

Appendix J

**Analysis of Access Roads between US 50 and the  
Capital SouthEast Connector Project**

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## MEMORANDUM

TO: Tom Zlotkowski  
FROM: John P. Long  
DATE: November 3, 2010  
SUBJECT: Analysis of Access Roads between US 50  
and the Capital Southeast Connector Project

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P/A No. 08238

### Overview

El Dorado County is concerned about how traffic will flow to and from the eastern portion of the Connector project. Their primary objective is to limit increases in traffic volumes on White Rock Road and Latrobe Road through El Dorado Hills.

The Metropolitan Transportation Plan (MTP), as well as the El Dorado County General Plan and the proposed Folsom SOI Specific Plan, assume that a number of improvements will be implemented over the next 25 years to increase both the number and capacity of the roadway connections between US 50 and White Rock Road. The Connector EIR analysis assumes that these roadway improvements will be implemented in the year identified in the MTP. However, El Dorado County is concerned that some of these roadway improvements may not occur in a timely manner and thus affect traffic volumes on White Rock Road and Latrobe Road through El Dorado Hills. They want to understand how the planned connections through the Folsom SOI, as well as the proposed West Access to the EDH Business Park, will feed traffic to/from the Connector.

To address these issues, the Capital Southeast Connector JPA has been working with El Dorado County DOT and the City of Folsom to evaluate future traffic conditions in the El Dorado Hills and Folsom SOI area. The JPA has asked DKS to:

- 1) Provide more information on future travel patterns traveling to and from the eastern portion of the Connector.
- 2) Conduct a “sensitivity analysis” involving traffic forecasts under future development levels with alternative roadway networks to determine how the timing of roadway improvements will impact traffic patterns and volumes.

This memorandum provides a summary of our analysis.

### Future Travel Patterns

An analysis of the projected origins and destinations of persons who will travel on White Rock Road in 2035 was conducted. [Figure 1](#) shows the projected origin and destination of the trips that would use the section of White Rock Road west of Prairie City Road in 2035 with the Connector project. It indicates the following:

- Of the 75,000 daily vehicle trips projected in to use White Rock Road west of Prairie City Road in 2035, only about 10,000 daily vehicle trips (about 13 percent) would use White Rock Road east of the County line.
- Most of the of the traffic (about 67 percent) that will use White Rock Road west of Prairie City Road in 2035 ( about 50,000 daily trips) will have origins and destinations in the City of Folsom while about 33 percent would travel to/from El Dorado County.
- An even higher amount (about 74 percent) of the traffic that will use White Rock Road west of Prairie City Road would access that road segment via Folsom SOI roadways (Prairie City Road, Oak Avenue Parkway and Scott Road). Traffic using that section of White Rock Road which is heading to/from US 50 east of Sylva Valley Road is expected to use Scott Road to reach US 50, not the eastern portion of White Rock Road, based on travel times.

Figure 2 shows the projected origin and destination of daily vehicle trips that would use the section of White Rock Road west of Empire Ranch Road in 2035 with the Connector project. It shows the following:

- Of the projected 28,800 daily vehicle trips in 2035 that would use White Rock Road west of Empire Ranch Road, about 12,100 daily vehicle trips would use the future West Access Road to access the El Dorado Hills Business Park and about 12,500 daily vehicle trips would use White Rock Road east of the future West Access Road to access various locations in the El Dorado Hills community.
- Only about 1,000 daily vehicle trips would travel through the community to access US 50 at Sylva Valley Rd interchange.

### Summary of Sensitivity Analysis

The Connector EIR analysis assumes that the roadway improvements under the No Project Alternative will be implemented in the year identified in SACOG's Metropolitan Transportation Plan (MTP). However, there is uncertainty about the timing of several key improvements involving connections to White Rock Road, including the following:

- The construction of the proposed West Access to the El Dorado Hills Business Park,
- The construction of the US 50/Empire Ranch Road interchange and extension of Empire Ranch Road from US 50 to White Rock Road

The MTP assumes that these roadway improvements would be constructed before 2025 and thus they were assumed to be implemented by the 2025 in the Connector EIR analysis. However, if one or more of these improvements are not constructed by 2025, or even 2035, then traffic volumes on some other roadways in the El Dorado Hills and Folsom SOI area would be different than the volumes forecasted in the Connector EIR. To show how volumes could change if key improvements are postponed, a number of future roadway network scenarios were crafted and evaluated. This analysis indicated that the following scenarios best demonstrate the impact on traffic volumes on White Rock Road and Latrobe Road through El Dorado Hills:

- Scenario 1: Construct all of the MTP roadway improvements without the proposed Connector. This represents the No Project Alternative in Connector EIR
- Scenario 2: Construct all of the MTP roadway improvements with the proposed Connector. This represents the Proposed Project Alternative in the Connector EIR
- Scenario 3: Scenario 2 but postpone construction of the proposed West Access to the El Dorado Hills Business Park, as well as construction of the US 50/Empire Ranch Road interchange and extension of Empire Ranch Road from US 50 to White Rock Road until after 2035
- Scenario 4: Scenario 2 but postpone construction of the proposed West Access to the El Dorado Hills Business Park until after 2035
- Scenario 5: Scenario 2 but postpone construction of the US 50/Empire Ranch Road interchange and extension of Empire Ranch Road from US 50 to White Rock Road until after 2035

The total future housing and employment levels assumed in El Dorado Hills and the City of Folsom are generally consistent with SACOG's estimated future development levels. [Table 1](#) shows the projected 2035 daily traffic volume for each scenario. [Table 2](#) shows the projected change in daily traffic volumes between key scenarios.

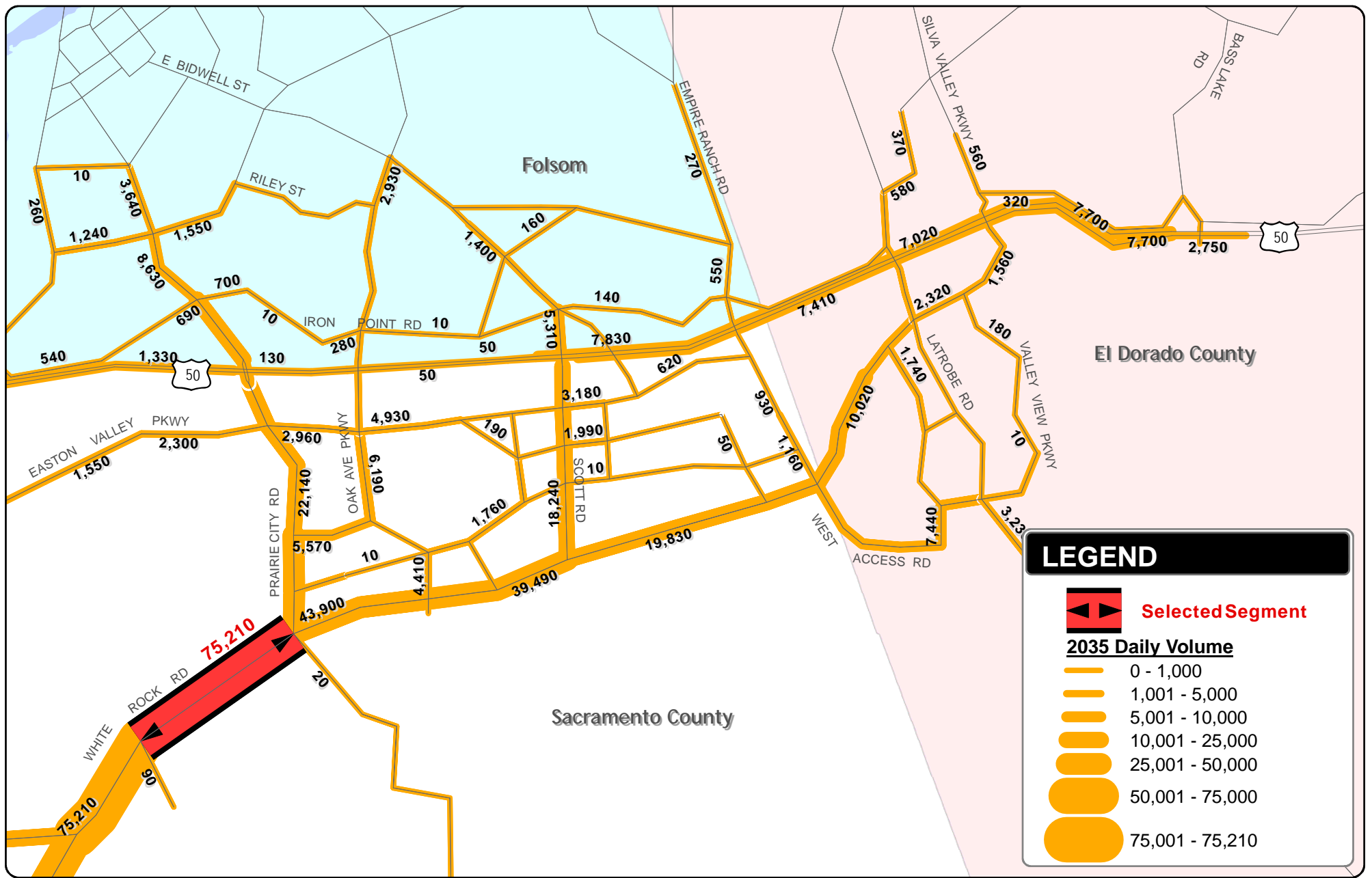
The proposed Connector project would upgrade White Rock Road between Grant Line Road and the El Dorado County line from a "thoroughfare" to an "expressway" facility but it would not change the planned improvements to White Rock Road in El Dorado County from those anticipated in the County's General Plan. [Figure 3](#) shows the changes in traffic volumes that would result from implementation of the Connector project. Roadway segments that would have higher volumes due to the Connector are shown in red while segments that would have lower volumes are shown in green. The width of the green or red line on each segment indicates the magnitude of the change in volume.

Compared to the Connector No Project Alternative, implementation of Connector Project would result in only a modest increase traffic volume (5 to 10 percent) on White Rock Road between Empire Ranch Road and Latrobe Road. The largest change in volume due to the Connector Project would occur on White Rock Road west of Scott Road.


[Figures 4 through 6](#) show the changes in traffic volumes that would result from postponing one or more of the new roadway connections to White Rock Road until after 2035. Roadway segments that would have higher volumes due to the postponement of roadway improvements are shown in red while segments that would have lower volumes are shown in green the width of the green or red line on each segment indicates the magnitude of the change in volume. The segments colored blue are the improvements that were assumed to be postponed and width of the blue line on each segment indicates the magnitude of the volume that would need to divert to other roadways.

The major conclusions from the sensitivity analysis on how postponing key roadway improvements would affect traffic volumes in the El Dorado Hills' area can be summarized as follows:








- If both the proposed West Access Road and the extension of Empire Ranch Road to White Rock Road are not implemented, the traffic volume on White Rock Road between Empire Ranch Road and Latrobe Road would exceed the capacity of a four-lane road by 2025, with or without the Connector
- Implementation of West Access Road would substantially decrease volumes on White Rock Road between Empire Ranch Road and Latrobe Road and on Latrobe Road between US 50 and Golden Foothill Parkway, with or without the Connector
- Implementation of the extension of Empire Ranch Road to White Rock Road would cause a significant decrease in traffic volume on Latrobe Road between US 50 and Golden Foothill Parkway, but it would result in only a modest decrease in traffic volume on White Rock Road between Empire Ranch Road and Latrobe Road.
- To minimize traffic volumes increases on White Rock Road and Latrobe Road through El Dorado Hills, it will be important to construct both the West Access Road and the extension of Empire Ranch Road before 2025



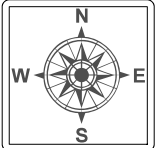
**LEGEND**

 **Selected Segment**

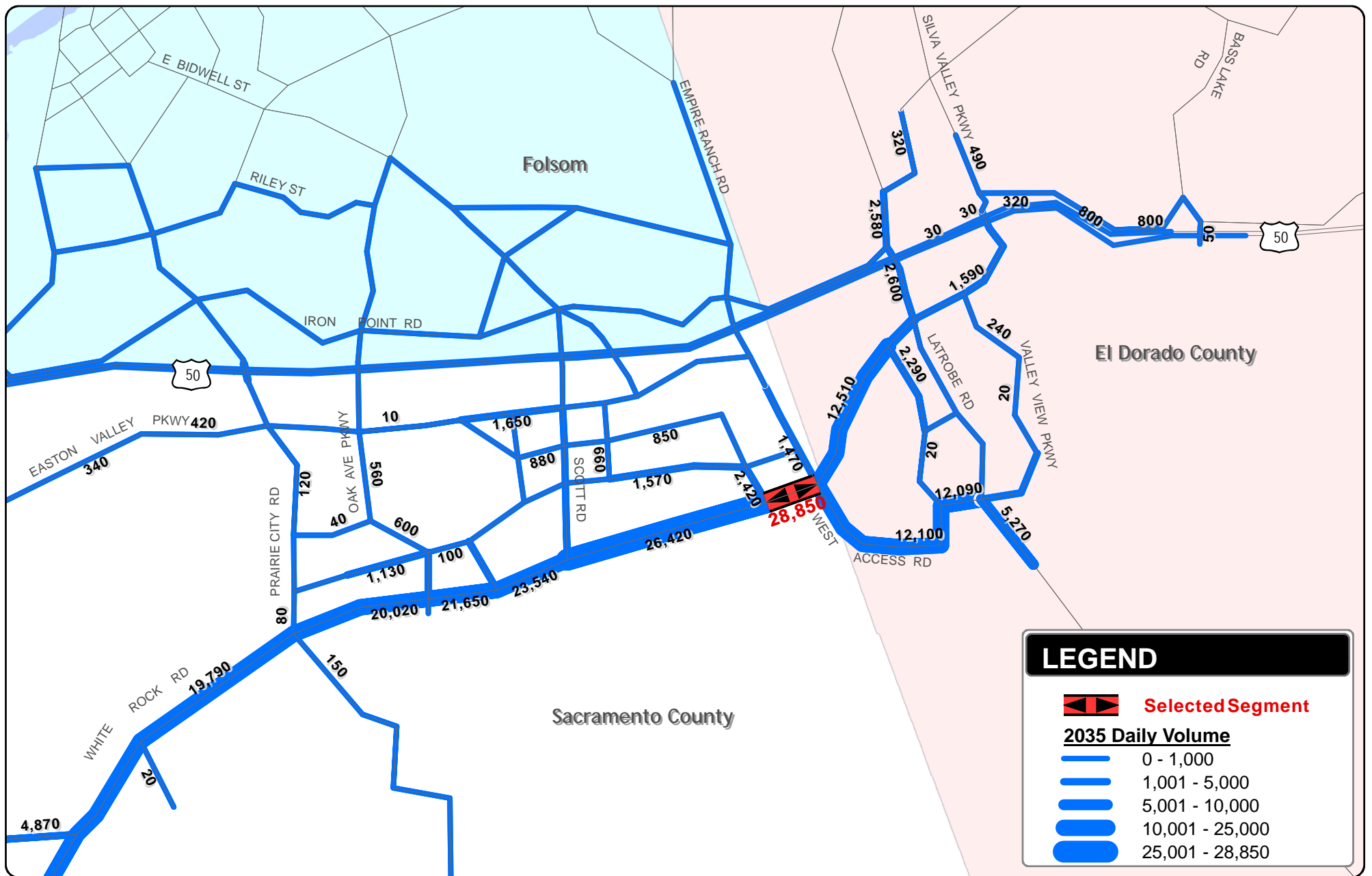
**2035 Daily Volume**

-  0 - 1,000
-  1,001 - 5,000
-  5,001 - 10,000
-  10,001 - 25,000
-  25,001 - 50,000
-  50,001 - 75,000
-  75,001 - 75,210

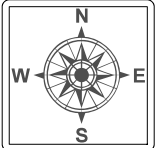
**DISTRIBUTION OF TRIPS**  
**That Use White Rock Road West of Prairie City Road**  
 2035 With Proposed Connector Project



**FIGURE 1**



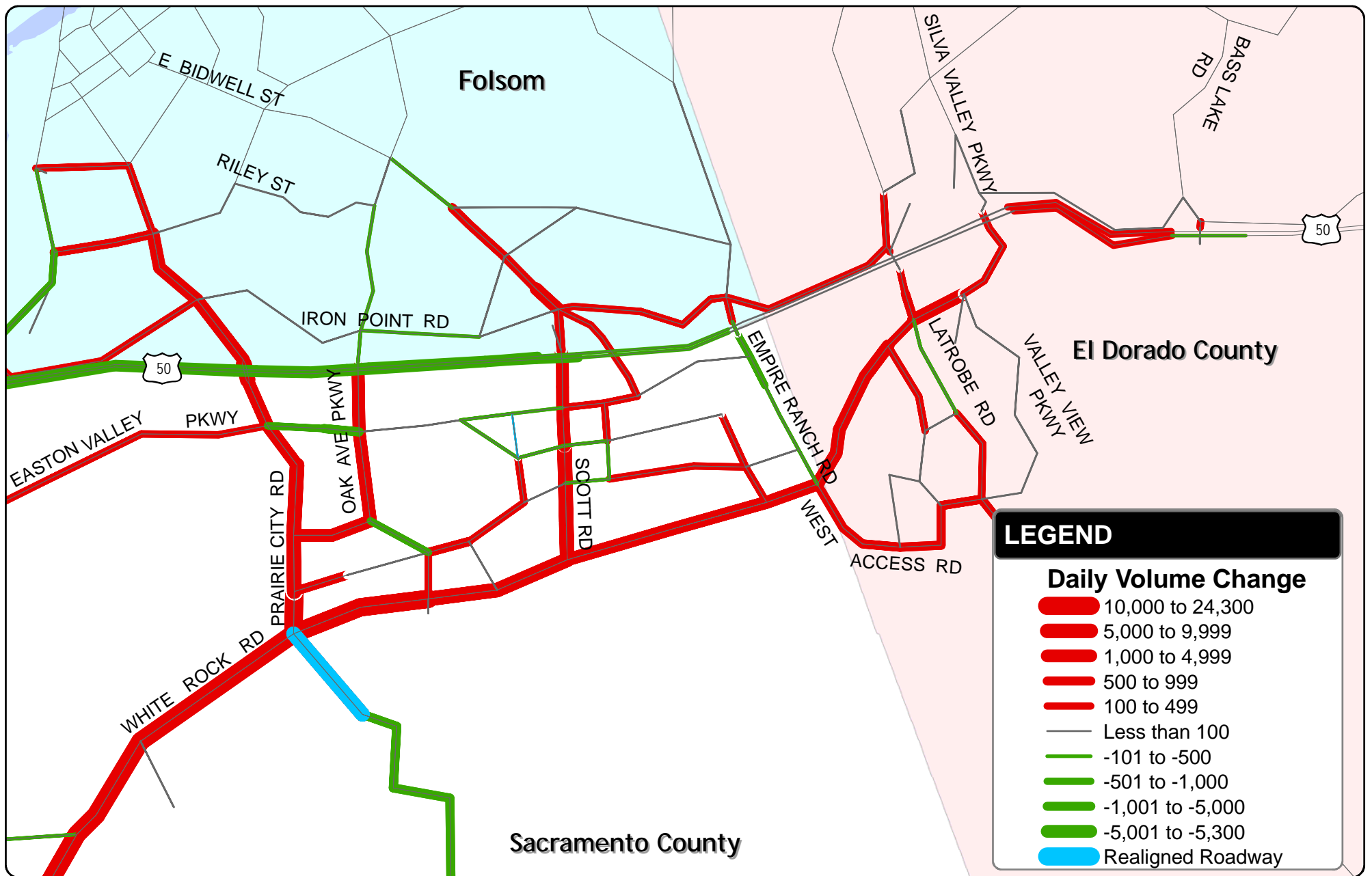
**DISTRIBUTION OF TRIPS**  
 That Use White Rock Road West of El Dorado Hills Business Park West Access Road  
 2035 With Proposed Connector Project



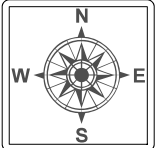
**FIGURE 2**

<b>Table 1</b>								
<b>Projected Traffic Volumes for Scenarios</b>								
Roadway	From	To	2035 Average Daily Traffic Volumes					
			2008	Scenario				
				1. Connector No Project	2. Connector Proposed Project	3	4	5
<b>On Connector Alignment</b>								
White Rock Rd	US-50	Valley View Pkwy	9,300	20,300	21,000	28,600	25,900	25,600
White Rock Rd	Valley View Pkwy	Latrobe Rd	13,700	23,800	25,100	25,700	25,900	25,600
White Rock Rd	Latrobe Rd	Windfield Way	10,100	22,200	23,100	34,800	29,300	27,400
White Rock Rd	Windfield Way	Four Seasons Dr	7,800	20,600	22,000	38,400	33,100	25,800
White Rock Rd	Four Seasons Dr	Empire Ranch Rd	6,400	18,700	20,500	33,100	34,000	20,400
White Rock Rd	Empire Ranch Rd	Scott Rd (North)	8,500	26,300	29,500	33,100	26,600	40,900
White Rock Rd	Scott Rd (North)	Oak Ave Pkwy	5,700	42,200	51,600	47,800	49,500	50,300
White Rock Rd	Oak Ave Pkwy	Prairie City Rd	5,700	41,400	51,900	49,600	50,400	50,400
<b>El Dorado County</b>								
Latrobe Rd	US-50	Town Center Blvd	40,200	72,700	72,800	88,200	86,800	84,500
Latrobe Rd	Town Center Blvd	White Rock Rd	24,700	50,500	50,800	67,100	65,300	63,300
Latrobe Rd	White Rock Rd	Golden Foothill Pkwy	19,100	40,800	40,800	64,400	64,500	52,400
Valley View Pkwy	White Rock Rd	Blackstone Pkwy	3,300	12,100	12,000	16,600	16,100	12,500
West Connection to Business Park	Sacramento Co	Golden Foothill Pkwy		33,500	34,400	200	200	22,200
<b>City of Folsom</b>								
Empire Ranch Rd	Iron Point Rd	US-50		27,600	28,100	-	28,400	-
Empire Ranch Rd	US-50	Easton Valley Pkwy		43,900	43,300	-	33,800	-
Empire Ranch Rd	Easton Valley Pkwy	White Rock Rd		27,300	27,200	-	12,100	-
Scott Rd	US-50	Easton Valley Pkwy	4,800	52,600	55,600	62,100	50,700	60,700
Scott Rd	Easton Valley Pkwy	White Rock Rd	4,800	18,700	23,700	21,700	20,500	23,900
<b>Scenarios:</b>								
3 - Postpone Empire Ranch Xxt and West Acces to EDH Bus Park								
4 - Postpone West Acces to EDH Business Park								
5 - Postpone Empire Ranch Extension								

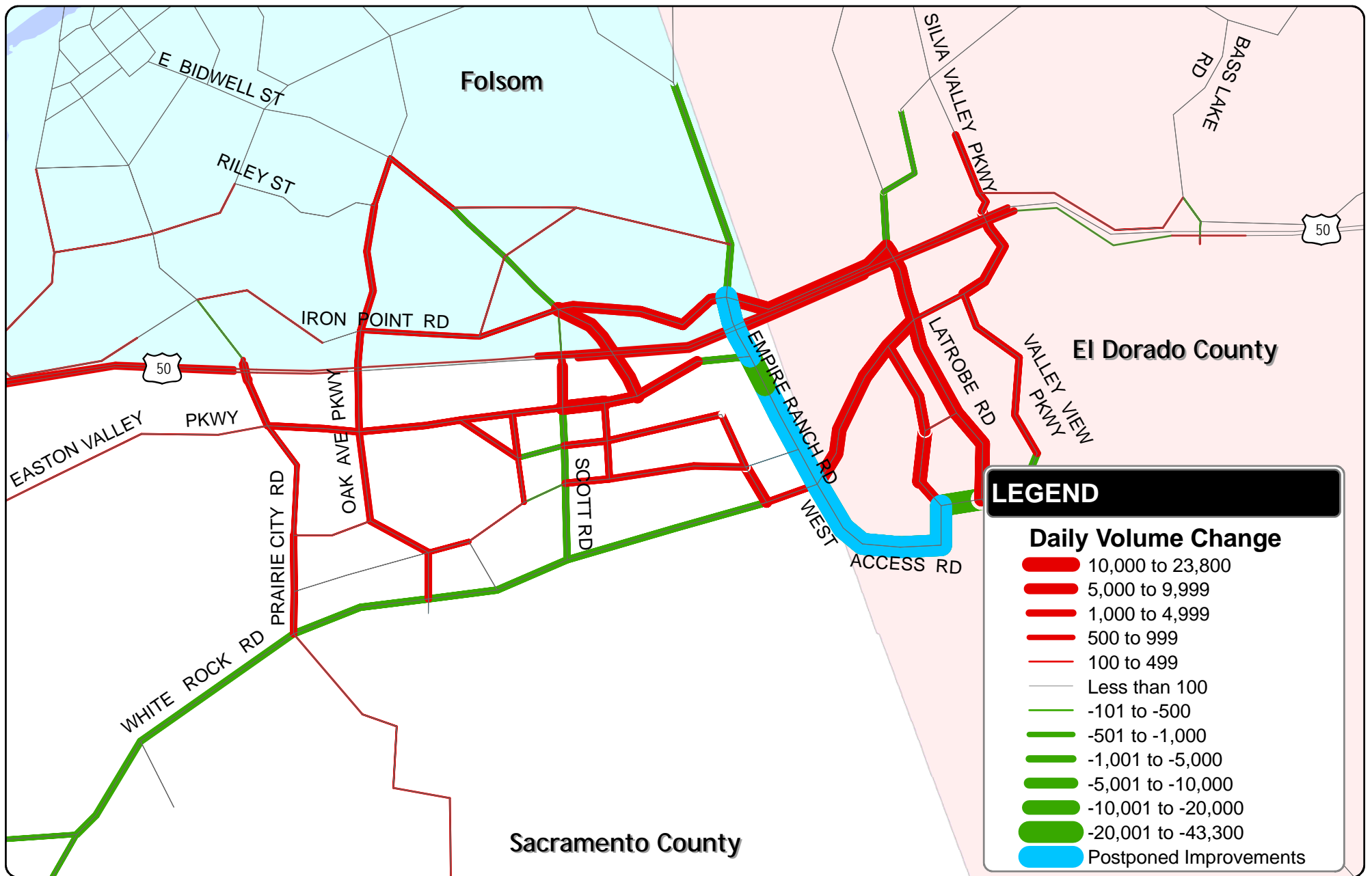
<b>Table 2</b>						
<b>Projected Change in Traffic Volumes</b>						
Roadway	From	To	Change in 2035 Daily Volume			
			Between Connector No Project (Scenario 1) and Scenario 2	Between Connector Project (Scenario 2) and Scenario:		
				3	4	5
<b>On Connector Alignment</b>						
White Rock Rd	US-50	Valley View Pkwy	700	7,600	4,900	4,600
White Rock Rd	Valley View Pkwy	Latrobe Rd	1,300	600	800	500
White Rock Rd	Latrobe Rd	Windfield Way	900	11,700	6,200	4,300
White Rock Rd	Windfield Way	Four Seasons Dr	1,400	16,400	11,100	3,800
White Rock Rd	Four Seasons Dr	Empire Ranch Rd	1,800	12,600	13,500	-100
White Rock Rd	Empire Ranch Rd	Scott Rd (North)	3,200	3,600	-2,900	11,400
White Rock Rd	Scott Rd (North)	Oak Ave Pkwy	9,400	-3,800	-2,100	-1,300
White Rock Rd	Oak Ave Pkwy	Prairie City Rd	10,500	-2,300	-1,500	-1,500
<b>El Dorado County</b>						
Latrobe Rd	US-50	Town Center Blvd	100	15,400	14,000	11,700
Latrobe Rd	Town Center Blvd	White Rock Rd	300	16,300	14,500	12,500
Latrobe Rd	White Rock Rd	Golden Foothill Pkwy	0	23,600	23,700	11,600
Valley View Pkwy	White Rock Rd	Blackstone Pkwy	-100	4,600	4,100	500
West Connection to Business Park	Sacramento Co	Golden Foothill Pkwy	900	-34,200	-34,200	-12,200
<b>City of Folsom</b>						
Empire Ranch Rd	Iron Point Rd	US-50	500	-28,100	300	-28,100
Empire Ranch Rd	US-50	Easton Valley Pkwy	-600	-43,300	-9,500	-43,300
Empire Ranch Rd	Easton Valley Pkwy	White Rock Rd	-100	-27,200	-15,100	-27,200
Scott Rd	US-50	Easton Valley Pkwy	3,000	6,500	-4,900	5,100
Scott Rd	Easton Valley Pkwy	White Rock Rd	5,000	-2,000	-3,200	200
<b>Scenarios:</b>						
3 - Postpone Empire Ranch Xxt and West Acces to EDH Bus Park						
4 - Postpone West Acces to EDH Business Park						
5 - Postpone Empire Ranch Extension						



**CHANGE IN 2035 TRAFFIC VOLUME**  
 2035 MTP WITHOUT CONNECTOR (Scenario 1) vs. 2035 MTP WITH CONNECTOR (Scenario 2)



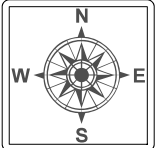
**FIGURE 3**



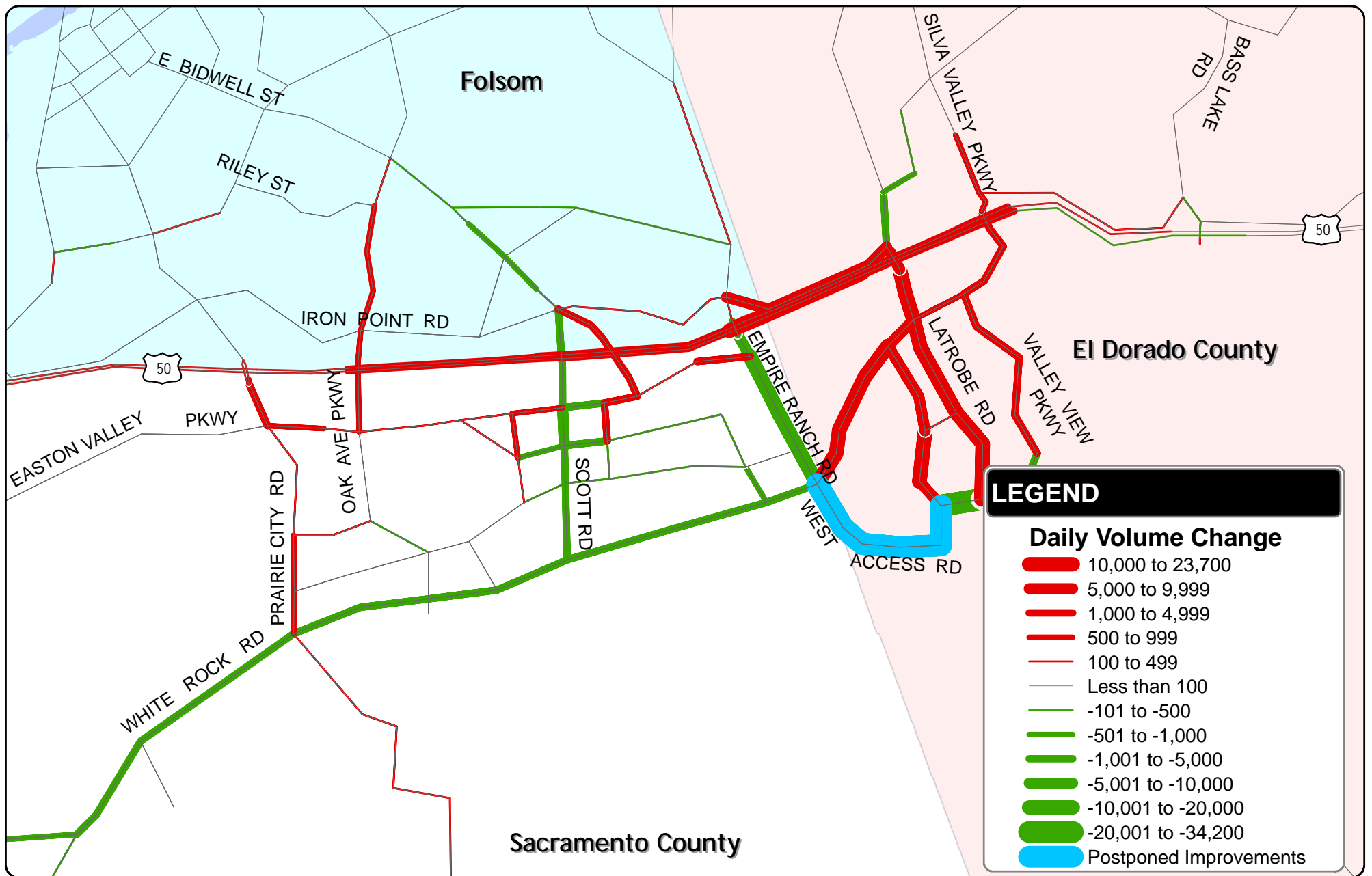
### CHANGE IN 2035 TRAFFIC VOLUME

2035 MTP WITH CONNECTOR (Scenario 2) vs. SCENARIO 3 CONDITIONS WITHOUT:

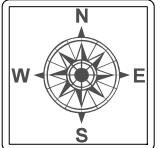
- Empire Ranch Road south of Iron Point Road
- El Dorado Hills Business Park West Access Road



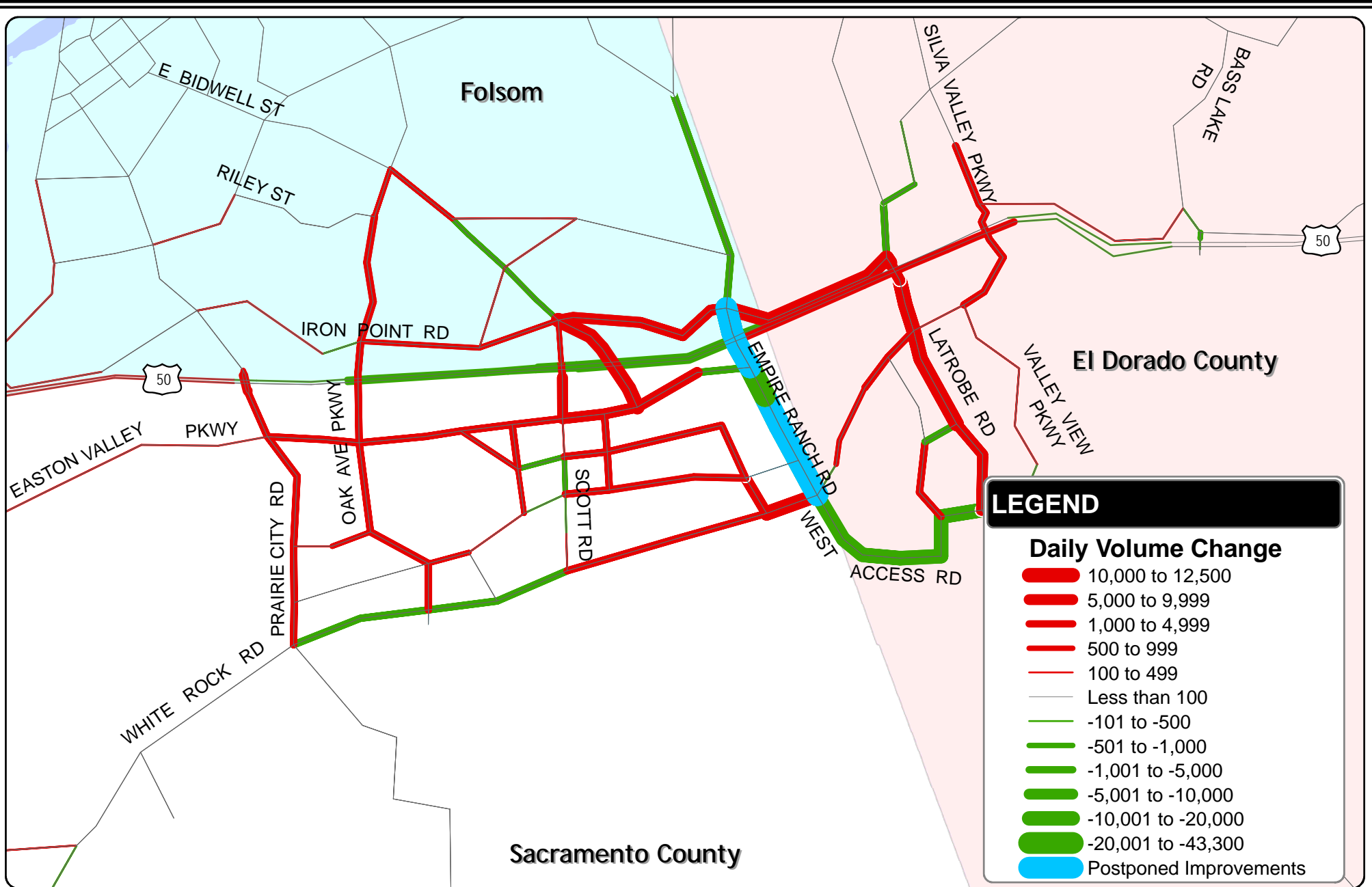
**FIGURE 4**



**CHANGE IN 2035 TRAFFIC VOLUME**  
 2035 MTP WITH CONNECTOR (Scenario 2) vs. SCENARIO 4 CONDITIONS WITHOUT:  
 - El Dorado Hills Business Park West Access Road



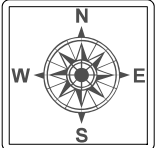
**FIGURE 5**



## CHANGE IN 2035 TRAFFIC VOLUME

2035 MTP WITH CONNECTOR (Scenario 2) vs. SCENARIO 5 CONDITIONS WITHOUT:

- Empire Ranch Road Iron Point Road to White Rock Road



**FIGURE 6**