

## **Appendix A. Freight Industry Glossary**



**Figure 16: Yosemite Blvd. and D Street with Difficult Turning Radii**

## Appendix A: Freight Industry Glossary

**Amtrak.** A federal corporation otherwise known as the National Railroad Passenger Corporation that operates most of the intercity passenger rail service in the United States.

**Backhaul.** The reverse trip of a vehicle, which may be empty or of less revenue than the original move (i.e., front haul). A common backhaul is canned goods transported to the east coast.

**Bin Center.** A drop off facility that is smaller in size than a public warehouse.

**Boxcar.** An enclosed railcar that transports freight.

**Brites.** Full, unlabeled cans.

**Chassis.** A specialized framework that carries a rail or marine container.

**Common Carrier.** A for-hire carrier that serves any customer. Less-than-truckload operations are common carriers as are parcel services.

**Container.** A container is an enclosed box that carries goods. Containers range from 20 to 53 feet, and can be carried by a truck or rail.

**Container on Flat Car (COFC).** A container that is transported on a rail flatcar. It can be shipped via tractor/trailer using a chassis as the wheel section.

**Crossdock.** Crossdock operations in a warehouse involve moving goods between different trucks to consolidate loads without intermediate storage.

**Distribution Center (DC).** Distribution centers store and sort goods using warehouse space so that full truckloads of merchandise can be sent to a single destination or to multiple destinations along a specific route.

**Doubles.** Double trucks are two 28-foot trailers that are pulled by one tractor. Doubles also are known as “double bottoms.”

**Drayage Firms.** These motor carriers provide local pickup and delivery of trailers and containers (on chassis).

**Flatbed.** A flatbed is a type of trailer on a truck that consists of a floor and no enclosure. In the study area, flatbeds are seen carrying pallets that are used to load/unload goods. (Flatbeds also haul brites.)

**Fronthaul.** The first leg of the truck trip that involves hauling a load or several loads to targeted destinations.

**Intermodal.** A movement of goods that involves more than one means of transportation such as a container may be shipped using BNSF, be unloaded at Valley Lift, and then a truck will use a chassis to transport it to the destination.

**Intermodal Marketing Company (IMC).** A broker for shipper, receivers, and carriers. A type of third party provider that focuses on the transportation of goods.

**Less-Than-Truckload (LTL) Carriers:** LTL carriers move smaller shipments, ordinarily less than a full truckload. They operate terminals, and perform pick-up and delivery to and from the terminals, many of these carriers serve the study area, but none have terminals there.

**Lumping.** A term used when drivers are required or coerced to assist with loading and unloading the trailer contents.

**Owner/operator.** A truck driver who owns and operates his/her tractor/trailer.

**Pallets.** A pallet is a reusable platform on which freight is loaded. Pallets are used to load/unload goods using a forklift. A pallet is made of wood and is about 40" x 48".

**Piggyback.** Piggyback is a truck trailer that is transported on a rail flatcar. It is also referred to as "pigs," or trailers on flatcar (TOFC).

**Public Warehouse.** A storage facility in which companies rent space for their goods.

**Private Trucking Fleets.** Private fleets serve the needs of their owners, and do not ordinarily offer commercial trucking services to other customers. Private fleets typically perform distribution or service functions.

**Refrigerated Carriers.** These specialized truckload carriers are particularly important to the focus area due to their service to the food industry.

**Route Trucks.** Delivery trucks that travel fixed routes.

**Straight Truck.** Straight trucks do not have a separate tractor and trailer. The driving compartment, engine and trailer are one unit.

**Subhauler.** A subhauler drives a tractor under contract for a company. Usually a subhauler is an owner/operator or a small company.

**Third-Party Logistics.** Third-party providers specialize in warehousing and distribution. They provide cross-dock services that consolidate truckloads of goods and order picking that creates loads.

**Tractor.** The tractor is the driver compartment and engine of the truck. It has two or three axles.

**Trailer.** The part of the truck that carries the goods. The length ranges from 28 to 56 feet with the most common in the study area as 53 feet. Enclosed trailers also are called vans if large (i.e., 48 to 56 feet) or pups if small (i.e., 28 feet).

**Trailer Drops.** A driver drops a full truck and picks up an empty one at a warehouse or other designated location. Drivers do not wait or assist with loading and unloading with this arrangement.

**Trailer on Flat Car (TOFC).** A TOFC is a truck trailer that is transported on a rail flat car. TOFC also is known as “piggyback.”

**Truck Brokers/Intermodal Marketing Companies.** These firms do not ordinarily operate trucks themselves, but broker loads to owner-operators or other truckers, and move loads via rail intermodal.

**Truckload (TL) Carriers.** These firms typically move full truckloads of goods between shipper and consignee, without using terminals. Firms range in size from major national carriers (i.e., J.B. Hunt and Schneider National) to local firms and owner-operators.

## **Appendix B. Questionnaires**



**Figure 17: Santa Fe Railroad Crossing at Yosemite Blvd.**

## Central Stanislaus Freight Study Shipper/Receiver Questionnaire

### *Company Information*

1. Company Name \_\_\_\_\_  
Contact Person \_\_\_\_\_  
Phone Number \_\_\_\_\_
2. How would you describe this business?  
\_\_\_\_\_  
\_\_\_\_\_  
SIC Code, if known \_\_\_\_\_
3. What is the normal year-round employment at this facility?  
\_\_\_\_\_
4. What is the seasonal peak employment (if the business is seasonal)?  
\_\_\_\_\_ What months are the peak? \_\_\_\_\_
5. About how many square feet do the buildings in this facility occupy?  
\_\_\_\_\_ total square feet.
6. Do you expect your business at this facility to grow or shrink?  
At about what rate? \_\_\_% per year.

## Trucking Services

7. Do you operate a truck fleet at this facility (or does a contractor operate one for you)?

8. What major/core motor carriers serve this facility?  
\_\_\_\_\_

9. About how many tractors/trailers are in the fleet? \_\_\_\_\_

10. What type of trucking services do you use (please check all that apply)

LTL \_\_\_ Truckload \_\_\_ Refrigerated \_\_\_ Flatbed \_\_\_ Tank \_\_\_ Bulk \_\_\_ Parcel \_\_\_  
Drayage \_\_\_ Agricultural \_\_\_ Other (please describe) \_\_\_\_\_

11. What truck types do you use to ship/receive?

Straight trucks \_\_\_% Tractor-trailers \_\_\_% Doubles \_\_\_%

12. What is the territory that the facility serves?

13. What are the days and hours of this facility? \_\_\_\_\_

14. Inbound

What are the inbound commodities? \_\_\_\_\_

About how many inbound truck movements does this facility generate in an average day? \_\_\_\_\_ trips/day. In a peak day? \_\_\_\_\_ trips/day.

What are the receiving/inbound days and hours for this facility?  
\_\_\_\_\_

Do you require delivery appointments? Yes \_\_\_ No \_\_\_

Do drivers have any trouble arriving on time?

Yes, often \_\_\_ Yes, sometimes \_\_\_ No \_\_\_

Percent of inbound shipment from the north \_\_\_ south \_\_\_

15. Outbound

What are the outbound commodities? \_\_\_\_\_

About how many outbound truck movements does this facility generate in an average day? \_\_\_\_\_ trips/day. In a peak day? \_\_\_\_\_ trips/day.

What are the peak shipping/outbound days and hours for this facility?  
\_\_\_\_\_

Do you require pick-up appointments? Yes \_\_\_ No \_\_\_

Do drivers have any trouble arriving on time?

Yes, often \_\_\_ Yes, sometimes \_\_\_ No \_\_\_

Percent of outbound shipment to the north \_\_\_ south \_\_\_

16. What other kinds of trucks serve this facility? (please check all that apply)

Service vehicles \_\_\_

Parcel delivery (FedEx, UPS, RPS, etc.) \_\_\_

Local vendors (office supply, canteen, others) \_\_\_

Other (please describe) \_\_\_\_\_

***Rail Shipping***

17. Do you ship or receive via rail carload service? Please describe

---

---

18. If you use rail carload service, about what share of your total inbound is rail? \_\_\_%  
About what share of total outbound? \_\_\_% Is your rail carload use growing or  
shrinking? \_\_\_\_\_

19. How many railcars of shipment are generated per day, week, or year? \_\_\_\_\_

***Intermodal Shipping***

20. Do you ship or receive via rail intermodal (piggyback or container) service? Please  
describe.

---

---

21. If you use rail intermodal service, about what share of your total inbound is  
rail? \_\_\_% About what share of total outbound? \_\_\_% Is your rail intermodal use  
growing or shirking? \_\_\_\_\_

22. How many piggyback or containers do you ship or receive in a day, week, or year?

---

**Truck Access and Operating Conditions (for fleet operators)**

23. Do your drivers experience delays, congestion, safety hazards, or other operating problems on the following routes? Please indicate the nature of the problem and improvement ideas for your constraints listed.

<b>Route</b>	<b>Problem / Potential Solutions</b>	<b>Frequency (1 to 5) 1= Seldom 5= Always</b>	<b>How serious? (1 to 5) 1= Minor 5= Major</b>
<b>West</b>			
SR 99			
Tuolumne Blvd./SR 99 interchange			
Yosemite Blvd. (SR 132)			
Yosemite Blvd./SR 99 access			
<b>South</b>			
Hatch Road			
Hatch Road/Mitchell Road intersection			
Hatch Road/SR 99 interchange			
Mitchell Road/SR 99			
Whitmore Avenue/SR 99			

Route	Problem/Potential Solutions	Frequency (1 to 5) 1= Seldom 5= Always	How serious? (1 to 5) 1= Minor 5= Major
<b>East</b>			
SR 132 railroad grade crossing at Santa Fe Avenue			
Santa Fe Avenue			
Santa Fe Avenue/Hatch Road			
<b>Local Truck Routes</b>			
Finch Road			
Santa Cruz Avenue			
<b>Others? Please Describe</b>			

*Thank you for your assistance.*

## **Central Stanislaus Freight Study Trucking Company Questionnaire**

### ***Company Information***

1. Company Name \_\_\_\_\_  
Contact Person \_\_\_\_\_  
Phone Number \_\_\_\_\_
2. What type of trucking services do you offer (please check all that apply)?  
LTL \_\_\_ Truckload\_\_\_ Refrigerated \_\_\_ Flatbed \_\_\_ Tank\_\_\_ Bulk\_\_\_ Parcel\_\_\_  
Drayage\_\_\_ Agricultural\_\_\_ Other (please describe) \_\_\_\_\_
3. What trucks do you operate? Straight trucks \_\_\_% Tractor-trailers \_\_\_% Doubles \_\_\_%
4. From which facilities are trucks dispatched to serve the Modesto area?  
\_\_\_\_\_
5. What portion of your drivers are employees? \_\_\_% owner-operators or sub-haulers \_\_\_%

### ***Business in Modesto's Beard Industrial Park and Gallo***

6. Do you have regular customers in the Beard Industrial Park? Yes \_\_\_ No\_\_\_  
If yes, about how many truck movements do your regular customers generate in an average week? (a range is okay) \_\_\_\_\_round trips.
7. Do you have occasional or irregular customers in the Beard Industrial Park? Yes \_\_\_ No\_\_\_  
If yes, about how many truck movements do your regular customers generate in an average week? (a range is okay) \_\_\_\_\_round trips.
8. What is the average weekly number of total trips to and from the Beard Industrial Park area? (a range is okay) \_\_\_\_\_round trips.
9. Is your business in the Beard Industrial Park area seasonal? Yes\_\_\_ No\_\_\_  
What are the peak months and the commodities hauled? \_\_\_\_\_
10. Receiving/Inbound  
What are the peak days/hours for your customers in the Beard Industrial Park area? \_\_\_\_\_  
Do these customers require delivery appointments? Yes\_\_\_ No\_\_\_  
Do you have any trouble arriving on time? Yes, often\_\_\_ Yes, sometimes\_\_\_ No\_\_\_
11. Shipping/Outbound  
What are the peak days/hours for your customers in the Beard Industrial Park area? \_\_\_\_\_  
Do these customers require pick-up appointments? Yes\_\_\_ No\_\_\_  
Do you have any trouble arriving on time? Yes, often\_\_\_ Yes, sometimes\_\_\_ No\_\_\_
12. Do you expect your business in the Beard Industrial Park area to grow or shrink?  
At about what rate? \_\_\_% per year.

**Truck Access and Operating Conditions (to/from Modesto’s Beard Industrial Park and Gallo)**

13. Do your drivers experience delays, congestion, safety hazards, or other operating problems on the following routes? Please indicate the nature of the problem and improvement ideas for your constraints listed.

<b>Route</b>	<b>Problem / Potential Solutions</b>	<b>Frequency (1 to 5) 1= Seldom 5= Always</b>	<b>How serious? (1 to 5) 1= Minor 5= Major</b>
<b>West</b>			
SR 99			
Tuolumne Blvd./SR 99 interchange			
Yosemite Blvd. (SR 132)			
Yosemite Blvd./SR 99 access			
<b>South</b>			
Hatch Road			
Hatch Road/Mitchell Road intersection			
Hatch Road/SR 99 interchange			
Mitchell Road/SR 99			
Whitmore Avenue/SR 99			

Route	Problem/Potential Solutions	Frequency (1 to 5) 1= Seldom 5= Always	How serious? (1 to 5) 1= Minor 5= Major
<b>East</b>			
SR 132 railroad grade crossing at Santa Fe Avenue			
Santa Fe Avenue			
Santa Fe Avenue/Hatch Road			
<b>Local Truck Routes</b>			
Finch Road			
Santa Cruz Avenue			
<b>Others? Please Describe</b>			

*Thank you for your assistance.*

## Appendix C. Transportation Modeling Results



Figure 18: 14<sup>th</sup> Street, D Street and Yosemite Blvd. Intersection Sign

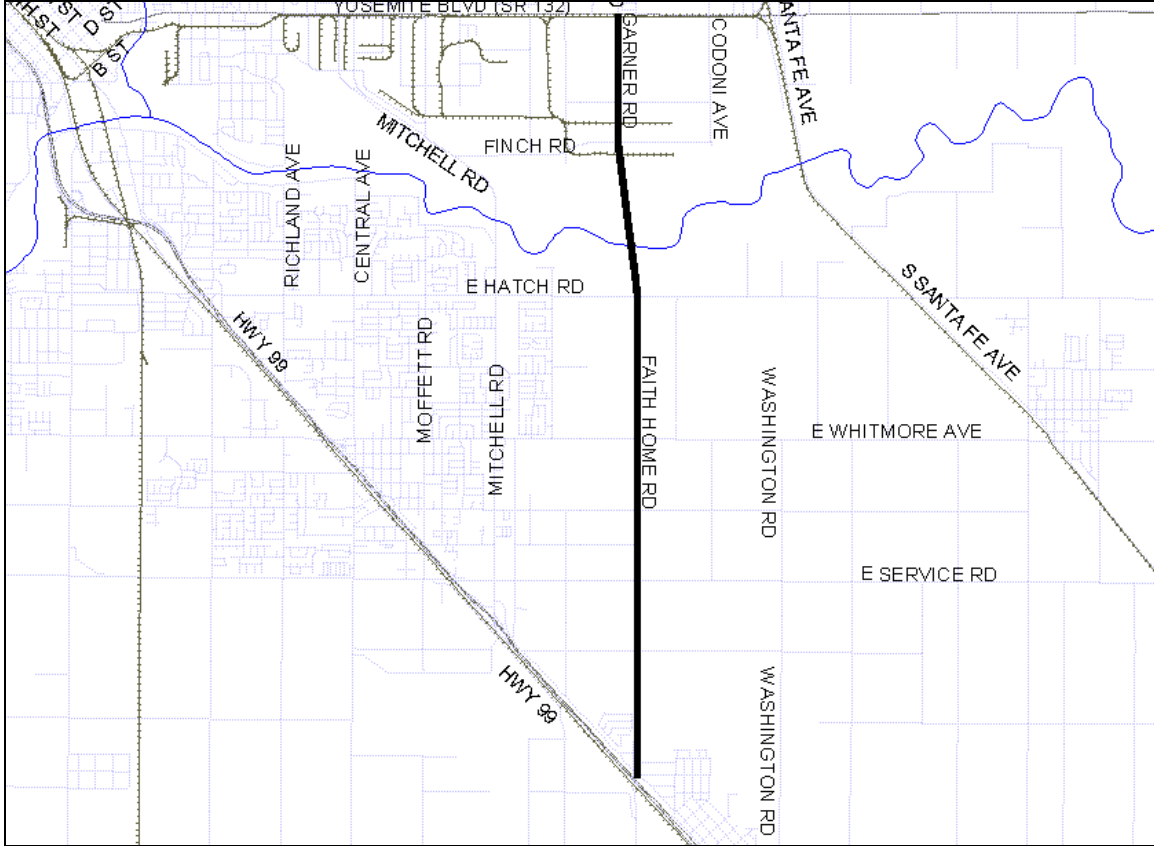
## **Appendix D. Project Fact Sheets**



**Figure 19: Tenaya Road at Santa Ana Avenue without Curb, Gutter and Sidewalk**

## Capacity Project: Claus Road/Garner Road/Faith Home (#3)

### Project Name: Claus Road/Garner Road/Faith Home Road Connector (#3)



#### ***Project Purpose and Need***

Some SR 132 Job Center trucks that travel south on the State Highway system use Mitchell Road through Ceres to access SR 99, which causes increased congestion on one of Ceres main thoroughfares. The Claus Road/Garner Road/Faith Home Road Connector would provide an alternative route for vehicles traveling between Modesto and Ceres and for south-oriented trucks.

#### ***Project Description***

The project would include a new crossing of the Tuolumne River, extensions of Garner Road and Faith Home Road, and the widening of Faith Home Road and Garner Road to expressway standards. The project would require three grade separations of the M&ET tracks through the Beard Industrial District to reduce potential negative impacts on internal circulation. The road would be elevated from Yosemite Blvd. to the river. The project also may require intersection rechannelization to better accommodate internal travel needs.

### ***Project Benefits***

This project would provide the following benefits:

- Reduces the amount of traffic on Mitchell Road, especially the Mitchell Road bridge over the Tuolumne River;
- Provides a southerly connection to SR 99; and
- Implements a portion of the Claus Road/Garner Road/Faith Home Road planned Expressway system, which stretches from Kiernan Avenue/Claribel Road to SR 99 in Keyes.

### **Modeling Results: Base Case vs. Claus Road/Garner Road/Faith Home Road Connector (#3)**

	<b>Base Case</b>	<b>Claus/Garner/Faith Home</b>	
VHT for study area trips	35,224	31,367	-3,857
Congested VHT minus free flow VHT for study area truck trips	1,475	880	-595
Truck VMT on truck routes in overall study area	423,665	408,561	-15,104
VMT (all vehicles) on all roadways within the overall study area	7,802,085	7,788,154	-13,931
Trucks on key routes.			
Ninth s/o G	2,508	2,410	-98
D e/o Ninth	2,384	1,780	-604
Hatch w/o Mitchell	3,720	3,574	-146
Mitchell n/o Hatch	8,752	5,368	-3,384

### ***Potential Impacts***

The project impacts are as follows:

- The project would divide the Beard Industrial District into two parts.
- Increased cut-through traffic would cause conflicts between the high-speed cut-through traffic and low-speed trucks transporting goods within and to/from the Beard Industrial District. The traffic volumes on Garner Road are estimated to increase by over 20,000 vehicles per day with this project.
- Vehicular traffic along Garner Road would cross the M&ET tracks at three locations (instead of the current two locations), and potentially at four or five in the future.
- The project cuts through agricultural lands and the Tuolumne River's riparian area and floodplain.
- The project requires right-of-way acquisitions on existing and proposed sections of Garner Road and Faith Home Road.
- The connector only would address south-oriented traffic.
- Single-family homes and ranchettes are located along Faith Home Road, which would be impacted by the increase in traffic flow.
- An above ground Turlock Irrigation District (TID) canal exists between Hatch Road and the Tuolumne River. This TID canal would have to be placed underground.

***Goals and Objectives***

The project would accomplish all the goals and objectives of the study, except for the objectives concerning agricultural lands and the improved access to/from north SR 99. The project would require right-of-way acquisition of agricultural lands on Garner Road and Faith Home Road. The preservation of agricultural lands is a study objective in that projects should minimize intrusion of proposed improvements into agricultural lands.

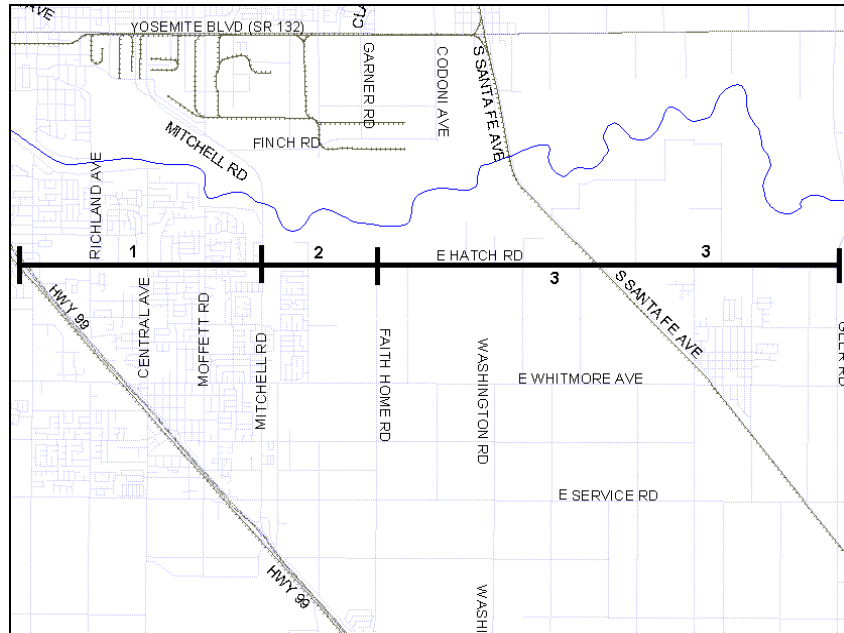
***Timeframe***

***Estimated Cost (Order of Magnitude)***

10 - 15 years from inception to completion      \$100 - \$150 million

## Capacity Project: Hatch Road (#5)

### Project Name: Hatch Road Lane Additions (#5a)



### ***Project Purpose and Need***

Congestion has increased along the Hatch Road corridor due to new residential and commercial development and new driveways. In October 1993, traffic counts show a total of 21,100 vehicles per day traveling on Hatch Road. In October 1998, traffic counts show a total of 25,800 vehicles per day, which equals a 3.6 percent annual increase in vehicles. Since Hatch Road represents one of Ceres' commercial districts, there is a push to improve the traffic flow on this major thoroughfare.

### ***Project Description***

This project has three phases:

- ***Phase I:*** Would add traffic lanes between Mitchell Road and Herndon Avenue, which would increase the number of lanes from four to six.
- ***Phase II:*** Would include lane widenings for a roadway segment east of Mitchell Road to Faith Home Road, which would increase the number of lanes from four to six. The timing of the second phase depends on when and if the Faith Home Road/Garner Road/Claus Road river-crossing project is constructed.
- ***Phase III:*** Would add lanes between Faith Home Road and Geer Road, which would increase the number of lanes from two to four. The construction of this phase depends on future development and traffic patterns.

**Project Benefits**

The project would allow for vehicles to move more freely through the commercial area of Ceres. It would provide a more effective east-west corridor in Stanislaus County, and would tie into the Santa Fe Avenue/Geer Road/Keyes Road proposed project (#7a).

**Modeling Results: Base Case vs. Hatch Road Lane Additions (#5a)**

	<b>Base Case</b>	<b>Hatch Road Lane Additions</b>	
VHT for study area trips	35,224	35,072	-152
Congested VHT minus free flow VHT for study area truck trips	1,475	1,451	-24
Truck VMT on truck routes in overall study area	423,665	426,241	2,576
VMT (all vehicles) on all roadways within the overall study area	7,802,085	7,821,445	19,360
Trucks on key routes.			
Ninth s/o G	2,508	1,888	-620
D e/o Ninth	2,384	2,404	20
Hatch w/o Mitchell	3,720	4,312	592
Mitchell n/o Hatch	8,752	8,802	50

**Potential Impacts**

The project would make Hatch Road more attractive to both automobiles and trucks causing an expected increase in volumes along this route. There are power lines along the length of Hatch Road within the proposed right-of-way, which would have to be placed underground or relocated.

Phase One would require right-of-way acquisition of property owned by the Turlock Irrigation District (TID) between Richland Avenue and Mitchell Road, which is about 1.5 miles. TID has a small above ground Lateral (# 1) that runs the entire length.

Phase Two would also require right-of-way acquisition of property owned by TID. The Ceres Main canal is located above ground from one parcel east of Mitchell Road to Santa Fe Avenue. It is cost prohibitive to underground the main canal so the right of way would need to be acquired from the north side of Hatch Road.

**Goals and Objectives**

The project would accomplish all the goals and objectives of the study, except that it would attract additional traffic onto Hatch Road. This impact is in conflict with the study’s objective that calls for a reduction in the amount of truck traffic on Hatch Road. With increased volumes comes increased air pollution, which also is in direct conflict with the study’s objective that calls for improved air quality.

**Timeframe**

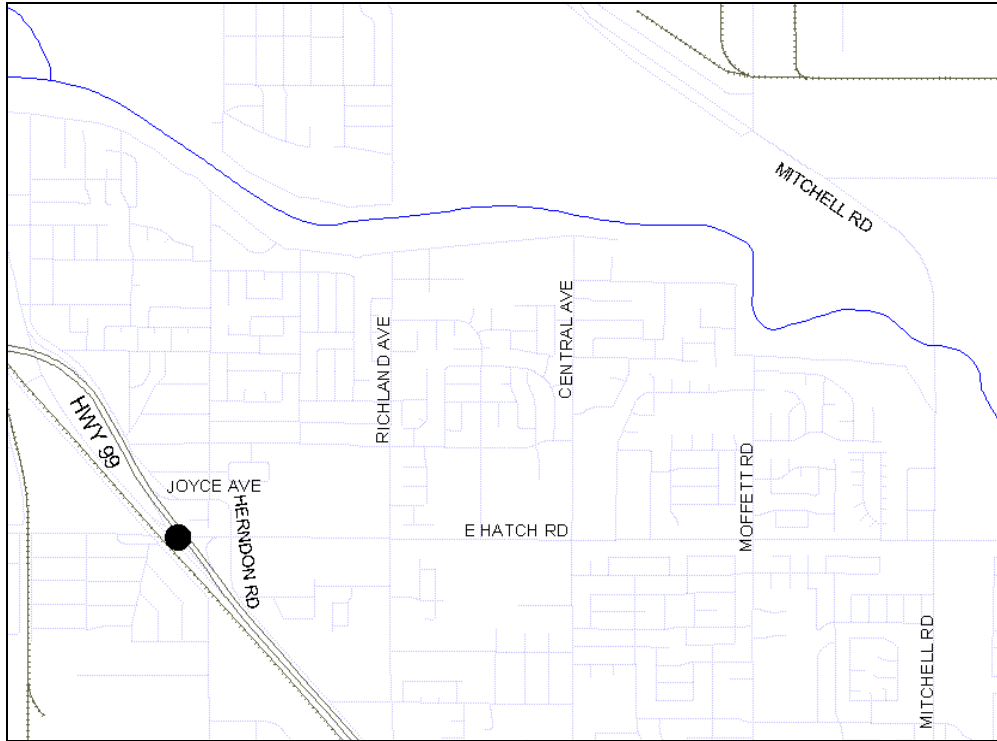
3 – 15 years from inception to completion.

**Estimated Cost (Order of Magnitude)**

\$750,000 - \$1 million (first phase);  
 \$500,000 - \$750,000 (second phase);  
 \$750,000 - \$1 million (third phase)

## Capacity Project: Hatch Road (#6)

### Project Name: Hatch Road/SR 99 Interchange (#6)



#### ***Project Purpose and Need***

The acceleration lane onto northbound SR 99 is overly abrupt making it difficult for northbound trucks to merge onto the freeway. Trucks back up on Hatch Road at Herndon Avenue waiting to access the northbound SR 99 on-ramp. The steep grade on the southbound off-ramp is difficult for trucks because they have to accelerate on the grade after stopping at the Hatch Road intersection. This issue is especially true for fully loaded trucks.

#### ***Project Description***

The project would involve a reconfiguration of the interchange. The reconfiguration would include grade improvements to the southbound off-ramp by extending the ramp. The northbound on-ramp would be reconstructed, and the existing on- and off-ramps would be removed. The project may include an auxiliary lane on SR 99 between the Hatch Road northbound on-ramp and the South 9<sup>th</sup> Street off-ramp.

#### ***Project Benefits***

The project would improve access to/from SR 99 for north-oriented trucks traveling to/from Ceres, Hughson, and the SR 132 Job Center.

**Modeling Results: Base Case vs. Hatch Road/State Route 99 Interchange (#6)**

	<b>Base Case</b>	<b>Hatch Road/SR 99</b>	
VHT for study area trips	35,224	35,237	13
Congested VHT minus free flow VHT for study area truck trips	1,475	1,475	0
Truck VMT on truck routes in overall study area	423,665	423,558	-107
VMT (all vehicles) on all roadways within the overall study area	7,802,085	7,799,865	-2,220
Trucks on key routes.			
Ninth s/o G	2,508	2,527	19
D e/o Ninth	2,384	2,384	0
Hatch w/o Mitchell	3,720	3,683	-37
Mitchell n/o Hatch	8,752	8,724	-28

***Potential Impacts***

The project would require right-of-way acquisition of adjacent commercial and affordable housing properties for the improved northbound on-ramp.

***Goals and Objectives***

The project would accomplish all the goals and objectives of the study.

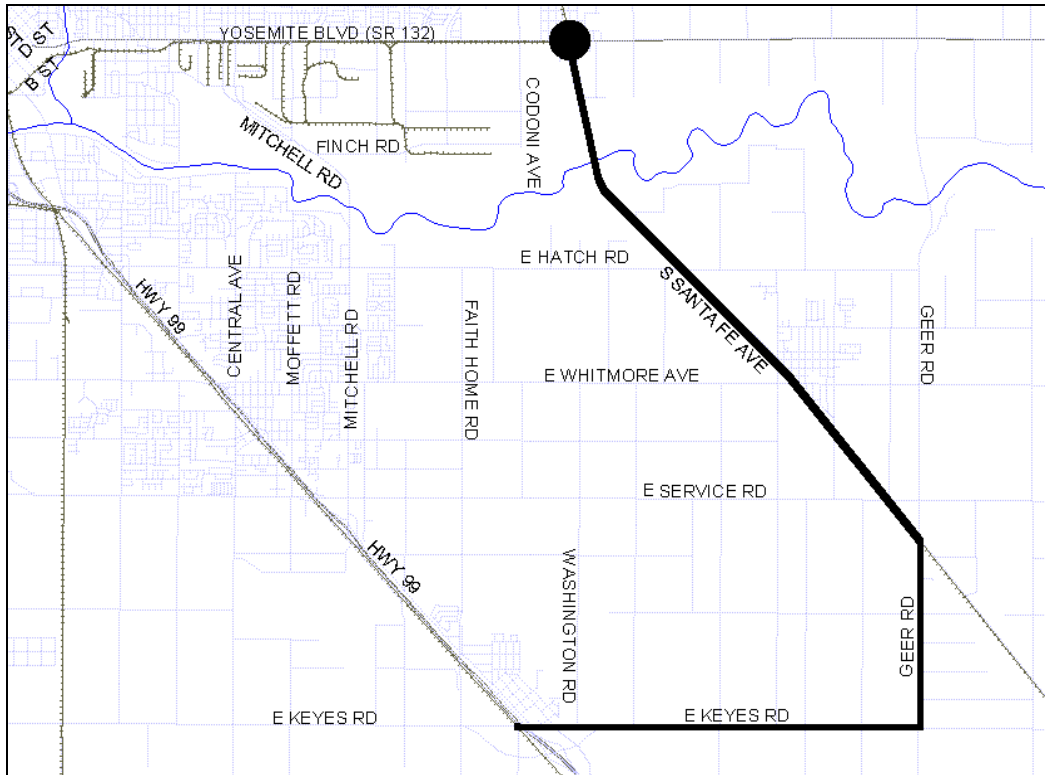
***Timeframe***

***Estimated Cost (Order of Magnitude)***

5 – 10 years from inception to completion      \$20 - \$30 million

## Capacity Project: Santa Fe Avenue (#7)

### Project Name: Santa Fe Avenue Road Improvements (#7a)



#### ***Project Purpose and Need***

Santa Fe Avenue is a two-lane, rural road that is not designed for heavy truck traffic. The BNSF switches railcars at the intermodal facility located at the intersection of Yosemite Blvd and Santa Fe Avenue. This movement of trains blocks the Santa Fe Avenue/Yosemite Blvd (SR 132) intersection causing traffic delays. The delays can last as long as 20 minutes, and occur between seven and ten times per day. There are three tracks at the Yosemite Blvd. and Santa Fe Avenue intersection.

The Santa Fe Avenue Bridge that crosses the Tuolumne River carries all trucks except overweight trucks that need special permits. The majority of trucks traveling to/from the SR 132 Job Center do not need special permits. This bridge will be reconstructed with seismic retrofit funds within the next three years, and already is programmed in the 2000 State Transportation Improvement Program (STIP).

#### ***Project Description***

The project would consist of the following:

- A railroad grade separation on SR 132/Yosemite Blvd. at the BNSF tracks west of Santa Fe Avenue; and
- Upgrade the following road segments with widened shoulders, improved street lights, turning radii, turning lanes, and bikeways: Santa Fe Avenue between SR

132 and Geer Road, Geer Road between Santa Fe Avenue and Keyes Road, and Keyes Road between SR 99 and Geer Road.

**Project Benefits**

The railroad grade separation project would improve reliability, and would reduce delays for east-west oriented traffic.

**Modeling Results: Base Case vs. Santa Fe Avenue Road Improvements (#7a)**

	<b>Base Case</b>	<b>Santa Fe Avenue Road Improvements</b>	
VHT for study area trips	35,224	34,565	-659
Congested VHT minus free flow VHT for study area truck trips	1,475	1,355	-120
Truck VMT on truck routes in overall study area	423,665	424,084	419
VMT (all vehicles) on all roadways within the overall study area	7,802,085	7,806,484	4,399
Trucks on key routes.			
Ninth s/o G	2,508	2,486	-22
D e/o Ninth	2,384	2,214	-170
Hatch w/o Mitchell	3,720	3,776	56
Mitchell n/o Hatch	8,752	8,641	-111

**Potential Impacts**

The railroad grade separation project would entail the displacement and relocation of both affordable housing and commercial businesses within the community of Empire. The project also would impact residential units and agricultural lands along the corridor. The project costs are high compared to the number of vehicles that would benefit from it. The timeframe for the project will be long due to the social and environmental sensitivity of the project as well as the need to negotiate an agreement with BNSF railroad.

**Goals and Objectives**

The project would accomplish all the goals and objectives of the study except for those pertaining to agricultural lands. The project would require right-of-way acquisition of agricultural lands along Santa Fe Avenue. The preservation of agricultural lands is a study objective in that projects should minimize intrusion of proposed improvements into agricultural lands.

**Timeframe**

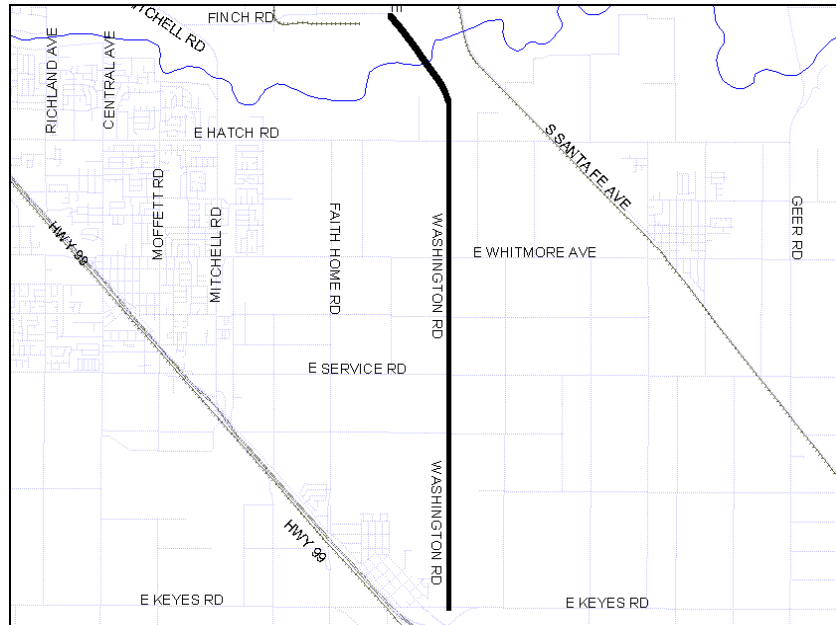
5 – 15 years from inception to completion

**Estimated Cost (Order of Magnitude)**

\$65 - \$75 million

## Capacity Project: Santa Fe Avenue (#7)

### Project Name: Washington Road/Codoni Avenue Connector (#7b)



#### ***Project Purpose and Need***

The Hatch Road and Mitchell Road corridors are becoming highly congested, especially during the peak harvest season. These corridors also serve as the main commercial districts for the City of Ceres. This project would divert south-oriented traffic from both Hatch and Mitchell roads. It also would serve as an alternative to the Claus Road/Garner Road/Faith Home Road connection.

#### ***Project Description***

The project would consist of a new river crossing between Washington Road and Codoni Avenue. The existing portion of Codoni Avenue would be widened requiring right-of-way acquisitions. This project would extend Codoni Avenue south to the river. Washington Road would be extended from Whitmore Avenue to the river, and would be upgraded to an urban expressway until Keyes. The project would include one grade separation of the M&ET tracks south of Finch Road to reduce potential negative impacts on internal circulation.

#### ***Project Benefits***

This project would provide the following benefits:

- Provides an alternative route for south-oriented trucks and autos thus relieving congestion on Hatch Road and Mitchell Road.
- Alleviates pressure from the Santa Fe Avenue/Hatch Road intersection, which is at an irregular angle due to the railroad tracks.
- Does not bisect the Beard Industrial District.

**Modeling Results: Base Case vs. Washington Road/Codoni Avenue Connector (#7b)**

	<b>Base Case</b>	<b>Washington Road/Codoni Avenue</b>	
VHT for study area trips	35,224	34,009	-1,215
Congested VHT minus free flow VHT for study area truck trips	1,475	1,158	-317
Truck VMT on truck routes in overall study area	423,665	418,095	-5,570
VMT (all vehicles) on all roadways within the overall study area	7,802,085	7,784,521	-17,564
Trucks on key routes			
Ninth s/o G	2,508	2,561	53
D e/o Ninth	2,384	2,223	-161
Hatch w/o Mitchell	3,720	3,344	-376
Mitchell n/o Hatch	8,752	7,706	-1,046

***Potential Impacts***

The project impacts are as follows:

- Would not create a direct expressway link with Claus Road.
- Vehicular traffic along Codoni Avenue would cross the M&ET tracks at two locations (instead of the current one), and potentially at three or four locations.
- Increases the likelihood that high-speed through traffic would conflict with low-speed trucks transporting goods within and to/from the Beard Industrial District.
- Agricultural lands to the south of Codoni Avenue and to the north of Washington Road would be impacted.
- Construction of the project would disturb and displace portions of the Tuolumne River's riparian area and floodplain. Environmental studies would need to be done to analyze the full impact.
- Requires right-of-way acquisitions on existing and proposed sections of Codoni Avenue and Washington Road.
- Residential units would be impacted south of the river.
- Addresses only south-oriented traffic.
- Increases the amount of truck traffic on Washington Road. This additional traffic may adversely impact the ranchettes, affordable homes, and a new middle school that are located along Washington Road.

***Goals and Objectives***

The project would accomplish all the goals and objectives of the study except for those pertaining to agricultural lands. The project would require right-of-way acquisition of agricultural lands along Santa Fe Avenue. The preservation of agricultural lands is a study objective in that projects should minimize intrusion of proposed improvements into agricultural lands.

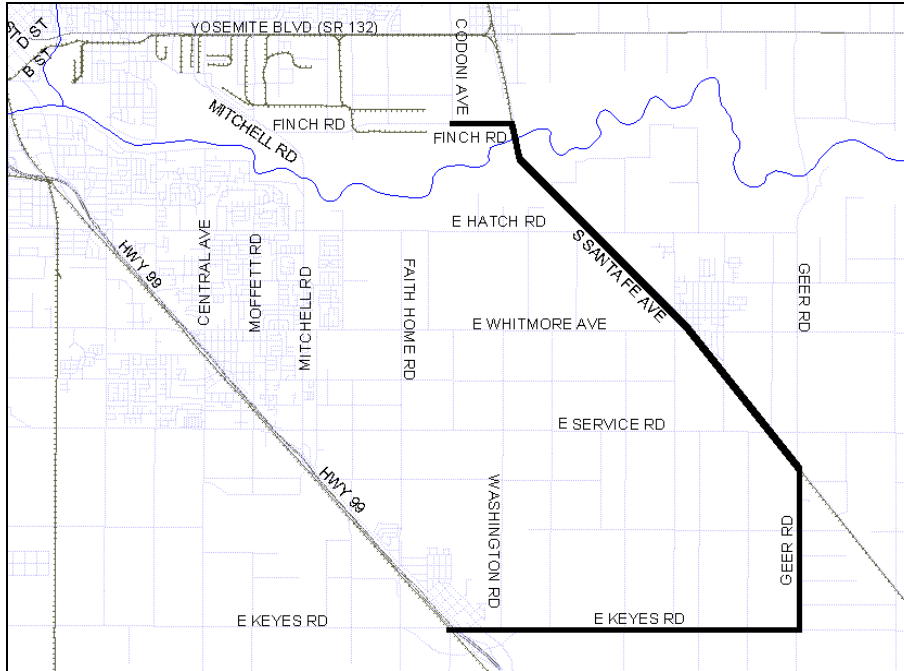
***Timeframe***

***Estimated Cost (Order of Magnitude)***

10 – 15 years from inception to completion     \$100 - \$120 million

## Capacity Project: Santa Fe Avenue (#7)

### Project Name: Finch Road Eastward Extension (#7c)



#### ***Project Purpose and Need***

SR 132 Job Center trucks wanting to use Santa Fe Avenue as a way to travel south must use Yosemite Blvd. to access Santa Fe Avenue. Vehicular traffic backs up along Yosemite Blvd. at the Valley Lift Intermodal yard, which is located southwest of the Yosemite Blvd./Santa Fe Avenue intersection. The delays can last as long as 20 minutes and occur at least one time per day when the trains are switching tracks. A grade-separated access to/from Santa Fe Avenue would give those traveling Yosemite Blvd. an alternative road thereby decreasing the delays currently being experienced. Furthermore, this grade separation acts as an alternate to the controversial grade separation project in Empire at the Yosemite Blvd./Santa Fe Avenue intersection.

#### ***Project Description***

This project would extend Finch Road eastward from Codoni Avenue to Santa Fe Avenue, and would include a grade-separated crossing of the BNSF railroad tracks just south of the intermodal yard. The project also would upgrade the following road segments with widened shoulders, improved street lights, turning radii, turning lanes and bikeways: Santa Fe Avenue between SR 132 and Geer Road, Geer Road between Santa Fe Avenue and Keyes Road and Keyes Road between SR 99 and Geer Road.

#### ***Project Benefits***

It would connect the Beard Industrial District with Hughson and eastern Stanislaus County. Hughson is expecting to increase its heavy industrial land uses, which could

generate more truck traffic between Hughson and the Beard Industrial District. The project would provide an alternative southern outlet for south-oriented trucks.

**Modeling Results: Base Case vs. Finch Road Eastward Extension (#7c)**

	<b>Base Case</b>	<b>Finch Road Eastward Extension</b>	
VHT for study area trips	35,224	35,014	-210
Congested VHT minus free flow VHT for study area truck trips	1,475	1,457	-18
Truck VMT on truck routes in overall study area	423,665	422,856	-809
VMT (all vehicles) on all roadways within the overall study area	7,802,085	7,797,301	-4,784
Trucks on key routes.			
Ninth s/o G	2,508	2,464	-44
D e/o Ninth	2,384	2,318	-66
Hatch w/o Mitchell	3,720	3,774	54
Mitchell n/o Hatch	8,752	8,645	-107

***Potential Impacts***

The Finch Road extension to Santa Fe Avenue would increase east-west cross traffic in the Beard Industrial District, which would conflict with business travel within the District. The project would require right-of-way acquisitions between Codoni Avenue and Santa Fe Avenue as well as near Santa Fe Avenue. The ROW acquisitions would impact agricultural lands. Only south-oriented traffic is served by this project.

This project would need an over/underpass of the BNSF rail lines because the Public Utilities Commission is not allowing new at-grade crossings. The BNSF railroad tracks run adjacent and parallel to Santa Fe Avenue making it difficult to provide the grade-separated crossing. Santa Fe Avenue is a depressed roadway at the point where Finch Road is proposed to connect. The road is approximately 10'-15' below the BNSF RR tracks. It would be easier to go under the tracks instead of over them. Going under the tracks would have its own set of problems. The height difference between the tracks and the road is not enough clearance so the track would have to be raised or the road lowered. Grade separations of this size are expensive and take time to negotiate with the railroad.

***Goals and Objectives***

The project would accomplish all the goals and objectives of the study except for those pertaining to agricultural lands. The project would require right-of-way acquisition of agricultural lands along Santa Fe Avenue. The preservation of agricultural lands is a study objective in that projects should minimize intrusion of proposed improvements into agricultural lands.

***Timeframe***

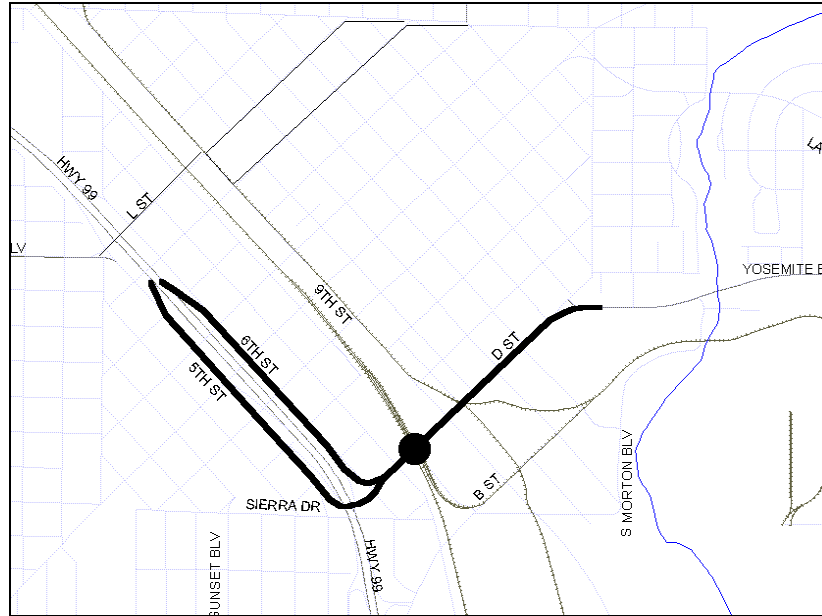
5 – 10 years (grade separation)

***Estimated Cost (Order of Magnitude)***

\$30 - \$35 million

## Capacity Project: State Routes 132 & 99 Connection (#9)

### Project Name: D Street Alternative without Interchange (#9a)



#### ***Project Purpose and Need***

The circuitous route between the SR 132 Job Center and SR 99 discourages drivers from taking the Central Modesto on/off ramps and SR 132. Downtown congestion and railroad operations also make it a slow route. Weaving occurs on SR 99 where Modesto northbound exiting traffic bisects with Tuolumne Blvd. entering traffic.

A large amount of truck traffic uses Hatch Road, Mitchell Road or 9<sup>th</sup> Street to access the Job Center. All of these roads are within the downtown or business district of Ceres or Modesto. A more direct route to SR 99 is needed to alleviate congestion and free up road capacity in the downtown/business areas so they can continue to thrive.

#### ***Project Description***

This project would do the following:

- Creates a smooth curve at the D Street/Yosemite Blvd./14<sup>th</sup> Street intersection;
- Widens and realigns D Street to a four lane road with left turn pockets;
- Provides a Union Pacific Railroad over/under crossing;
- Improves 5<sup>th</sup> and 6<sup>th</sup> Streets;
- Improves South 9<sup>th</sup> Street for south-oriented traffic (i.e. repave road, implement an access management plan, etc); and
- Provides a SR 99 overcrossing between D Street and 5<sup>th</sup> Street for southbound traffic to access SR 132.

Alternative corridors could be studied such as E and F streets.

The new SR 132/SR 99 interchange project near Kansas will eliminate the L Street northbound on-ramp to SR-99. The road segment between the remaining I Street on-ramp and the new SR 132/SR 99 interchange may require auxiliary lanes.

### ***Project Benefits***

The project would improve truck access between the SR 132 Job Center and SR 99 for north-oriented traffic using existing Central Modesto SR 99 on- and off-ramps. The route would pass through primarily industrial areas thereby avoiding downtown Modesto and the Tuolumne River Regional Park. It would improve access to South 9<sup>th</sup> Street industrial areas to better accommodate south-oriented traffic. The project is consistent with the City of Modesto’s planned projects in the area.

#### **Modeling Results: Base Case vs. D Street Alternative without Interchange (#9a)**

	<b>Base Case</b>	<b>D St Alternative w/o Interchange</b>	
VHT for study area trips	35,224	35,143	-81
Congested VHT minus free flow VHT for study area truck trips	1,475	1,461	-14
Truck VMT on truck routes in overall study area	423,665	423,014	-651
VMT (all vehicles) on all roadways within the overall study area	7,802,085	7,787,327	-14,758
Trucks on key routes.			
Ninth s/o G	2,508	2,104	-404
D e/o Ninth	2,384	2,626	242
Hatch w/o Mitchell	3,720	3,733	13
Mitchell n/o Hatch	8,752	8,772	20

### ***Potential Impacts***

The project would have the following impacts:

- Businesses and affordable housing would be displaced and would need to be relocated.
- The Sierra Drive/SR 99 overpass would need to be eliminated.
- Does not provide direct access to SR 99 for south-oriented traffic.
- If auxiliary lanes were built, they would make future widenings of SR 99 more difficult.

### ***Goals and Objectives***

The project would accomplish all the goals and objectives of the study except for increased delay on Tuolumne Blvd. east of SR 99 and on D Street east of 9<sup>th</sup> Street. The project would reduce the LOS on Tuolumne Blvd. east of SR 99 from C to D and on D Street east of 9<sup>th</sup> Street from D to F, which is in conflict with the study’s objective to maintain or improve LOS.

### ***Timeframe***

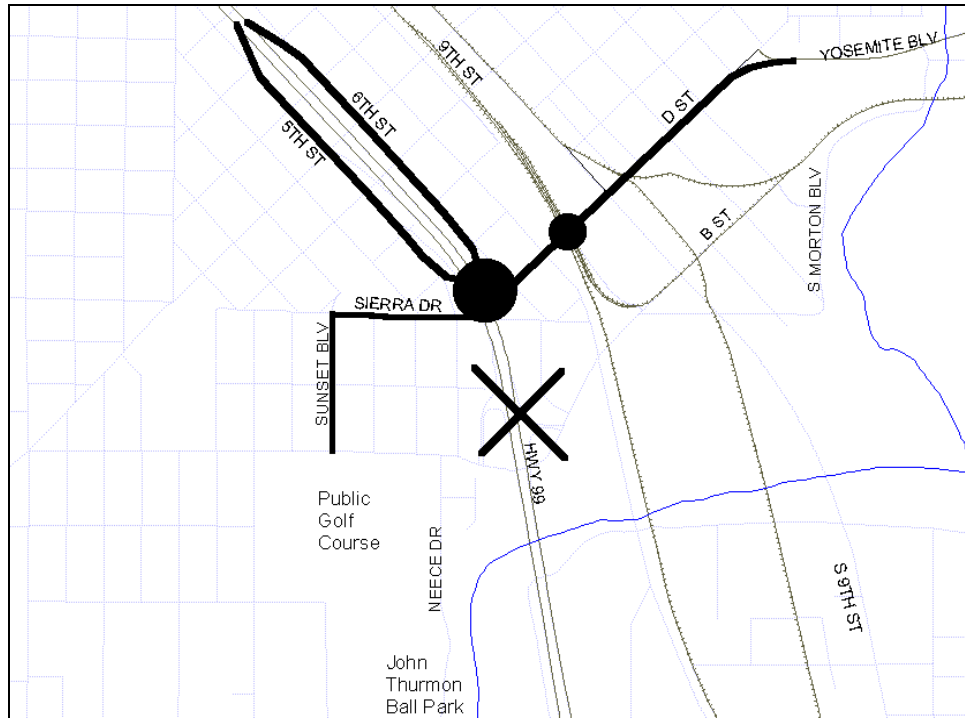
10- 15 years from inception to completion

### ***Estimated Cost (Order of Magnitude)***

\$35 - \$40 million

## Capacity Project: State Routes 132 & 99 Connection (#9)

### Project Name: D Street Alternative with Interchange (#9b)



### ***Project Purpose and Need***

The circuitous route between the SR 132 Job Center and SR 99 discourages drivers from taking the Modesto on/off ramps and SR 132. Downtown congestion and railroad operations also make it a slow route. Weaving occurs on SR 99 where Modesto northbound exiting traffic bisects with Tuolumne Blvd. entering traffic.

Currently a large amount of truck traffic is using Hatch Road, Mitchell Road or 9<sup>th</sup> Street for access to the Job Center. All of these roads are within the downtown or business district of Ceres or Modesto. A more direct route to SR 99 is needed to alleviate congestion and free up road capacity in the downtown/business areas so they can continue to thrive.

### ***Project Description***

This project would do the following:

- Creates a smooth curve at the D Street/Yosemite Blvd./14<sup>th</sup> Street intersection;
- Widens and realigns D Street to a four lane road with left turn pockets;
- Provides a Union Pacific Railroad over/under crossing;
- Improves 5<sup>th</sup> and 6<sup>th</sup> Streets;
- Constructs a full interchange at D Street and SR 99;
- Closes Tuolumne Blvd. interchange;

- Provides a multimodal connection to west Modesto using Sierra Drive and Sunset Avenue, which are already built to handle high volumes of traffic; and
- Constructs auxiliary lanes on SR 99 if interchange volumes warrant it.

Alternative corridors could be studied such as E and F streets.

The new SR 132/SR 99 interchange project near Kansas will eliminate the L Street northbound on-ramp to SR-99. The road segment between the remaining I Street on-ramp and the new SR 132/SR 99 interchange may require auxiliary lanes.

**Project Benefits**

The project would improve truck access between the SR 132 Job Center and SR 99 for both north- and south-oriented traffic. It would divert truck traffic away from Hatch and Mitchell roads. The route would pass primarily through industrial areas rather than residential or commercial areas. It would provide the City of Modesto an opportunity to create a new “Gateway” into downtown Modesto.

**Modeling Results: Base Case vs. D Street Alternative with Interchange (#9b)**

	Base Case	D St Alternative w/ Interchange	
VHT for study area trips	35,224	35,048	-176
Congested VHT minus free flow VHT for study area truck trips	1,475	1,491	16
Truck VMT on truck routes in overall study area	423,665	423,348	-317
VMT (all vehicles) on all roadways within the overall study area	7,802,085	7,795,885	-6,200
Trucks on key routes.			
Ninth s/o G	2,508	2,162	-346
D e/o Ninth	2,384	3,748	1,364
Hatch w/o Mitchell	3,720	3,581	-139
Mitchell n/o Hatch	8,752	8,558	-194

**Potential Impacts**

The project would require the closure of the Tuolumne Blvd interchange, which would cause access issues for the Tuolumne River Regional Park. The current plans for the “Gateway” parcel of the Tuolumne River Regional Park has the entrance to the park lining up with the northbound Tuolumne Blvd exit from SR 99. Modesto potentially would have to redesign the “Gateway” entrance to the park and the city. The closure of the Tuolumne Blvd. interchange also would increase traffic along Sierra Drive, Madera Avenue and Merced Avenue.

The building of a new interchange would force the closure of the Central Modesto SR 99 ramps causing traffic routing implications and would impact local streets and circulation patterns. If auxiliary lanes were built, they would make future widenings of SR 99 more difficult.

Some businesses and affordable housing would be displaced and would need to be relocated. A Christian school backs up to the existing right of way. A new off-ramp would be located next to the school causing increased traffic, noise, and air pollution.

***Goals and Objectives***

The project would accomplish all the goals and objectives of the study except for increased delay on D Street east of 9<sup>th</sup> Street. The project would reduce the LOS from D to F on D Street east of 9th St., which is in conflict with the study’s objective to maintain or improve LOS. The alternative route helps businesses move their products in a more efficient manner away from the heavily traveled commercial and residential areas of Hatch and Mitchell roads.

***Timeframe***

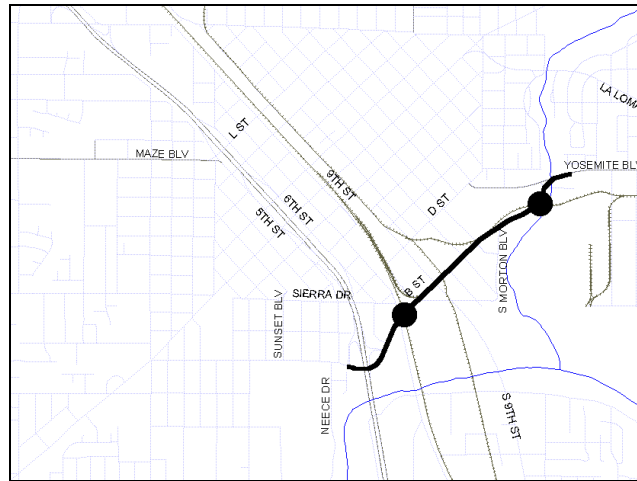
***Estimated Cost (Order of Magnitude)***

5- 10 years from inception to completion

\$60 - \$70 million

## Capacity Project: State Routes 132 & 99 Connection (#9)

### Project Name: Tuolumne Blvd/B Street/Morton Blvd. (#9c)



### ***Project Purpose and Need***

The circuitous route between the SR 132 Job Center and SR 99 discourages drivers from taking the Modesto on/off ramps and SR 132. Downtown congestion and railroad operations also make it a slow route. Weaving occurs on SR 99 where Modesto northbound exiting traffic bisects with Tuolumne Blvd. entering traffic.

A large amount of truck traffic uses Hatch Road, Mitchell Road or 9<sup>th</sup> Street to access the Job Center. All of these roads are within the downtown or business district of Ceres or Modesto. A more direct route to SR 99 is needed to alleviate congestion and free up road capacity in the downtown/business areas so they can continue to thrive.

### ***Project Description***

The project would consist of the following:

- Over/underpass of the M&ET railroad at Morton Blvd.;
- Improvements to B Street and Morton Blvd.;
- Over/underpass of Union Pacific railroad tracks;
- Reconstruction of the Tuolumne Blvd./SR 99 interchange;
- Construction of auxiliary lanes on SR 99.

### ***Project Benefits***

The project would provide direct access to SR 99 for both northbound and southbound traffic. It would separate downtown and SR 132 Job Center traffic. It also would divert truck traffic from Mitchell and Hatch Roads in Ceres.

**Modeling Results: Base Case vs. Tuolumne Blvd/B Street/Morton Blvd. (#9c)**

	<b>Base Case</b>	<b>Tuolumne Blvd/B St/Morton Blvd.</b>	
VHT for study area trips	35,224	34,781	-443
Congested VHT minus free flow VHT for study area truck trips	1,475	1,410	-65
Truck VMT on truck routes in overall study area	423,665	417,462	-6,203
VMT (all vehicles) on all roadways within the overall study area	7,802,085	7,788,348	-13,737
Trucks on key routes.			
Ninth s/o G	2,508	2,254	-254
D e/o Ninth	2,384	1,334	-1,050
Hatch w/o Mitchell	3,720	3,506	-214
Mitchell n/o Hatch	8,752	8,438	-314

***Potential Impacts***

The project would cause the following impacts:

- Requires two grade separations and major right-of-way acquisitions.
- Displaces portions of two major commercial properties located along Morton Blvd. and B Street.
- May impact Dry Creek and the Beard Brook Park due to their proximity to Morton Blvd.
- Impacts a private school and residential properties due to the Tuolumne Blvd. interchange reconstruction.
- Creates major vehicular/train conflicts along M&ET's main access tracks on B Street.
- Interferes with the proposed plans for the \$14 million gateway parcel project for the Tuolumne River Regional Park.
- Conflicts with an historic bridge at Morton Blvd./Yosemite Blvd. intersection.
- Causes the elimination of the Central Modesto northbound off-ramp from SR 99 due to the Tuolumne Blvd. interchange reconstruction.
- High construction costs and extended timeframe due to steep slopes, close proximity of Dry Creek to Morton Blvd, and the narrow road width on Morton Blvd.
- If auxiliary lanes were built, they would make future widenings of SR 99 more difficult.

***Goals and Objectives***

The project would accomplish all the goals and objectives of the study except for increased delay on Tuolumne Blvd. east of SR 99. The project would reduce the LOS on Tuolumne Blvd. east of SR 99 from C to D, which is in conflict with the study's objective to maintain or improve LOS. The alternative route helps businesses move their products in a more efficient manner away from the heavily traveled commercial and residential areas of Hatch and Mitchell roads.

<b><i>Timeframe</i></b>	<b><i>Estimated Cost (Order of Magnitude)</i></b>
10 – 15 years from inception to completion	\$75 - \$85 million



Alternative corridors could be studied such as E and F streets.

The new SR 132/SR 99 interchange project near Kansas will eliminate the L Street northbound on-ramp to SR-99. The road segment between the remaining I Street on-ramp and the new SR 132/SR 99 interchange may require auxiliary lanes.

### ***Project Benefits***

The project would improve truck access between the SR 132 Job Center and SR 99 for north-oriented traffic using existing Central Modesto SR 99 on- and off-ramps. The route would pass through primarily industrial areas thereby avoiding downtown Modesto and the Tuolumne River Regional Park. It would improve access to South 9<sup>th</sup> Street industrial areas to better accommodate south-oriented traffic. The project is consistent with the City of Modesto’s planned projects in the area. Refer to Figures 20 and 21 for a graphical representation of the transportation effects shown in the below table.

#### **Modeling Results: Base Case vs. D Street/Yosemite Blvd. to Mitchell Road Alternative without Interchange (#9d)**

	<b>Base Case</b>	<b>#9d Alternative</b>	
VHT for focused area trips	35,224	34,373	-851
Congested VHT minus free flow VHT for focused area truck trips	1,475	1,487	12
Truck VMT on truck routes in overall study area	423,665	425,086	1,421
VMT (all vehicles) on all roadways within the overall study area	7,802,085	7,783,162	-18,923
Trucks on key routes.			
Ninth s/o G	2,508	2,918	410
D e/o Ninth	2,384	5,378	2,994
Hatch w/o Mitchell	3,720	3,398	-322
Mitchell n/o Hatch	8,752	7,892	-860

### ***Potential Impacts***

The project would have the following impacts:

- Businesses and affordable housing would be displaced and would need to be relocated.
- The Sierra Drive/ SR 99 overpass would need to be eliminated.
- Does not provide direct access to SR 99 for south-oriented traffic.
- If auxiliary lanes were built, they would make future widenings of SR 99 more difficult.

### ***Goals and Objectives***

The project would accomplish all the goals and objectives of the study except for increased delay on D Street east of 9<sup>th</sup> Street. The project would reduce the LOS on D Street east of 9<sup>th</sup> Street from D to F, which is in conflict with the study’s objective to maintain or improve LOS.

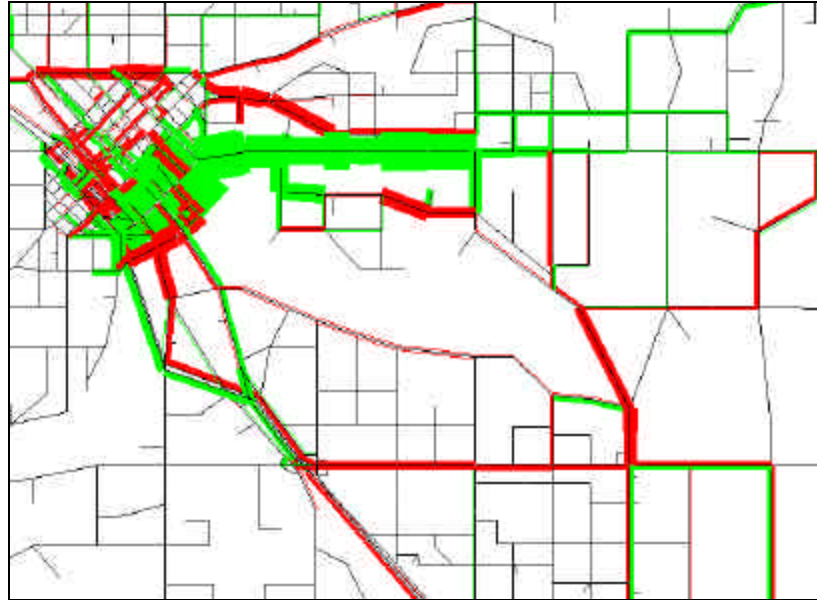
**Timeframe**

**Estimated Cost (Order of Magnitude)**

10- 15 years from inception to completion

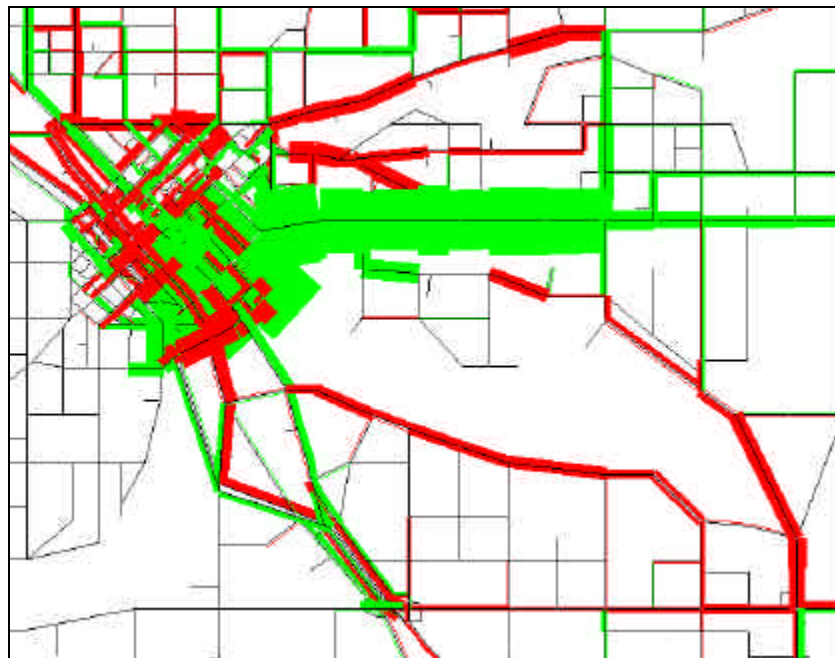
\$60 - \$80 million

**Figure 20: Change in Truck Volumes (9d – Mitchell)**



*Green (or light gray) = Increase Red (or dark gray) = Decrease*  
Source: Dowling Associates, 2001.

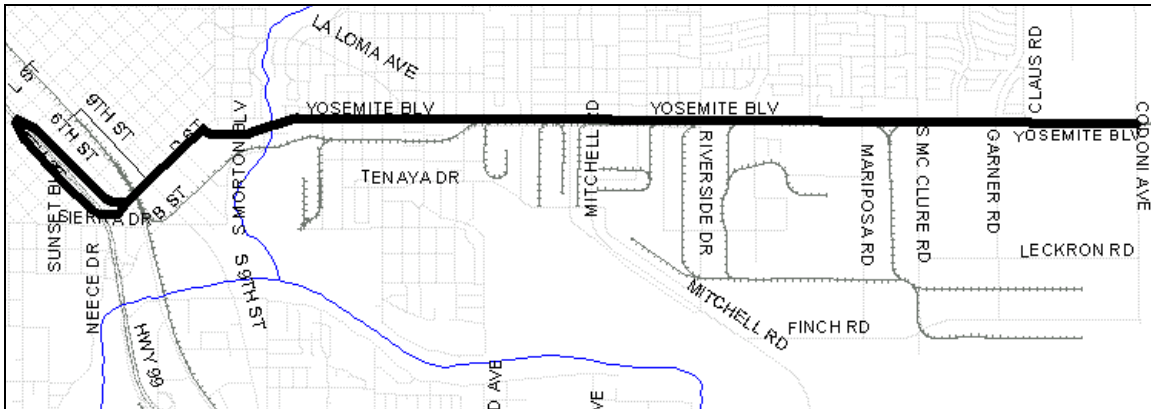
**Figure 21: Change in Total Volumes (9d – Mitchell)**



*Green (or light gray) = Increase Red (or dark gray) = Decrease*  
Source: Dowling Associates, 2001.

## Capacity Project: State Routes 132 & 99 Connection (#9)

### Project Name: D Street/Yosemite Blvd. to Claus Road Alternative without Interchange (#9e)



#### ***Project Purpose and Need***

The circuitous route between the SR 132 Job Center and SR 99 discourages drivers from taking the Central Modesto on/off ramps and SR 132. Downtown congestion and railroad operations also make it a slow route. Weaving occurs on SR 99 where Modesto northbound exiting traffic bisects with Tuolumne Blvd. entering traffic.

A large amount of truck traffic uses Hatch Road, Mitchell Road or 9<sup>th</sup> Street to access the Job Center. All of these roads are within the downtown or business district of Ceres or Modesto. A more direct route to SR 99 is needed to alleviate congestion and free up road capacity in the downtown/business areas so they can continue to thrive.

#### ***Project Description***

This project would do the following:

- Creates a smooth curve at the D Street/Yosemite Blvd./14<sup>th</sup> Street intersection;
- Widens and realigns D Street to a four-lane road with left turn pockets;
- Provides a Union Pacific Railroad over/under crossing;
- Improves 5<sup>th</sup> and 6<sup>th</sup> Streets;
- Provides a Class B expressway between Claus Road and SR 99;
- Improves South 9<sup>th</sup> Street for south-oriented traffic (i.e. repave road, implement an access management plan, etc); and
- Provides a SR 99 overcrossing at between D Street and 5<sup>th</sup> Street for southbound traffic to access SR 132.

Alternative corridors could be studied such as E and F streets.

The new SR 132/SR 99 interchange project near Kansas will eliminate the L Street northbound on-ramp to SR-99. The road segment between the remaining I Street on-ramp and the new SR 132/SR 99 interchange may require auxiliary lanes.

### ***Project Benefits***

The project would improve truck access between the SR 132 Job Center and SR 99 for north-oriented traffic using existing Central Modesto SR 99 on- and off-ramps. The route would pass through primarily industrial areas thereby avoiding downtown Modesto and the Tuolumne River Regional Park. It would improve access to South 9<sup>th</sup> Street industrial areas to better accommodate south-oriented traffic. The project is consistent with the City of Modesto’s planned projects in the area. Refer to Figures 22 and 23 for a graphical representation of the transportation effects shown in the below table.

#### **Modeling Results: Base Case vs. D Street/Yosemite Blvd. to Claus Road Alternative without Interchange (#9e)**

	<b>Base Case</b>	<b>#9e Alternative</b>	
VHT for focused area trips	35,224	33,163	-2,061
Congested VHT minus free flow VHT for focused area truck trips	1,475	1,382	-93
Truck VMT on truck routes in overall study area	423,665	434,162	10,497
VMT (all vehicles) on all roadways within the overall study area	7,802,085	7,800,525	-1,560
Trucks on key routes.			
Ninth s/o G	2,508	2,862	354
D e/o Ninth	2,384	6,571	4,187
Hatch w/o Mitchell	3,720	3,157	-563
Mitchell n/o Hatch	8,752	7,483	-1,269

### ***Potential Impacts***

The project would have do the following impacts:

- Some displace businesses and affordable housing would be displaced and would need to be relocated.
- Impacts the Sierra Drive/ SR 99 overpass would need to be eliminated.
- Does not provide direct access to SR 99 for south-oriented traffic.
- If auxiliary lanes were built, they would make future widenings of SR 99 more difficult.

### ***Goals and Objectives***

The project would accomplish all the goals and objectives of the study except for increased delay on D Street east of 9<sup>th</sup> Street. The project would reduce the LOS on D Street east of 9<sup>th</sup> Street from D to F, which is in conflict with the study’s objective to maintain or improve LOS.

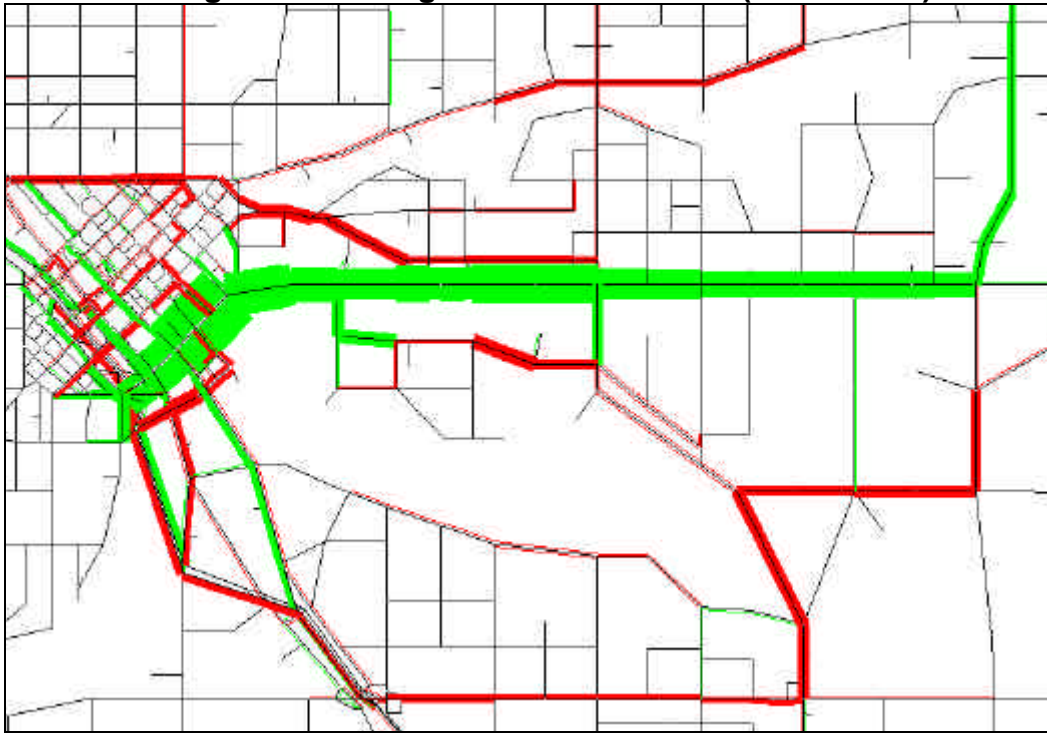
### ***Timeframe***

10- 15 years from inception to completion

### ***Estimated Cost (Order of Magnitude)***

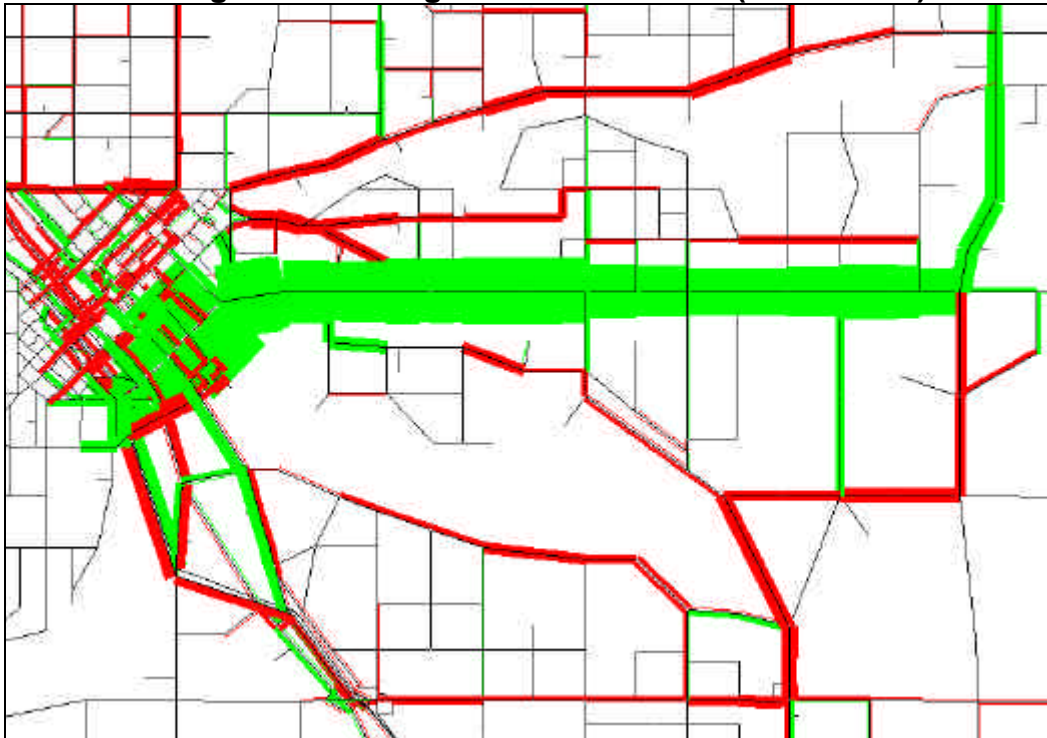
\$80 - \$100 million

**Figure 22: Change in Truck Volumes (9e to Claus)**



*Green (or light gray) = Increase Red (or dark gray) = Decrease*  
Source: Dowling Associates, 2001.

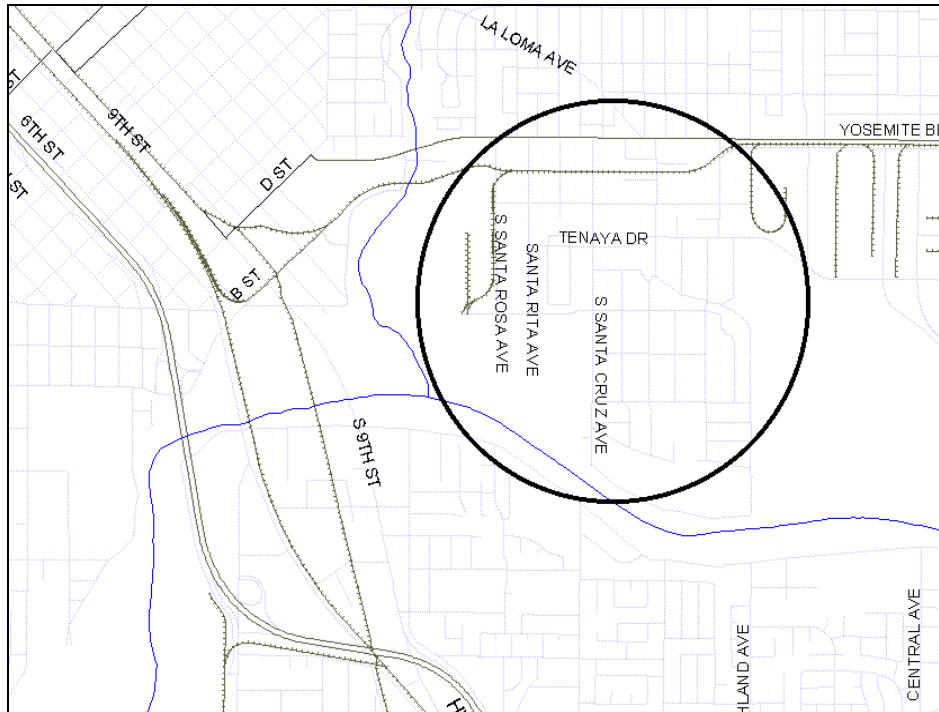
**Figure 23: Change in Total Volumes (9e to Claus)**



*Green (or light gray) = Increase Red (or dark gray) = Decrease*  
Source: Dowling Associates, 2001.

## Operational Project: Airport District (#1)

### Project Name: Airport District Improvements (#1)



#### ***Project Purpose and Need***

An adequate truck route does not exist to/from Gallo through the Airport District. A truck route on Tenaya Drive eliminates the need to use Yosemite Blvd. for south-oriented trucks. Curbs, gutters, sidewalks, streetlights, pavement resurfacing, and bikeways would improve safety for the neighborhood residents traveling along the proposed truck route(s).

#### ***Project Description***

The existing truck route on Santa Cruz Avenue would be improved and an alternate east-west truck route would be designated along Tenaya Drive. The following alternate truck routes also would be considered: Santa Rosa Avenue and Santa Rita Avenue. Designated truck route(s) would include improved curb, gutter, sidewalks as well as possible widenings, resurfacing, streetlights, and bike lanes. Santa Cruz Avenue would add lane markings to prevent drivers from passing (on the right) northbound trucks turning right on Yosemite Blvd.

#### ***Project Benefits***

Due to the location of Gallo's shipping and receiving facility, Santa Cruz Avenue would remain the primary truck route through the Airport District. A new Tenaya Drive truck route could reduce truck travel on Yosemite Blvd. by providing south-oriented trucks

with a route that avoids Yosemite Blvd. The project would improve the streetscape and safety of these routes, which could help increase property values.

***Potential Impacts***

The Airport District is an industrial area as well as a residential area so the improvement projects should consider the residents' needs and concerns. Minimal ROW acquisition may be needed for potential road widenings and sidewalk improvements.

***Goals and Objectives***

The project would accomplish all the goals and objectives of the study.

***Timeframe***

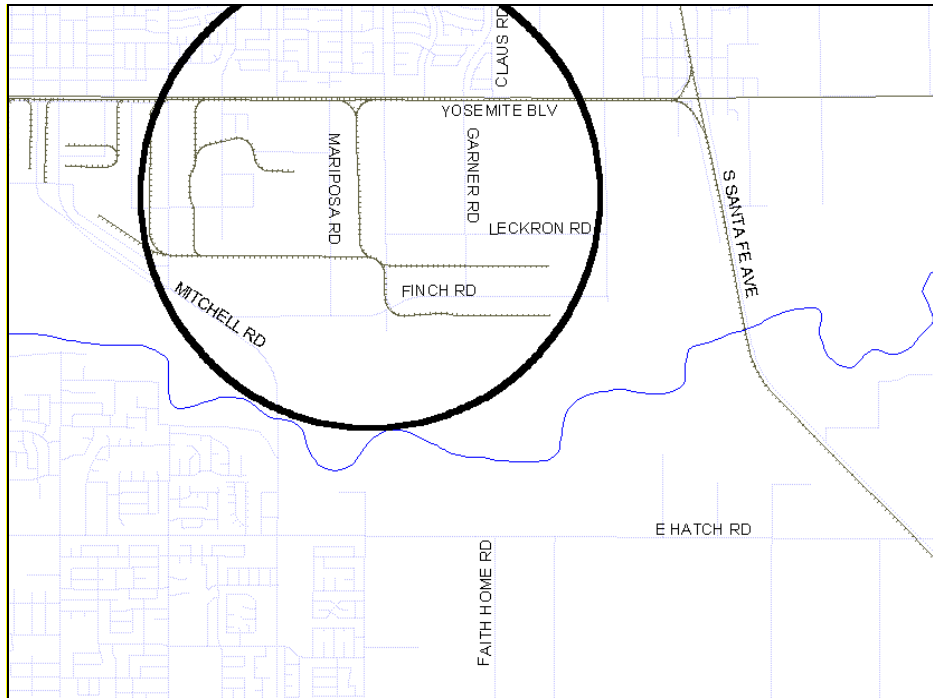
***Estimated Cost (Order of Magnitude)***

2 – 5 years from inception to completion

\$500,000 - \$1,000,000

## Operational Project: Beard Industrial District (#2)

### Project Name: Beard Industrial District Truck Parking Plan (#2a)



#### ***Project Purpose and Need***

An inadequate supply of short-term truck parking exists within the Beard Industrial District. At one facility, a maximum of 20 trucks may wait on the street to drop off at a loading dock. On-street truck parking is possible now because the Beard Industrial District is not built out. Future growth within the Beard Industrial District will bring more trucks to the area causing increased visibility and safety problems.

Furthermore, no truck stops or rest areas exist in Modesto. The closest truck stops are in Ripon and Turlock, and they frequently reach maximum capacity. Truck drivers need a place to sleep and eat, to use restrooms, refuel and access repair stations. Unaffiliated truck drivers use the Tri-Valley Growers lot because it is a safe place for drivers to sleep.

#### ***Project Description***

The project would involve the development of parking or staging areas for trucks within or near the Beard Industrial District. The parking areas could include the selected paving of shoulders, wide right lanes, and designated lots.

Companies would be encouraged to change their shipping methods to reduce driver waits. Future companies would be encouraged to develop an adequate number of truck docks and parking areas so trucks would not be forced to wait on public streets. The Beard Industrial District could develop standards that would allow for sufficient space within the facilities to accommodate trucks.

***Project Benefits***

This project would help eliminate potential safety hazards associated with truck parking, and would improve the work conditions for truck drivers.

***Potential Impacts***

This project is partially a private sector issue so the public sector does not have control over its entire implementation. The parking or staging areas for trucks on designated lots would impact the Beard Industrial District land.

***Goals and Objectives***

The project would accomplish all the goals and objectives of the study; however, the project's impacts on reducing delay and truck traffic would be minimal.

***Timeframe***

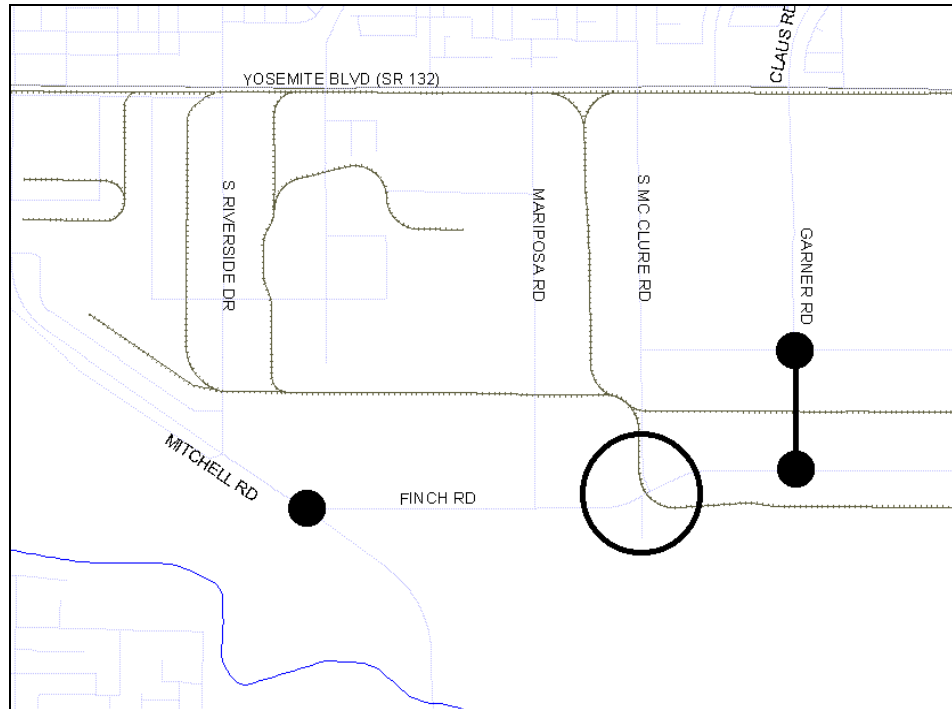
1 – 3 years from inception to completion

***Estimated Cost (Order of Magnitude)***

\$20,000 for paved shoulders (excludes private sector expenditures for designated lots, shipping methods, and parking standards)

## Operational Project: Beard Industrial District (#2)

### Project Name: Finch Road/Garner Road Improvements (#2b)



#### ***Project Purpose and Need***

This project purpose and need is as follows:

- The Finch Road/Mitchell Road intersection is difficult for westbound trucks turning south onto Mitchell Road and for northbound trucks turning right onto Finch Road.
- A dangerous S curve in conjunction with an offset intersection limits visibility on the Finch Road/McClure Road intersection.
- Garner Road between Leckron Road and Finch Road has high speeds and pavement in need of repair/replacement.

The Finch Road/Mariposa Road Channelization project will receive \$1 million from State Transportation Improvement Program (STIP) funds for moving a telephone pole to help trucks turning at this intersection.

#### ***Project Description***

The project would include:

- The widening of the northbound right turn lane from Mitchell Road to Finch Road;
- Signalization and reconfiguration of the intersection at Finch Road and S. McClure Road. The County would have to determine the exact reconfiguration to maximize visibility.

- The signalization of the Garner Road and Finch Road intersection;
- A four-way stop sign or a signal at the Garner Road and Leckron Road intersection; and
- The repaving of Garner Road between Leckron Road and Finch Road.

***Project Benefits***

Signalizations, turn widenings, and road reconfigurations would increase safety, especially during evenings and foggy conditions.

***Potential Impacts***

For the McClure Road/Finch Road project, railroad tracks cross in the middle of the McClure Road intersection. Each McClure Road leg cannot be individually signalized due to the proximity to one another. The S. McClure Road/Finch Road and the Mitchell Road/Finch Road intersection projects would involve right-of-way acquisitions.

***Goals and Objectives***

The project would accomplish all the goals and objectives of the study; however, the project’s impacts on reducing delay and truck traffic would be minimal.

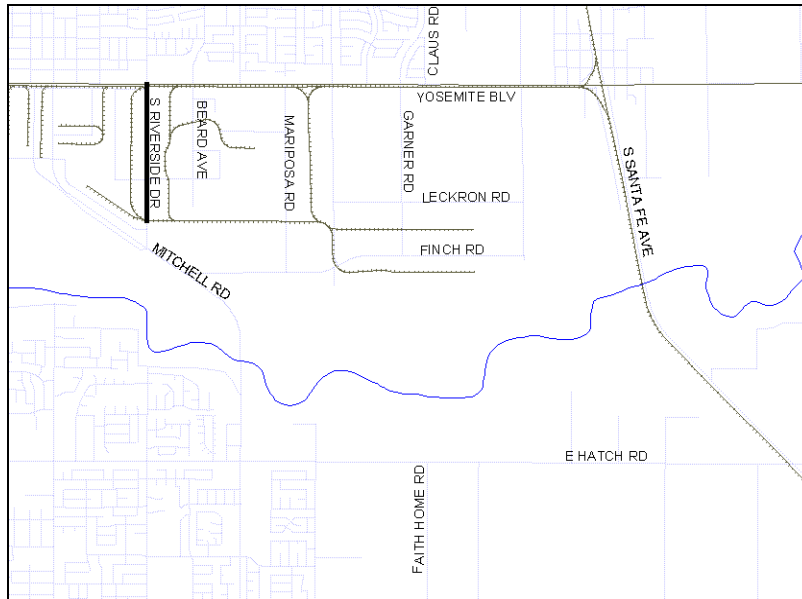
***Timeframe***

***Estimated Cost (Order of Magnitude)***

1 – 3 years from inception to completion	\$1,000,000 - \$2,000,000
--	---------------------------

## Operational Project: Beard Industrial District (#2)

### Project Name: S. Riverside Drive Improvements (#2c)



#### ***Project Purpose and Need***

Trucks that wait for deliveries create congestion at the CW Wholesale and Weyerhaeuser area south of Yosemite Blvd. Low-speed trucks and high-speed autos conflict at this road segment. No easement exists on Riverside Drive for Watkins Shepard, which forces their trucks to make a circuitous route using Yosemite Blvd. / Mariposa Road / Finch Road / Mitchell Road instead of using only Riverside Drive to access Mitchell Road.

#### ***Project Description***

This project would add warning signs and flashing lights south of Yosemite Blvd. The intersection of Nathan Avenue and Riverside Drive could be signalized. An easement could be established by Watkins Shepard between their facility and Riverside Drive to provide direct access for trucks associated with Watkins Shepard.

#### ***Project Benefits***

The project would improve traffic flow, and would provide a more direct truck route for the Watkins Shepard facility. The easement would divert truck traffic away from Yosemite Blvd.

#### ***Potential Impacts***

The project would require Watkins Shepard to negotiate a right-of-way acquisition from the lumberyard. The lumberyard may or may not grant the easement.

***Goals and Objectives***

The project would accomplish all the goals and objectives of the study; however, the project's impacts on reducing delay and truck traffic would be minimal.

***Timeframe***

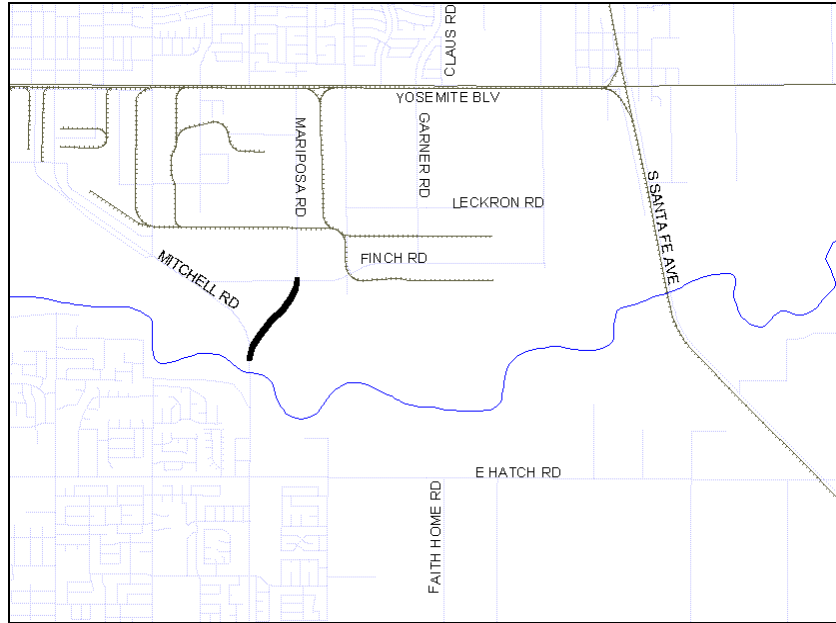
1 – 3 years from inception to completion

***Estimated Cost (Order of Magnitude)***

\$10,000 - \$15,000 for warning signs  
(excludes easement costs by Watkins Shepard)

## Operational Project: Finch Road (#4)

### Project Name: Finch Road Feeder Route (#4)



#### ***Project Purpose and Need***

The awkward turning radius at the Finch Road/Mitchell Road intersection makes it difficult for northbound trucks on Mitchell Road to turn right onto Finch Road. Trucks traveling westbound on Finch Road to southbound on Mitchell Road tip loads.

#### ***Project Description***

The project consists of a new two-lane feeder truck route that would connect Finch Road and Mitchell Road at Mariposa Road. A grade change at this location due to the river floodplain necessitates an elevated structure for about one half the length. The project would include curb, gutter and sidewalks, and may include a flyover to facilitate southbound traffic flow.

#### ***Project Benefits***

The project would provide a bypass of a difficult turn at the Finch Road and Mitchell Road intersection. It also would provide a more direct route to/from the Beard Industrial District for south-oriented trucks.

#### ***Potential Impacts***

The proposed feeder route would be in the floodplain causing its cost to increase due to a need for an elevated structure and detailed environmental work.

The feeder route may intersect with Mitchell Road in the center of a curve making it a more difficult intersection to design. The Mitchell Road curve also is at a sloping grade, which further complicates the facility's design.

***Goals and Objectives***

The project would accomplish all the goals and objectives of the study, except that it would attract additional traffic onto Mitchell Road. This impact conflicts with the study's objective that calls for a reduction in the amount of truck traffic on Mitchell Road. The project would require right-of-way acquisition of agricultural lands in the Beard Industrial District. The preservation of agricultural lands is a study objective in that projects should minimize intrusion of proposed improvements into agricultural lands.

***Timeframe***

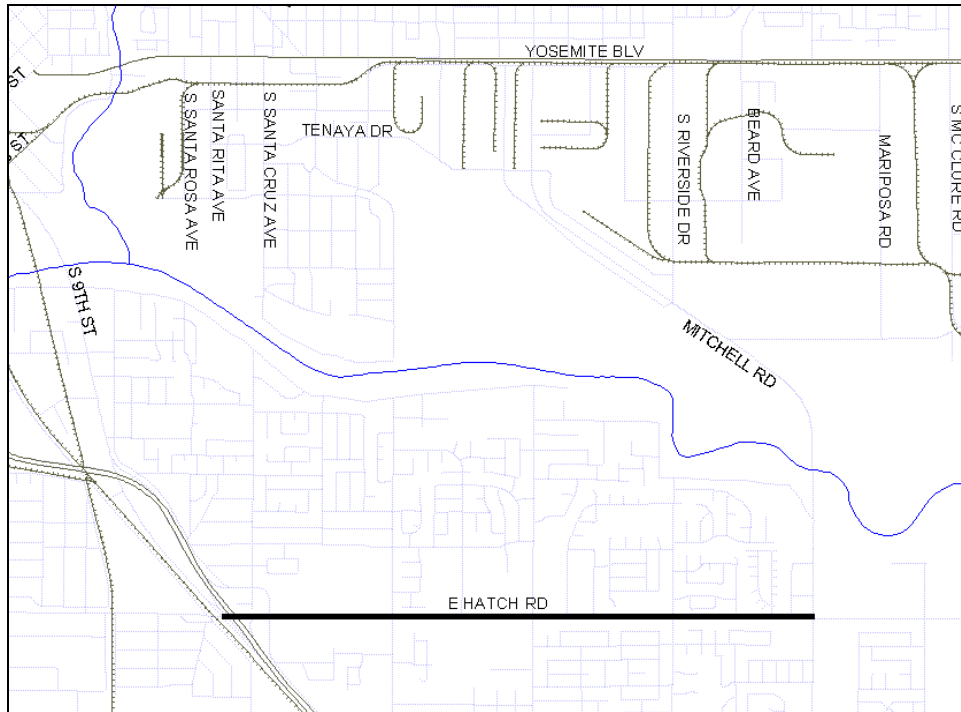
5 – 10 years from inception to completion

***Estimated Cost (Order of Magnitude)***

\$5 - \$15 million without flyover; \$20 - \$30 million with flyover

## Operational Project: Hatch Road (#5)

### Project Name: Hatch Road Access Management Plan (#5b)



### ***Project Purpose and Need***

Congestion has increased from the new residential and commercial development and new driveways. In October 1993, traffic counts show a total of 21,100 vehicles per day traveling on Hatch Road. In October 1998, traffic counts show a total of 25,800 vehicles per day, which equals a 3.6 percent annual increase in vehicles. The intersection of Herndon Avenue/Hatch Road, which is part of the SR 99 northbound on-ramp access, will have improved turning radii by the end of 2000.

### ***Project Description***

The access management plan would:

- Improve signal timings between SR 99 and Mitchell Road;
- Improve turning radii at the northwest corner of the Mitchell Road intersection by increasing the right-of-way and relocating two traffic poles;
- Provide safety features for pedestrians and bicyclists; and
- Provide a bus turnout on Herndon Avenue near K-Mart to reduce conflicts with buses that slow the traffic flow at bus stops.

### ***Project Benefits***

The operational improvements would smooth traffic flow, and would reduce the number of stops along Hatch Road. The project would provide a more effective east-west corridor in Stanislaus County, and would tie into the Santa Fe Avenue/Geer Road/Keyes

Road project. This project conflicts with one of the stated objectives of the study, which is to reduce the amount of truck traffic on Hatch Road.

***Potential Impacts***

Signal timing is important for all approaches so optimal coordination on Hatch Road would be difficult. A new signal is planned between the Herndon Avenue and the Raley's signals making signal timing more essential.

***Goals and Objectives***

The project would accomplish all the goals and objectives of the study; however, the project's impacts on reducing truck traffic would be minimal.

***Timeframe***

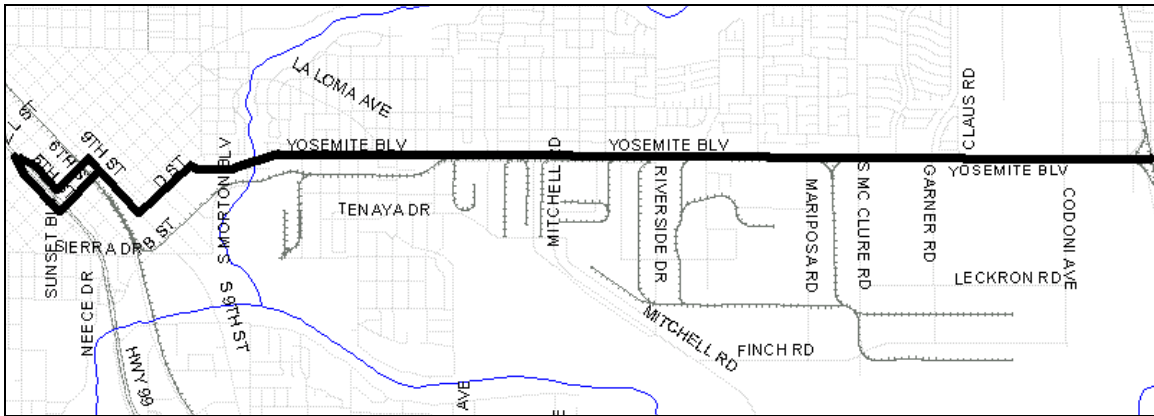
***Estimated Cost (Order of Magnitude)***

1 – 3 years from inception to completion

\$500,000 - \$1,000,000

## Operational Project: Yosemite Blvd./SR 132 (#8)

### Project Name: Yosemite Blvd. / SR 132 Access Management Plan (#8)



### ***Project Purpose and Need***

Early morning/late afternoon city driving is difficult due to congestion. Employee shift changes during the processing season create congestion along this route. The Summer/Friday vacation traffic in the spring and summer going to the lakes and mountains exacerbates the problems. The signals are not synchronized along Yosemite Blvd. Many cross streets exist along Yosemite Blvd., which causes weaving as well as speed and lane change conflicts. Traffic backs up from the Burlington Northern Santa Fe (BNSF) trains that block the Santa Fe Avenue/Yosemite Blvd. intersection between seven and ten times per day.

Yosemite Blvd. between Riverside Drive and Codoni Avenue is scheduled to be widened to four lanes plus a continuous left turn lane in 2004, which is a \$9.5 million project. This project also will improve the intersections along this roadway segment through railroad crossing safety features and reconfigurations.

### ***Project Description***

The access management plan would:

- Reduce the number of driveways on Yosemite Blvd.;
- Restrict left turns for southbound vehicles accessing Yosemite Blvd.;
- Close select streets from the northern residential area;
- Provide safety features for pedestrians and bicyclists such as sidewalks and bike lanes, respectively;
- Improve signal timings on Yosemite Blvd.;
- Improve the turning radii at the Santa Cruz Avenue/Yosemite Blvd. intersection;
- Improve turning radii at downtown Modesto intersections such as 5<sup>th</sup> Street/G Street and 9<sup>th</sup> Street/G Street; and
- Coordinate with BNSF to reduce the impact of grade crossing delays so as to alleviate the near-term need for rail/highway infrastructure investment.

***Project Benefits***

Improved traffic flow would provide an incentive for trucks to use the SR 132 / SR 99 connector instead of Hatch Road and Mitchell Road. The BNSF coordination project would open up eastern Stanislaus County to development due to more reliable east-west corridor traffic flow.

***Potential Impacts***

The project will impact local circulation. Driveway restrictions and street closures may give the perception of a negative impact on corridor businesses by decreasing the number of available access points. The rail project is private sector so the public sector only can encourage them to improve their operations. The rail project would impact railroad operations and potentially their facility configuration.

***Goals and Objectives***

The project would accomplish all the goals and objectives of the study.

***Timeframe***

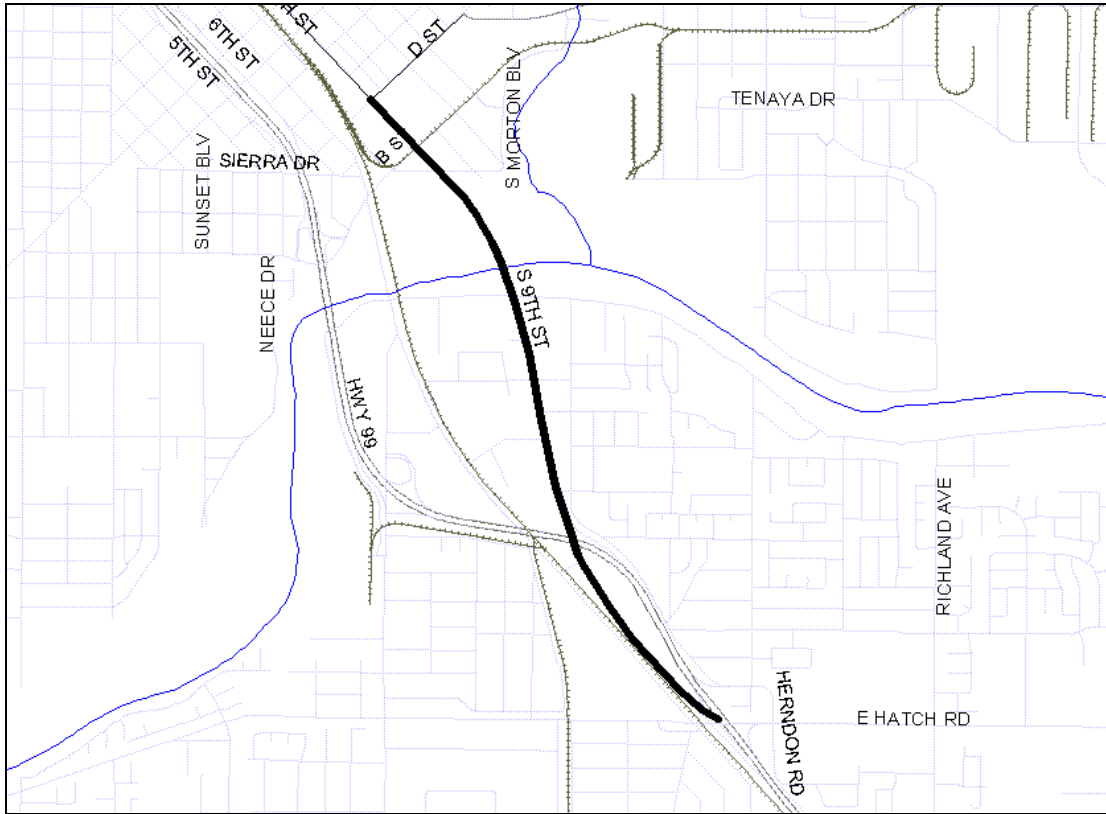
3 – 5 years from inception to completion.

***Estimated Cost (Order of Magnitude)***

\$400,000 - \$600,000

## Operational Project: State Routes 132 and 99 Connection (#9)

### Project Name: South 9<sup>th</sup> Street Access Management Plan (#9f)



### ***Project Purpose and Need***

The retrofitted South 9<sup>th</sup> Street bridge will make the South 9<sup>th</sup> Street corridor more attractive to truck drivers, especially those drivers needing to access the western portion of the SR 132 Job Center (i.e., Stanislaus Foods and Gallo). The bridge retrofit project is expected to be completed by 2003 or 2004. An access management plan should consider how the improved facility will affect truck travel patterns, and will recommend operational improvements to the South 9<sup>th</sup> Street corridor.

### ***Project Description***

The access management plan would:

- Reduce the number of driveways on South 9<sup>th</sup> Street.;
- Restrict left turns for westbound and eastbound vehicles accessing South 9<sup>th</sup> Street;
- Provide safety features for pedestrians and bicyclists such as sidewalks and bike lanes, respectively;
- Improve signal timings; and
- Improve the turning radii at the D Street/9<sup>th</sup> Street intersection.

***Project Benefits***

Improved traffic flow would provide an incentive for south-oriented trucks to use South 9<sup>th</sup> Street instead of Hatch Road and Mitchell Road.

***Potential Impacts***

The project will impact local circulation. Driveway restrictions may give the perception of a negative impact on corridor businesses by decreasing the number of available access points.

***Goals and Objectives***

The project would accomplish all the goals and objectives of the study.

***Timeframe***

3 – 5 years from inception to completion.

***Estimated Cost (Order of Magnitude)***

\$400,000 - \$600,000

## **Appendix E. Project Prioritization Process**



**Figure 24: Frito-Lay Snack Foods on Leckron Road**

**Measures and Indicators**

At a Planning and Programming (P&P) meeting, the group was presented with a list of evaluation criteria. They were asked to review the list and to suggest any changes. The P&P participants then were asked to provide weightings for each measure. Based on the weighting responses, Dowling Associates and StanCOG developed a system to prioritize the projects.

To reduce the overlap among the performance indicators, the measures are grouped into the following five higher-level criteria: Time Saved, Vehicle Miles Traveled, Accessibility, Community Impacts, and Cost. One to four measures are used to define the criteria. A specific indicator evaluates each measure. For example, the measure titled “reduced truck travel” is under the VMT criterion evaluated by the impacts on “truck vehicle miles traveled.” Table 28 illustrates the measures and indicators for each of the five criteria.

**Table 28: Evaluation Measures and Indicators**

<b>Measures</b>	<b>Indicators</b>
<b><i>Time Saved</i></b>	
Improved travel times	Vehicle hours of travel (VHT) for study area trips
Improved door-to-door reliability	Difference between free flow and congested times
Reduced delay	Level of service at key locations
<b><i>Vehicle Miles Traveled (VMT)</i></b>	
Reduced truck travel	Truck VMT on truck routes in overall study area
Improved air quality	Vehicle miles traveled
<b><i>Accessibility</i></b>	
Route simplicity	Description of turns, stop lights, and route
Ease of implementation	Environmental issues/ROW acquisition/local support
Separation of autos and trucks	Reduction of truck traffic in downtown
<b><i>Community Impacts</i></b>	
Economic growth potential	Description of economic growth
Impacts open space and properties	Description of land impacts on open space, agricultural lands, and private properties
Traffic safety impacts	Accidents per million VMT on new vs. old route. (injury/fatality)
Neighborhood impacts	Description of how each alternative effects the surrounding neighborhoods
<b><i>Cost</i></b>	
Cost of the project	Estimated cost

## Method of Calculating Measures

Each project’s potential to impact the criteria were calculated using quantitative indicators taken from StanCOG’s regional transportation model or by qualitative indicators. Table 29 shows the measures, indicators and methods used to calculate each indicator.

**Table 29: Evaluation Calculation Methods**

<b>Measures</b>	<b>Indicators</b>	<b>Method of Calculation</b>
<b><i>Time Saved</i></b>		
1. Improved travel times	1. Time savings	1. Vehicle hours of travel (VHT) for study area trips
2. Improved door-to-door reliability	2. Difference between free flow and congested times	2. VHT for trucks and autos on truck routes and SR 99 routes.
3. Reduced delay	3. Level of service at key locations	3. LOS indicators (A through F) and volume/capacity data.
<b><i>Vehicle Miles Traveled</i></b>		
1. Reduced truck travel	1. Truck vehicle miles traveled	1. Truck VMT on truck routes
2. Improved air quality	2. Vehicle miles traveled	2. VMT on all routes
<b><i>Accessibility</i></b>		
1. Route simplicity	1. Number of turns and stop lights	1. Qualitative indicator
2. Ease of implementation	2. Environmental issues, ROW acquisition, local support, feasibility	2. Qualitative indicator
3. Separation of autos and trucks	3. Reduction in the amount of truck traffic in downtown Modesto & Ceres	3. Truck volume on selected routes through downtown Ceres and Modesto
<b><i>Community Impacts</i></b>		
1. Economic growth potential	1. Description of economic growth	1. Qualitative indicator
2. Impacts open space and properties	2. Description of land impacts on open space, agricultural lands, and private properties	2. Qualitative indicator
3. Traffic safety impacts	3. Accidents per million VMT on new vs. old route (injury/fatality)	3. Caltrans Hazard Elimination and Safety Program calculation
4. Neighborhood impacts	4. Description of neighborhoods impacts	4. Qualitative indicator
<b><i>Cost</i></b>		
1. Cost of the project	1. Estimated Cost	1. Order-of-magnitude cost estimate

The operational projects were not modeled because the traffic-forecasting model is not able to meaningfully reflect the kinds of changes represented by such projects. The

model is a planning-level tool that is best suited to evaluating projects on major roadways that add lanes, create new roadway connections, remove roadway connections, or upgrade a roadway to a higher functional classification. Nevertheless, a qualitative analysis was done for the operational projects.

Dowling Associates established the 2025 base case roadway network, which excludes all of the proposed capacity projects listed in Table 30. For the base case and for each capacity project, Dowling Associates provided model run results for travel times, vehicle miles of travel (VMT), and traffic volumes. Where appropriate, the results are provided for truck traffic as well as for all vehicles. Some of the projections are for all travel on the truck routes in Stanislaus County, and other projections are for the major travel routes between SR 99 and the study area. These travel routes include the following corridors: Mitchell Road, Hatch Road, Yosemite Blvd./SR 132, D Street, G & H Streets, 9<sup>th</sup> Street, Tuolumne Blvd., South 9<sup>th</sup> Street, and Kiernan Avenue.

### ***Weightings***

The weightings reflect the relative importance of criteria and embody implicit tradeoffs between desirable outcomes or project features. The results of the weighting vote reveal that measures in the “time saved” category rank higher than the other three categories. Table 24 shows how the weightings compare to one another.

**Table 30: Evaluation Criteria Weightings**

<b>Criteria</b>	<b>Weighting</b>
Time Saved	6
Vehicle Miles Traveled	4
Accessibility	4
Community Impacts	4
Cost	2
<b>Total</b>	<b>20</b>

### ***Project Prioritization Process***

A Prioritization Panel ranked the potential projects for the *Central Stanislaus Freight Study*. The panel included a cross section of interest groups, and was drawn from the membership of the *Central Stanislaus Freight Study*’s P&P Working Group. The panel consisted of representatives from the following agencies: Stanislaus Council of Governments, City of Modesto, City of Ceres, Stanislaus County, Caltrans, San Joaquin Valley Air Pollution Control District, Central Valley Manufacturers Council and the Tri-County Freight Advisory Committee. Refer to Appendix F for a list of the prioritization panel members.

The Prioritization Panel was given the project concept fact sheets as background information to help in the prioritization of projects and strategies for the *Central Stanislaus Freight Study*. In addition to the fact sheets, the Prioritization Panel was given matrices that compare the capacity projects and the operational projects. (Appendix C)



## Project Prioritization Rankings

The project prioritization panel ranked the capacity and operational projects in late January of 2001. (Tables 32-34) For more information on the project priorities, refer to the section titled Task 5: Implementation.

**Table 32: Project Prioritization Summary**

<b>Capacity Projects</b>			
#	Project Name	Total	Average
3	Claus Rd/Garner Rd/Faith Home Rd Connector	556	70
7b	Codoni Ave./Washington Rd Connector	482	60
9a	D St. Alternative w/o Interchange	446	56
9b	D St. Alternative w/ Interchange	442	55
9c	Tuolumne Blvd/B St/Morton Blvd. Alternative	402	50
5a/6	Hatch Rd/SR 99 Interchange + Lane Additions	353	44
7a	Santa Fe Ave. Rd Improvements	340	43
7c	Finch Rd Eastward Ext.	320	40
<b>Operational Projects</b>			
8	Yosemite Blvd/SR 132 Access Mgmt Plan	416	69
1	Airport District Improvements	346	58
2c	Beard Industrial District - S. Riverside Dr	342	57
5b	Hatch Rd Access Management Plan	342	57
2b	Beard Industrial District - Finch Rd/Garner Rd	278	56
4	Finch Rd Feeder Route	308	51

**Table 33: Capacity Project Prioritization Panel Summary**

#	Project Name	Time Saved	VTMT	Access-ibility	Community Impacts	Cost	Total
<b>3</b>	<b><i>Claus Rd/Garner Rd/Faith Home Rd Connector</i></b>						
	Switzer – City of Modesto	24	12	16	16	2	70
	Barnes - Stanislaus County	24	20	20	12	6	82
	Hollstein - City of Ceres	30	20	12	16	2	80
	Cadrett - SJVUAPCD	24	12	8	4	4	52
	Reardon - Manu. Council	6	4	4	20	2	36
	Balance - FAC	24	16	16	16	6	78
	Whitmore - StanCOG	30	20	20	16	10	96
	Cowell - Caltrans	24	16	12	8	2	62
	<b>Total</b>	186	120	108	108	34	556
	<b>Average</b>	23	15	14	14	4	70
<b>5a</b>	<b><i>Hatch Rd Lane Additions</i></b>						
	Switzer - City of Modesto	6	4	4	12	10	36
	Barnes - Stanislaus County	18	8	8	8	4	46
	Hollstein - City of Ceres	12	4	12	8	10	46
	Cadrett - SJVUAPCD	12	4	8	8	2	34
	Reardon - Manu. Council	18	8	8	8	8	50

**Table 33: Capacity Project Prioritization Panel Summary**

#	Project Name	Time Saved	VMT	Access-ibility	Community Impacts	Cost	Total
	Balance - FAC	6	4	8	8	2	28
	Whitmore - StanCOG	12	8	12	4	8	44
	Cowell - Caltrans	12	4	4	16	10	46
	<b>Total</b>	96	44	64	72	54	330
	<b>Average</b>	12	6	8	9	7	41
<b>6</b>	<b>Hatch Rd/SR 99 Interchange</b>						
	Switzer - City of Modesto	6	4	4	4	6	24
	Barnes - Stanislaus County	18	12	12	12	4	58
	Hollstein - City of Ceres	24	12	12	16	8	72
	Cadrett - SJVUAPCD	6	4	4	4	2	20
	Reardon - Manu. Council	24	12	16	20	6	78
	Balance - FAC	12	4	8	8	2	34
	Whitmore - StanCOG	12	8	8	16	4	48
	Cowell - Caltrans	12	4	4	12	10	42
	<b>Total</b>	114	60	68	92	42	376
	<b>Average</b>	14	8	9	12	5	47
<b>7a</b>	<b>Santa Fe Ave. Rd Improvements</b>						
	Switzer - City of Modesto	12	4	4	4	4	28
	Barnes - Stanislaus County	12	8	4	8	2	34
	Hollstein - City of Ceres	18	4	4	4	6	36
	Cadrett - SJVUAPCD	18	8	8	4	6	44
	Reardon - Manu. Council	18	12	8	20	6	64
	Balance - FAC	12	8	4	8	4	36
	Whitmore - StanCOG	18	4	12	12	6	52
	Cowell - Caltrans	12	4	8	16	6	46
	<b>Total</b>	120	52	52	76	40	340
	<b>Average</b>	15	7	7	10	5	43
<b>7b</b>	<b>Codoni Ave. / Washington Rd Connector</b>						
	Switzer - City of Modesto	18	8	12	12	2	52
	Barnes - Stanislaus County	24	16	12	4	4	60
	Hollstein - City of Ceres	24	20	12	12	2	70
	Cadrett - SJVUAPCD	24	12	4	4	2	46
	Reardon - Manu. Council	18	12	12	16	4	62
	Balance - FAC	18	16	12	12	4	62
	Whitmore - StanCOG	24	12	12	16	8	72
	Cowell - Caltrans	24	16	8	8	2	58
	<b>Total</b>	174	112	84	84	28	482
	<b>Average</b>	22	14	11	11	4	60
<b>7c</b>	<b>Finch Rd Eastward Ext.</b>						
	Switzer - City of Modesto	6	4	4	12	6	32
	Barnes - Stanislaus County	6	4	4	4	2	20

**Table 33: Capacity Project Prioritization Panel Summary**

#	Project Name	Time Saved	VMT	Access-ibility	Community Impacts	Cost	Total
	Hollstein - City of Ceres	12	12	8	16	8	56
	Cadrett - SJVUAPCD	18	8	8	8	4	46
	Reardon - Manu. Council	6	8	8	8	4	34
	Balance - FAC	6	4	4	4	2	20
	Whitmore - StanCOG	18	8	12	12	6	56
	Cowell - Caltrans	12	12	8	16	8	56
	<b>Total</b>	84	60	56	80	40	320
	<b>Average</b>	11	8	7	10	5	40
<b>9a D St. Alternative w/o Interchange</b>							
	Switzer - City of Modesto	6	4	4	12	6	32
	Barnes - Stanislaus County	18	12	8	8	4	50
	Hollstein - City of Ceres	12	20	16	16	6	70
	Cadrett - SJVUAPCD	18	16	8	8	4	54
	Reardon - Manu. Council	12	16	8	16	6	58
	Balance - FAC	12	8	12	8	4	44
	Whitmore - StanCOG	12	12	16	16	6	62
	Cowell - Caltrans	24	12	16	16	8	76
	<b>Total</b>	114	100	88	100	44	446
	<b>Average</b>	14	13	11	13	6	56
<b>9b D St. Alternative w/ Interchange</b>							
	Switzer - City of Modesto	6	4	4	4	4	22
	Barnes - Stanislaus County	24	16	12	8	6	66
	Hollstein - City of Ceres	12	16	12	8	6	54
	Cadrett - SJVUAPCD	18	16	12	12	6	64
	Reardon - Manu. Council	18	16	8	8	6	56
	Balance - FAC	12	4	12	12	2	42
	Whitmore - StanCOG	18	8	16	16	6	64
	Cowell - Caltrans	24	12	20	12	6	74
	<b>Total</b>	132	92	96	80	42	442
	<b>Average</b>	17	12	12	10	5	55
<b>9c Tuolumne Blvd/B St/Morton Blvd. Alternative</b>							
	Switzer - City of Modesto	12	8	4	4	4	32
	Barnes - Stanislaus County	18	16	8	4	2	48
	Hollstein - City of Ceres	18	16	8	4	6	52
	Cadrett - SJVUAPCD	18	12	12	8	6	56
	Reardon - Manu. Council	18	12	8	20	4	62
	Balance - FAC	12	12	4	4	4	36
	Whitmore - StanCOG	18	8	16	8	4	54
	Cowell - Caltrans	24	16	12	4	6	62
	<b>Total</b>	138	100	72	56	36	402
	<b>Average</b>	17	13	9	7	5	50

**Table 34: Operational Project Prioritization Panel Summary**

#	Project Name	Time Saved	VMT	Access-ibility	Commun. Impacts	Cost	Total
<b>1 Airport District Improvements</b>							
	Switzer - City of Modesto	18	12	4	4	8	46
	Barnes - Stanislaus County	18	12	12	4	8	54
	Hollstein - City of Ceres	24	12	16	12	6	70
	Cadrett - SJVUAPCD						0
	Reardon - Manu. Council	24	16	16	16	8	80
	Balance - FAC	6	4	4	4	6	24
	Whitmore - StanCOG	24	12	12	16	8	72
	Cowell - Caltrans						0
	<b>Total</b>	114	68	64	56	44	346
	<b>Average</b>	19	11	11	9	7	58
<b>2a Beard Industrial District - Truck Parking Plan</b>							
	Switzer - City of Modesto	0	4	12	12	10	38
	Barnes - Stanislaus County	12	8	12	12	6	50
	Hollstein - City of Ceres	6	8	12	20	10	56
	Cadrett - SJVUAPCD						0
	Reardon - Manu. Council	6	4	4	4	2	20
	Balance - FAC	30	20	20	20	10	100
	Whitmore - StanCOG	12	8	16	20	10	66
	Cowell - Caltrans						0
	<b>Total</b>	66	52	76	88	48	330
	<b>Average</b>	11	9	13	15	8	55
<b>2b Beard Industrial District - Finch Rd/Garner Rd Improvements</b>							
	Switzer - City of Modesto	0	12	16	12	6	46
	Barnes - Stanislaus County	18	12	16	20	8	74
	Hollstein - City of Ceres						0
	Cadrett - SJVUAPCD						0
	Reardon - Manu. Council	24	16	12	8	6	66
	Balance - FAC	6	4	8	8	2	28
	Whitmore - StanCOG	18	8	16	16	6	64
	Cowell - Caltrans						0
	<b>Total</b>	66	52	68	64	28	278
	<b>Average</b>	13	10	14	13	6	56
<b>2c Beard Industrial District - S. Riverside Dr Improvements</b>							
	Switzer - City of Modesto	12	12	12	12	10	58
	Barnes - Stanislaus County	12	8	12	16	10	58
	Hollstein - City of Ceres	12	8	12	12	10	54
	Cadrett - SJVUAPCD						0
	Reardon - Manu. Council	30	20	12	8	6	76
	Balance - FAC	6	4	12	8	6	36

**Table 34: Operational Project Prioritization Panel Summary**

#	Project Name	Time Saved	VMT	Access-ibility	Commun. Impacts	Cost	Total
	Whitmore - StanCOG	12	12	16	12	8	60
	Cowell - Caltrans						0
	<b>Total</b>	84	64	76	68	50	342
	<b>Average</b>	14	11	13	11	8	57
<b>4</b>	<b><i>Finch Rd Feeder Route</i></b>						
	Switzer - City of Modesto	6	4	4	4	2	20
	Barnes - Stanislaus County	12	8	8	8	2	38
	Hollstein - City of Ceres	20	16	16	12	2	66
	Cadrett - SJVUAPCD						0
	Reardon - Manu. Council	24	16	12	8	4	64
	Balance - FAC	24	16	8	8	4	60
	Whitmore - StanCOG	18	12	8	16	6	60
	Cowell - Caltrans						0
	<b>Total</b>	104	72	56	56	20	308
	<b>Average</b>	17	12	9	9	3	51
<b>5b</b>	<b><i>Hatch Rd Access Management Plan</i></b>						
	Switzer - City of Modesto	12	8	12	8	8	48
	Barnes - Stanislaus County	12	4	8	12	6	42
	Hollstein - City of Ceres	18	12	12	12	6	60
	Cadrett - SJVUAPCD						0
	Reardon - Manu. Council	24	16	16	8	8	72
	Balance - FAC	24	12	12	12	6	66
	Whitmore - StanCOG	12	12	12	12	6	54
	Cowell - Caltrans						0
	<b>Total</b>	102	64	72	64	40	342
	<b>Average</b>	17	11	12	11	7	57
<b>8</b>	<b><i>Yosemite Blvd/SR 132 Access Management Plan</i></b>						
	Switzer - City of Modesto	12	12	4	4	8	40
	Barnes - Stanislaus County	24	12	16	12	8	72
	Hollstein - City of Ceres	24	16	12	16	8	76
	Cadrett - SJVUAPCD						0
	Reardon - Manu. Council	30	20	16	16	10	92
	Balance - FAC	18	4	12	8	6	48
	Whitmore - StanCOG	30	16	16	16	10	88
	Cowell - Caltrans						0
	<b>Total</b>	138	80	76	72	50	416
	<b>Average</b>	23	13	13	12	8	69

## **Appendix F. Participants and Public Outreach**



**Figure 25: Santa Fe Avenue and Hatch Road with Rural Road Dimensions**

## Appendix F. Participants and Public Outreach

### *Planning and Programming Working Group*

<b>Participant</b>	<b>Affiliation</b>
Linda Abid-Cummings	City of Riverbank
Fred Allen	City of Modesto Parks and Recreation Department
Fred E. Baker	Tri-Valley Growers
Chuck Barnes	Stanislaus County Public Works Department
Dwight Bateman	MILE
Bill Beard	Beard Land Improvement Company/Modesto & Empire Traction Co.
Jim Beard	Beard Land Improvement Company/Modesto & Empire Traction Co.
Ken Beard III	Modesto & Empire Traction Company
John Blattler	San Joaquin Valley Exp.
John Cadrett	San Joaquin Valley Air Pollution Control District
Brad Christian	Stanislaus County
Joel Cocknell	City of Hughson
Jana Coons	City of Modesto
Lark Downs	Stanislaus Council of Governments
Jerry Erwin	California Department of Transportation
Roger Fall	City of Turlock
George Fink	San Joaquin Council of Governments
David Franke	California Department of Transportation
Ron Freitas	Stanislaus County Planning and Community Development
Len Guillette	City of Ceres
Jim Harrity	Stanislaus County Public Works Department
Randy Hatch	City of Ceres Planning Department
Joe Holland	Dowling Associates, Inc.
Joe Hollstein	City of Ceres Public Works Department
Ken Hove	California Trucking Association
Jim Howarth	California Highway Patrol
Artemio Hoyos	California Department of Transportation
Audrey Mills	Stanislaus Council of Governments
Leslie Moore	Rocha Transportation
David Myers	Stanislaus County Public Works Department
Gary Parker	Citizen representative
Gail Payne	Dowling Associates, Inc.
Stan Randolph	California Trucking Association
Chris Reardon	Manufacturers Council of the Central Valley
Charles Ross	Stanislaus Foods Processing
Brian Smith	Modesto Community Development Department
Dan Smith	The Tioga Group
Georgie Stillman	Stanislaus County Public Works Department
Van Switzer	City of Modesto
Frank Taylor	California Department of Transportation
Firoz Vohra	City of Modesto Public Works Department
Debra Whitmore	Stanislaus Council of Governments
Chuck Winn	California Highway Patrol
Chris Wornum	Cambridge Systematics, Inc.
James Worthley	Stanislaus Council of Governments
Carlos Yamzon	California Department of Transportation

***Regional Transportation Forum Expert Panel***

<b>Participant</b>	<b>Affiliation</b>
Chuck Barnes	Stanislaus County Public Works Department
Keith D. Boggs	Stanislaus County
Gary Dickson	Stanislaus Council of Governments
Ken Entin	California State University at Sacramento (CSUS)
David Franke	California Department of Transportation
Ron Freitas	Stanislaus County Planning Department
Jim Harrity	Stanislaus County Public Works Department
Randy Hatch	City of Ceres Planning Department
Joe Holland	Dowling Associates, Inc.
Joe Hollstein	City of Ceres Public Works Department
Denny Jackman	Goal - Stax
Richard Jantz	Stanislaus County Executive Office
David Myers	Stanislaus County Public Works Department
Gail Payne	Dowling Associates, Inc.
Stan Randolph	California Trucking Association
Chris Reardon	Manufacturers Council of the Central Valley
Brian Smith	City of Modesto Community Development Department
Dan Smith	The Tioga Group
Charlene Speck	Stanislaus County Economic Development Corporation (SCECDC)
Fran Sutton-Berardi	Stanislaus County Planning Department
Van Switzer	City of Modesto Public Works Department
Debra Whitmore	Stanislaus Council of Governments
Chuck Winn	California Highway Patrol

***Prioritization Panel***

<b>Participant</b>	<b>Affiliation</b>
Harry Ballance	Freight Advisory Committee
Chuck Barnes	Stanislaus County Public Works Department
John Cadrett	San Joaquin Valley Air Pollution Control District
Dana Cowell	California Department of Transportation
Joe Hollstein	City of Ceres Public Works Department
Chris Reardon	Manufacturers Council of the Central Valley
Van Switzer	City of Modesto Public Works Department
Debra Whitmore	Stanislaus Council of Governments

# Regional Transportation Forum

Stanislaus County Agricultural Center  
Harvest Hall  
3800 Cornucopia  
Modesto, California

Tuesdays, June 13 and 27, 2000  
4 - 6 P.M.

**COME JOIN US!**

**TOPIC:**

## **IMPROVING GOODS MOVEMENT**

*A Connection to State Route 99  
At What Social, Economic, or Environmental Cost?*

*For More Information Contact:*

**StanCOG**

Stanislaus Council of Governments  
900 "H" Street, Suite "D"  
Modesto, California 95354  
(209) 558-7830 sa@mail.co.stanislaus.ca.us

# Regional Transportation Forum

Stanislaus County Agricultural Center  
Harvest Hall  
3800 Cornucopia  
Modesto, California

**Thursday, September 7**  
**10 a.m. to Noon**

**MARK YOUR CALENDAR!**

**TOPIC:**

**IMPROVING GOODS MOVEMENT**

*A Connection from SR-132 to SR-99*  
*Expert Panel's Findings*

*For More Information Contact:*

***StanCOG***

Stanislaus Council of Governments  
900 "H" Street, Suite "D"  
Modesto, California 95354  
(209) 558-7830 ♦ [sa@mail.co.stanislaus.ca.us](mailto:sa@mail.co.stanislaus.ca.us)