	10,700	0.75		10,800	0.76	Ö
East of Drummond Avenue	Co	2	2,000	0.16	A	1,900	0.15	А	1,950	0.15	A	1,850	0.15	4
Old Davis Road			2											
West of A Street	M	7	15.700		<u>I</u>	14,800	1.04	ш	16,000	1.13	ĮΤ.	16,200	1.14	щ
West of A Succession						Š						1		

								Year 2010	2010					
		1	Alte	Alternative 2	7									
			(Exist	<b>Existing Genera</b>	eral	Alte	Iternative 3	3	Alt	Alternative 4	4	Alte	Alternative 5	S
				Plan)		(R	(Reduced)		٦	OESTE)			PG&E)	
Location	Street Class	Plan Lanes	ADT	V/C	N/C LOS	ADT	V/C	V/C LOS ADT	ADT	V/C	V/C LOS ADT	ADT	N/C LOS	ros
East-West (continued)														
Russell Boulevard														
West of Lake Boulevard	Mi	7	5,650	0.40	Ą	5,450	0.38	Ą	7,000	0.49	Ą	6,300	0.44	A
Lake Boulevard to Arlington Rd	$M_i$	7	14,400	1.01	Ш	14,100	0.99	E	15,500	1.09	ш	15,100	1.06	IT.
Arlington to SR 113 SB Ramps	Ma	4	22,700	99.0	В	22,400	99.0	В	26,100	0.76	C	23,900	69.0	В
SR 113 SB Ramps to Anderson	Ma	++	28,600	0.84	C	28,200	0.82	C	30,900	06.0	D	30,100	0.88	D
Anderson Rd to Oak Avenue	Ma	++	30,800	06.0	О	29,900	0.87	D	31,500	0.92	D	31,600	0.92	D
Oak Avenue to B Street	Ma	+	32,400	0.95	D	31,900	0.93	D	32,500	0.95	D	33,000	96.0	H

Notes:

**Exceeds** significance criteria

Numbers in italic type are unadjusted total volumes. A discussion of adjustments can be found in Appendix B.

Legend:

Ma = major arterial

Mi = minor arterial

Co = collection street

Fr = frontage road Fwy = Freeway

Table 5D-12. Alternative 2 - Buildout to 2010 Using Existing General Plan (Mitigated Roadways)

Page 1 of 2

					Year	Year 2010		
			Adjusted	Unmitigated	gated		Mitigated	
Location	Street Class	Plan Lanes	Traffic Volume	V/C	FOS	LANES	V/C	ros
	New G	eneral Pl	New General Plan Thresholds	splo				
North-South								
Pole Line Road	M;	7+	16 400	1.15	Ţ	4	0.58	Ą
5th St to Cowell	Ma	2+	18,900	1.10	H	4	0.55	V
Richards Boulevard E Street to East Olive Drive	Ma	2+	29,000	1.70	ഥ	++	0.85	C
East-West								
5th Street Juniper Point to Peña	Mi	7+	15,000	1.06	F	4	0.53	A
Old Davis Road West of A Street	Mi	2	15,700	1.10	ഥ	4	0.55	A
Russell Boulevard Lake Boulevard to Arlington Road	Mi	2	14,400	1.01	F	4	0.51	A
	Old Ge	neral Pl	Old General Plan Thresholds	spl				
North-South								
F Street Covell Boulevard to 14th Street	Mi	2+	14,000	0.99	Э	4	0.49	A
Pole Line road Loyola to 8 <sup>th</sup> Street	Mi	2+	13,800	0.97	ш	9	19.0	а,
8th Street to 5th Street	Mi	2+	13,900	0.98	ш	9	0.65	a

					Yea	Year 2010		
			Adjusted	Unmit	Unmitigated		Mitigated	
Location	Street Class	Plan Lanes	Traffic Volume	V/C	TOS	LANES	A/C	ros
Richards Boulevard		-						
I-80 WB Ramps to I-80 EB Ramps	Ma	4	34,200	1.00	Э	9	79.0	В
1-80 EB Ramps to Research Park Drive	Ma	4	33,400	0.98	田	٥	0.65	В
East-West								
1st Street								
A Street to E Street	Ma	2+	16,400	96.0	Ш	4	0.48	Y
Covell Boulevard Shasta Drive to F Street	Ma	++	33,000	96.0	Э	9	0.64	В

Notes:

Mitigation required exceeds the City's policies on maximum lanes.

Numbers in italic type are unadjusted total volumes. A discussion of adjustments can be found in Appendix B.

Legend:

Ma = major arterial
Mi = minor arterial
Co = collection street
Fr = frontage road
Fwy = Freeway

Table 5D-13. Alternative 3 - Reduced Buildout Scenario (Mitigated Roadways)

					Year	Year 2010		
			Adjusted	Unmitigated	igated		Mitigated	
Location	Street Class	Plan Lanes	Traffic Volume	V/C	ros	LANES	V/C	ros
North-South		•						
Pole Line Road 5th St to Cowell Boulevard	Ma	2+	17,900	1.05	ഥ	4	0.52	A
Richards Boulevard E St to E. Olive Drive	Ma	2+	27,600	1.61	ഥ	++	0.81	D
East-West								
Old Davis Road West of A St	Mi	2	14,800	1.04	щ	4	0.52	А

Legend:

Ma = major arterial
Mi = minor arterial
Co = collection street
Fr = frontage road
Fwy = Freeway

Table 5D-14. Alternative 4 – Community Expansion Scenario With Oeste Campus, Mitigated Roadways

					Year	Year 2010		
			Adjusted	Unmitigated	igated		Mitigated	
Location	Street Class	Plan Lanes	Traffic Volume	N/C	TOS	Lanes	J/A	301
North-South								
B Street Russell Rlvd to 1st Street	Ma	. +6	17 400	6	נו			
Lake Boulevard			11,100	1.02	ı,	4	10.0	A
North of Covell Blvd	Ma	2+	17,500	1.02	Т	4	0.51	Ą
Pole Line Road								
Covell Blvd to Loyola	Mi	7+	16,400	1.05	ഥ	4	0.50	A
5th St to Cowell Blvd	Ma	2+	19,000	1.11	ഥ	4	0.56	Y
Richards Boulevard								
E St to Olive Drive	Ma	2+	29,400	1.72	Ī	4	0.86	D
I-80 EB Ramps to I-80 WB Ramps	Ma	4	34,800	1.02	ц	9	0.68	В
East-West								
1st Street								
A St to F St	Ma	2+	17,400	1.02	Ħ	4	0.51	<
5th Street								
Juniper Pt to Pena	Mi	7+	15,100	1.06	F	4	0.53	¥
Covell Boulevard								
Lake Blvd to Denali	Ma	7+	19,100	1.11	ц	4	0.52	A
Shasta Dr to County Rd 101A	Ma	++	38,100	1.1	ΙΤ	9	0.74	U
County Rd 101A to Sycamore Ln	Ma	4+	34,800	1.02	П	9	89.0	В
Old Davis Road								
West of A St	Mi	2	16,000	1.13	F	4	0.56	A
Russell Boulevard								
Lake Blvd to Arlington Rd	Mi	2	15,500	1.09	F	4	0.55	T
Notes:  = Mitigation required exceeds the City's policies on maximum bers in italic type are unadjusted total volumes.  A discussion of adjustments can be found in Appendix B.	's policies on maximum lanes. al volumes. d in Appendix B.	m lanes.	Lege Ma Mi Co Fr Fr Fwy	Legend:  Ma = major arterial  Mi = minor arterial  co = collection street  r = frontage road  wy = Freeway	rterial rterial on street e road			

Table 5D-15. Alternative 5 – Community Expansion Scenario with Davis Technology Campus (Mitigated Roadways)

					Year	Year 2010		
			Adjusted	Unmitigated	igated		Mitigated	
	Street	Plan	Traffic					
Location	Class	Lanes	Volume	V/C	ros	Lanes	A/C	ros
North-South								
B Street								
Russell Boulevard to 1st Street	Ma	2	17,500	1.02	F	4	0.51	Α
Pole Line Road		•						
Covell Boulevard to Loyola	Μ̈́	2+	16,900	1.19	ഥ	4	09.0	A
5th Street to Cowell Boulevard	Ma	2+	19,200	1.12	ഥ	4	0.56	Α
Richards Boulevard								
E Street to East Olive Drive	Ma	7+	30,000	1.75	נדי ו	4 ,	0.87	Ω
I-80 EB Ramps to I-80 WB Ramps	Ma	4	35,200	1.03	щ	9	69.0	B
East-West								
1st Street								
A St to F Street	Ma	2+	17,400	1.02	ഥ	4	0.51	A
5th Street								
Juniper Point to Peña	Mi	2+	14,800	1.04	F	4	0.52	Y
Chiles Road								
Mace Boulevard to Intervening Lands	Mi	2	14,700	1.04	F	4	0.51	V
Covell Boulevard	:		0	•	ţ	`	i c	ţ
Shasta Drive to County Road 99D	Ma	4+	35,80	1.05	Ŧ	9	07.0	В
Old Davis Road	į	,		•	ſ	ŀ	(	
West of A Street	Mı		16,400	CI.I.	<b>4</b>	4	0.58	V
Russell Boulevard		,			ļ		į	
Lake Boulevard to Arlington Road	Mi	2	15,100	1.06	Ħ	4	0.53	V
Notes:			Legend:					
Mitigation required exceeds the City's policies on maximum lanes.	icies on max	imum lanes.	Ma		ırterial			
Numbers in italic type are unadjusted total volumes.	les.		Ξ Ċ	= minor arterial	ırterial			
A discussion of adjustments can be found in Appendix B.	endix b.		F	= frontage road	on succi e road			
			Fwy	= Freeway	y			
							-	

can be mitigated to LOS E or better during peak hours under each of the land use alternatives with the exception of those highlights.

Some of the study roadways would need to be widened to six lanes in order to provide acceptable operations on a daily basis. However, the City's maximum roadway section is four travel lanes (although turn lanes may be added). Therefore, a few roadways cannot be mitigated with this maximum allowable section. These roadways are discussed below:

- While Covell Boulevard and Cowell Boulevard operate below LOS D, City standards
  prohibit widening roadways to six lanes. This standard is to be implemented even if this
  requirement reduced the LOS. Therefore, operating below LOS D on these segments is
  a significant and unavoidable impact.
- While the two-lane Richards Boulevard undercrossing is projected to operate at LOS F under all of the land use alternatives, Policy MOB 1.7 requires the preservation and enhancement of the Richards Boulevard underpass as an entrance to Davis and the core area while maintaining the historical character of the structure. While implementation of various transportation demand management measures are to be executed to reduce the demand at the Richards Boulevard underpass, without widening the structure, LOS D will not be achieved. Therefore, this is a significant and unavoidable impact.

On an overall program level, many of the significant impacts associated with this alternative can be reduced to a less-than-significant level with application of Mitigation Measures TC-2.1 and TC-2.2. But, as discussed above, some roadways cannot be expanded to a size capable of handling the traffic loads projected. Therefore, the overall General Plan program will have a *significant and unavoidable* impact.

#### TC-2.1. Project-Specific Traffic Studies

As part of the initial project review for any new project, the City Engineer may determine that a project-specific traffic study shall be prepared. Studies shall identify impacted roadway segments and intersections and recommend mitigation measures designed to reduce these impacts to acceptable levels.

Funding Source: Developer and successors in interest
Implementing Party: Developer and successors in interest
Monitoring Agency: City of Davis Public Works Department

Timing: Prior to project review by Planning Commission/City Council

#### TC-2.2. Roadway Improvements

The City shall implement the roadway improvements identified in Table 5D-12 through 5D-15 that can be improved by roadway expansion up to the number of lanes allowed by General Plan policy. This mitigation may be completed by funding and construction by the

City, collection of pro rata share contributions from applicable developments, or construction by project developer contributing to the need for the improvement. Future developers will be responsible for reimbursing the costs of improvements on a pro-rata basis.

Funding Source:

City, development fees, or developer

Implementing Party:

City or developer

Monitoring Agency:

City of Davis Public Works Department

Timing:

As specified in the City's Capital Improvement Plan or as

required by project construction

#### Impact TC-3. Impacts to Bicyclists and Pedestrians

#### Significance Criteria

The proposed land use map alternative was determined to have a significant impact on bicyclists
and pedestrians if the alternative would conflict with any plans or programs that support
alternative forms of transportation or would lead to increases in accidents with vehicles.

Impacts of the proposed project related to bicyclists and pedestrians were assessed with application of the above significance criteria. Table 5D-16 provides an overview/comparison of the level of impact associated with the General Plan under the four land use map alternatives evaluated in this EIR. A more detailed discussion of each alternative is described below.

Table 5D-16. Impacts to Bicyclists and Pedestrians under Each Land Use Map Alternative

Alternative 2	Alternative 3	Alternative 4	Alternative 5
<ul> <li>Provides for facilities better than typically found in similar communities</li> <li>Increased conflicts with automobile traffic</li> </ul>	<ul> <li>Provides for facilities better than typically found in similar communities</li> <li>Increased conflicts with automobile traffic</li> </ul>	<ul> <li>Provides for facilities better than typically found in similar communities</li> <li>Increased conflicts with automobile traffic</li> </ul>	<ul> <li>Provides for facilities better than typically found in similar communities</li> <li>Increased conflicts with automobile traffic</li> </ul>

Alternative 2. Buildout to 2010 Using Existing General Plan. As vehicular travel demand increases, so would the demand for bicycle and pedestrian travel. This may create additional conflicts for roadway space between the competing modes of travel that could result in increases in congestion and conflicts. Many goals and policies within the existing General Plan are aimed at improving the bikeway/pedestrian systems and reducing conflicts with automobiles.

On roadways requiring widening with existing bikeways, right-of-way also would be required to maintain or expand those bikeways in a safe manner. Existing bike lanes are never to be removed to add through-traffic lanes.

Although the risk (rate) of being in an accident with a bicycle/pedestrian will not increase, the higher levels of automobile traffic and bicycle/pedestrian traffic may result in a higher number of accidents. Although the risk does not increase, the potential for a higher number of accidents was seen as a *significant and unavoidable* impact.

**Alternative 3. Reduced Buildout Scenario.** Under this alternative, impacts to bikeways would be reduced in comparison to Alternative 2 due to the reduction in overall development planned, and therefore a reduction in the number of conflicts between vehicular traffic and bicycles. In addition, the General Plan update contains a number of enhanced policies pertaining to bicycles and pedestrian circulation that will improve the operation and safety of the overall system. These include MOB 1.3, MOB 1.5, and MOB 3.1 through 3.5.

Although the risk (rate) of being in an accident with a bicycle/pedestrian will not increase, the higher levels of automobile traffic and bicycle/pedestrian traffic may result in a higher number of accidents. Although the risk does not increase, the potential for a higher number of accidents was seen as a *significant and unavoidable* impact.

Alternative 4. Community Expansion Scenario with Oeste Campus. As vehicular travel demand increases, so may the demand for bicycle and transit use. This creates additional conflicts for roadway space between the competing modes of travel that may result in additional congestion and collisions. Many goals and policies are aimed at improving the bikeway system and reducing conflicts with automobiles.

The General Plan update contains a number of enhanced policies pertaining to bicycles and pedestrians that will improve the operation and safety of the overall system. These include MOB 1.3, MOB 1.5, and MOB 3.1 through 3.5. With application of the General Plan update, traffic conflicts may increase, but the overall bicycle and pedestrian circulation system within the City also would be enhanced.

Related to major project components, most of the sites being studied have access to existing bicycle facilities. The Nishi/Gateway, Covell Center, and the Under Second Street sites do not currently have bicycle facilities adjacent or through their sites, but these are planned in the General Plan update.

Although the risk (rate) of being in an accident with a bicycle/pedestrian will not increase, the higher levels of automobile traffic and bicycle/pedestrian traffic may result in a higher number of accidents. Although the risk does not increase, the potential for a higher number of accidents was seen as a significant and unavoidable impact.

Alternative 5. Community Expansion Scenario with Davis Technology Campus. This impact is similar to the description above under Alternative 4. Related to major project components, most of sites being studied have access to existing bicycle facilities. The Nishi/Gateway, Covell Center, and the Under Second Street sites do not currently have bicycle facilities adjacent or through their sites, but these are planned in the General Plan update.

One difference under this alternative relates to the lack of facilities planned to service the proposed Davis Technology Campus and Intervening Lands sites. The draft General Plan update does not show extension of the bicycle network to these sites. In addition, although the risk (rate) of being in an accident with a bicycle/pedestrian will not increase, the higher levels of automobile traffic and bicycle/pedestrian traffic may result in a higher number of accidents. Although the risk does not increase, the potential for a higher number of accidents was seen as a *significant and unavoidable* impact.

#### **Mitigation Measures**

The existing General Plan and General Plan update contains plans and policies designed to enhance bicycle and pedestrian travel within the community. Although the facilities planned provide state-of-the-art facilities, additional accidents will occur due to increases in vehicular and bicycle/pedestrian traffic. This is considered to be a *significant and unavoidable* impact. For Alternative 5, Mitigation TC-3.1 will reduce impacts associated with planned to a *less-than-significant* impact.

#### TC-3.1. Extension of Planned Bicycle Network (Alternative 5)

If Alternative 5 is adopted, the City shall incorporate the extension of the bicycle network easterly on Chiles Road and shall require new development at the Intervening Lands and Davis Technology Campus sites to fund the extension of facilities to their sites from existing City facilities. Funding may be in the collection of pro rata share contributions from applicable developments, or construction by a project developer contributing to the need for the improvement. Future developers will be responsible for reimbursing the costs of improvements on a pro-rata basis.

Funding Source: Implementing Party:

Developer and successors in interest Developer and successors in interest

Monitoring Agency:

City of Davis Planning and Building Department

Timing:

Prior to project occupancy

### Impact TC-4. Impacts to Transit Services

#### Significance Criteria

- The proposed land use map alternative was determined to have a significant impact on transit services if the alternative would conflict with any plans or programs that support alternative forms of transportation.
- The proposed land use map alternative would require expansion of transit services that are not convenient or efficient for transit providers.

Impacts of the proposed project related to transit service were assessed with application of the above significance criteria. Table 5D-17 provides an overview/comparison of the level of impact associated with the General Plan under the four land use map alternatives evaluated in this EIR. A more detailed discussion of each alternative is described below.

Table 5D-17. Impacts to Transit Services under Each Land Use Map Alternative

Alternative 2	Alternative 3	Alternative 4	Alternative 5
Improved transit services	<ul> <li>Enhanced support and use of public transit services</li> </ul>	<ul> <li>Enhanced support and use of public transit services</li> </ul>	<ul> <li>Enhanced support and use of public transit services</li> <li>Requires expansion of service to areas that can not be served efficiently</li> </ul>

Alternative 2. Buildout to 2010 Using Existing General Plan. Existing General Plan Policies A through H directly address transit-related issues. These policies are aimed at reducing automobile traffic by improving transit services and encouraging its use. The City has always had good support for transit use within the planning area, and implementation of applicable goals, policies, standards, and actions from the existing General Plan will help to continue this support. Due to the adequate planning and implementation of transit facilities, this impact was considered to be *less than significant*.

Alternative 3. Reduced Buildout Scenario. Proposed General Plan update policies MOB 4.1 through 4.3 directly address transit-related issues. These policies are aimed at reducing automobile traffic by improving transit services and encouraging its use. Policy MOB 4.1 would require implementation of the Davis portion of the Yolo County Transit Plan. This policy requires work to establish neighborhood transit stops. These potential neighborhood commercial transit centers and transit stops are presented in Figure 15 of the General Plan update.

The City has always had good support for transit use within the planning area, and implementation of the enhanced goals, policies, standards, and actions in the proposed General Plan update will enhance the support and use of public transit. While growth will create some adverse impacts to the system, with the planning and implementation of transit facilities included in the General Plan update, this impact was considered to be *less than significant*.

Alternative 4. Community Expansion Scenario with Oeste Campus. This impact is similar to the description above under Alternative 3. This impact is considered to be *less than significant*.

Alternative 5. Community Expansion Scenario with Davis Technology Campus. This impact is similar to the description above under Alternative 3. Related to major project components, most of project sites have access to transit routes within an acceptable walking distance. A major difference under this alternative relates to the lack of facilities planned to service the proposed Davis Technology Campus and Intervening Lands sites. As part of the review of the NOP, Unitrans commented that "the campus site [Davis Technology Campus] is not conducive of convenient, efficient transit service." The development of urban uses in this area may necessitate the expansion of services to an area that is outside the service plans of the provider, and adds additional cost to their operations. Based on the statement from UniTrans and the lack of planned facilities in the General Plan update, this alternative is considered to have a *significant and unavoidable* impact on transit services.

#### Mitigation Measures

Expansion of the existing City limits is a decision presented for consideration by the City, and can not be mitigated without modifying the character of the alternatives proposed. Therefore, impacts associated with Alternative 5 remains *significant and unavoidable*. Alternatives 2 through 4 were found to have a *less than significant* impact, therefore no mitigation was required.

#### Impact TC-5. Impacts to Truck Routes

#### Significance Criteria

• The proposed land use map alternative was determined to have a significant impact on truck routes if the alternative would conflict with the location or placement of any designated truck routes within the planning area.

Impacts of the proposed project related to truck routes were assessed with application of the above significance criteria. Table 5D-18 provides an overview/comparison of the level of impact

associated with the General Plan under the four land use map alternatives evaluated in this EIR. A more detailed discussion of each alternative is described below.

Table 5D-18. Impacts to Truck Routes under Each Land Use Map Alternative

Alternative 2	Alternative 3	Alternative 4	Alternative 5
Low impacts due to low	<ul> <li>Low impacts due to low</li></ul>	<ul> <li>Low impacts due to low</li></ul>	<ul> <li>Low impacts due to low</li></ul>
truck traffic within the	truck traffic within the	truck traffic within the	truck traffic within the
City of Davis	City of Davis	City of Davis	City of Davis

Alternative 2. Buildout to 2010 Using Existing General Plan. The City currently has regulations that define truck routes and require truck traffic to use these routes, except when local deliveries are needed. Given the regional transportation links available to the City (I-80 and State Route 113), truck traffic within the City is relatively low. Although this traffic will grow with development, it will not significantly impact roadway operations within the City. Therefore, this impact is considered to be *less than significant*.

Alternative 3. Reduced Buildout Scenario. The proposed General Plan update contains a diagram showing proposed truck routes in the planning area. This diagram is included in the General Plan update as Figure 22.

Policies MOB 1.6 and 1.9 in the General Plan update both pertain to truck traffic. MOB 1.9 prohibits through truck traffic on streets other than those identified as truck routes. MOB 1.6 indicates that a second truck route other than Covell Boulevard needs to be designated to serve the Hunt-Wesson plant. In addition, this policy suggests considering using County roads to divert truck traffic from the intersection of Covell Boulevard and Pole Line Road. Implementation of the land use map alternative and any associated development would not conflict with any existing or proposed truck routes.

As part of the General Plan update, the LOS standards are being reduced, which will lead to more congestion in portions of the planning area. This change in policy is not expected to adversely impact truck routes since the City has good regional access on I-80 and Highway 113.

With implementation of the General Plan update, impacts on and from truck traffic will be *less-than-significant*.

Alternative 4. Community Expansion Scenario with Oeste Campus. Impact caused by the implementation of this alternative is similar to that described above under Alternative 3. This impact is considered to be *less than significant*.

Alternative 5. Community Expansion Scenario with Davis Technology Campus. Impact caused by the implementation of this alternative is similar to that described above under Alternative 3. This impact is considered to be *less than significant*.

#### **Mitigation Measures**

Each land use alternative was found to be less-than-significant. Therefore, no mitigation is required.

#### Impact TC-6. Impacts to Rail and Air Services

#### Significance Criteria

• The proposed land use map alternative was determined to have a significant impact on rail and or air service if the alternative would conflict with the development of any future rail facilities and or the operation of any existing rail or air service facilities within the planning area.

Impacts of the proposed project related to rail and air services were assessed with application of the above significance criteria. Table 5D-19 provides an overview/comparison of the level of impact associated with the General Plan under the four land use map alternatives evaluated in this EIR. A more detailed discussion of each alternative is described below.

Table 5D-19. Impacts to Rail and Air Services under Each Land Use Map Alternative

Alternative 2	Alternative 3	Alternative 4	Alternative 5
No impacts to rail and	<ul> <li>No impacts to rail and</li> </ul>	<ul> <li>No impacts to rail and</li> </ul>	<ul> <li>No impacts to rail and</li> </ul>
air services	air services	air services	air services

Alternative 2. Buildout to 2010 Using Existing General Plan. The Sacramento Regional Transit District has prepared a study of the feasibility of various light rail routes in the region, including a planning route between the City of Davis and Sacramento. The planning route was shown along side the railroad tracks used by Amtrak, with possible stations on the UC Davis campus opposite Mrak Hall, at the Amtrak Depot, and at Mace Boulevard. Funding for light rail service between Davis and Sacramento is not available at present and would be subject to regional priorities based on ridership and the costs of providing service. Until funding is obtained, the existing railroad right-of-way between Dais and Sacramento needs to be maintained for both existing and future rail service of all types.

Air travel forecasts for 2005 project 23,000 persons being served daily. While no public transit service to the airport currently exists, a private airport shuttle provides service between Davis and the airport.

Under the current General Plan, the City does not include activities that would delay or hinder the construction or operation of light rail service, and the General Plan has no adverse effect on regional or local air traffic (*no impact*).

**Alternative 3. Reduced Buildout Scenario.** Impact caused by the implementation of this alternative is similar to that described above under Alternative 2. This alternative is considered to have no adverse impact (*no impact*) on rail and air services.

Alternative 4. Community Expansion Scenario with Oeste Campus. Impact caused by the implementation of this alternative is similar to that described above under Alternative 2. This alternative is considered to have no adverse impact (*no impact*) on rail and air services.

Alternative 5. Community Expansion Scenario with Davis Technology Campus. Impact caused by the implementation of this alternative is similar to that described above under Alternative 2. This alternative is considered to have no adverse impact (*no impact*) on rail and air services.

#### **Mitigation Measures**

Each land use alternative was found to be less-than-significant. Therefore, no mitigation is required.

#### THIS PAGE INTENTIONALLY LEFT BLANK