

# **APPENDIX S**

---

Supplemental Traffic Materials



## MEMORANDUM

Date: January 8, 20067

To: Tom Zlotkowski – Sacramento County DOT  
Dean Blank – Sacramento County DOT  
Dan Shoeman – Sacramento County DOT  
Matt Darrow – Sacramento County DOT

Cyrus Abhar – City of Rancho Cordova Public Works Department  
Mark Thomas – City of Rancho Cordova Public Works Department

Cc: Dennis Yeast – Sacramento County DERA  
Joyce Horizumi – Sacramento County DERA  
Kate Brownfield – Sacramento county DERA  
Al Herson – SWCA Environmental Consultants  
Francine Dunn – EDAW

From: Jason Isaac, Jeff Clark, and Jason Pack

**Subject: *Final Roadway Improvement Assumptions for ongoing EIR analyses of projects in Eastern Sacramento County***

RS06-2260

---

The purpose of this memorandum is to document the discussions at our meeting with Sacramento County DOT and DERA staff on Wednesday, January 3, 2007. Specifically, various roadway network assumptions for cumulative conditions were agreed upon at the meeting that will be applied to the ongoing EIR traffic analyses of development projects within eastern Sacramento County. Table 1 lists the cumulative (Year 2032) roadway improvements and includes the associated cost in millions of dollars (these roadway improvements were also documented in our memo dated December 5, 2006). Figure 1 also illustrates these cumulative (“long-term”) improvements, which will be applied to the following ongoing EIR traffic analyses:

- Easton development and Teichert Quarry projects in Sacramento County
- Suncreek and Westborough development projects in Ranch Cordova

In addition to the improvements listed in Table 1 (shown in red on Figure 1), other expected roadways improvements will be assumed under cumulative conditions based on the development of various projects including buildout of the Sunrise Douglas Specific Plan, Rio Del Oro, Suncreek, Westborough and Easton developments. Some of the notable expected improvements shown in green on Figure 1 include:

*Expected Roadway Improvements due to Westborough Development*

- Construction of Easton Valley Parkway from Rancho Cordova Parkway to Hazel Avenue

Expected Roadway Improvements due to Easton Development

- Construction of Easton Valley Parkway from Hazel Avenue to Prairie City Road
- Extension of Hazel Avenue from Folsom Boulevard to Easton Valley Parkway
- Construction of Glenborough Drive from Folsom Boulevard to Easton Valley Parkway
- Improvements to the US Highway 50/Hazel Avenue interchange including grade-separation of the Hazel Avenue/Folsom Boulevard intersection
- Construction of Easton Valley Parkway from Rancho Cordova Parkway to Hazel Avenue

Expected Roadway Improvements due to Rio Del Oro Development

- Extension of International Drive from Rancho Cordova Parkway to White Rock Road
- Construction of Americanos Boulevard from Kiefer Boulevard International Drive extension
- Widening of Grant Line Road to 4 lanes between White Rock Road and Douglas Road
- Construction of Jaeger Road/Rancho Cordova Parkway from White Rock Road to Douglas Road

Expected Roadway Improvements due to Sunrise Douglas/Suncreek Developments

- Widening of Grant Line Road to 4 lanes between Douglas Road and State Route 16
- Widening of Douglas Road to 4 lanes between Sunrise Boulevard and Grant Line Road
- Widening of Sunrise Boulevard to 6 lanes from White Rock Road to State Route 16

In addition to these expected roadway improvements, the following are also assumed to be in place under cumulative conditions (but are not shown on Figure 1):

- High Occupancy Vehicle (HOV) lanes in both directions on US Highway 50 from Sunrise Boulevard to Downtown Sacramento
- Enhancements (e.g., double tracking, etc.) to provide for 15 minute headways for light rail transit line within the eastern Sacramento County sub-region

It was also decided at the January 3<sup>rd</sup> meeting that the assumptions for analysis of a near-term (Year 2012) scenario for the Easton project would not be determined at this time. An update to the *50 Corridor Mobility Partnership Draft Final Report* (Parson Brinckerhoff and DKS Associates, June 29, 2006) will need to occur, at which time a more realistic set of roadway improvement assumptions can be made for a 2012 scenario. Once these near-term assumptions are determined, F&P will provide an independent traffic study analyzing the traffic impacts related specifically to the Easton project, which will be separate from the EIR traffic analysis.

We hope this information is helpful. Please feel free to contact us with any questions.

**TABLE 1  
RECOMMENDED ALLOCATION OF IDENTIFIED FUNDING FOR  
ROADWAY IMPROVEMENTS OF ONGOING EIR ANALYSES**

Project ID#	Project	Short-term Improvement	Long-term Improvement	Short-term Cost (million \$)	Long-term Cost (million \$)	Total Cost (million \$)
1	Rancho Cordova Parkway	Construct as 4 lanes from US 50 to White Rock Road	6 lanes from US 50 to Douglas Road	9.7	43.8	53.5
2	Rancho Cordova Parkway/US 50 interchange	Construct interchange and includes auxiliary lanes from Sunrise Boulevard interchange to Hazel Avenue interchange on US 50	N/A	83.0	-	83.0
3	Easton Valley Parkway	Construct as 4 lanes from Hazel Avenue to Rancho Cordova Parkway	6 lanes from Rancho Cordova Parkway to Empire Ranch Road	14.6	81.9	96.5
4	International Drive extension	Construct as 4 lanes from Kilgore Road to Rancho Cordova Parkway	N/A	18.0	-	18.0
5	White Rock Road widening	Widen to 4 lanes from Sunrise Boulevard to the County line	6 lanes from Sunrise Boulevard to the County line	47.7	59.8	107.5
6	Zinfandel Drive extension and widening	Construct as 4 lanes from International Drive to Douglas Road	6 lanes from White Rock Road to Douglas Road	7.8	11.4	19.2
7	Hazel Avenue/US 50 interchange improvements	Includes Folsom Boulevard grade separation and auxiliary lanes from Rancho Cordova Parkway interchange to Folsom Boulevard interchange on US 50	N/A	50.0	-	50.0
8	Empire Ranch Road/US 50 interchange	Construct interchange and includes auxiliary lanes from Empire Ranch Road interchange to El Dorado Hills Boulevard interchange on US 50	N/A	28.4	-	28.4
9	Silva Valley Road/US 50 interchange	Construct interchange	N/A	33.8	-	33.8
10	Kiefer Boulevard extension	Construct as 4 lanes from Sunrise Boulevard to Jaeger Road	4 lanes from Bradshaw Road to Grant Line Road	10.0	31.6	41.6
11	Douglas Road widening	Widen to 4 lanes from Mather Boulevard to Sunrise Boulevard	N/A	9.7	-	9.7
12	Sunrise Boulevard widening	N/A	6 lanes from SR 16 to Grant Line Road	-	9.5	9.5
13	Excelsior Road widening and extension	N/A	4 lanes from Kiefer Boulevard to SR 16 and 4 lanes from Kiefer Boulevard to Mather Boulevard	-	31.9	31.9
14	Oak Avenue extension	N/A	4 lanes from Iron Point Road to White Rock Road	-	12.3	12.3
15	Scott Road widening	N/A	6 lanes from US 50 to Easton Valley Parkway and 4 lanes from Easton Valley Parkway to White Rock Road	-	11.7	11.7
16	Empire Ranch Road extension	N/A	4 lanes from US 50 to Latrobe Road	-	20.2	20.2
17	Latrobe Road widening	N/A	4 lanes from US 50 to Empire Ranch Extension	-	17.1	17.1
18	Prairie City Road widening	N/A	6 lanes from US 50 to Easton Valley Parkway and 4 lanes from Easton Valley Parkway to White Rock Road	-	13.8	13.8
<b>TOTAL</b>				<b>312.7</b>	<b>345.0</b>	<b>657.7</b>

**NOTES:** The recommended roadway improvements above would be applied to the Suncrest and Westborough developments in Rancho Cordova, the Teichert Quarry and Easton developments in Sacramento County, and the forthcoming development of the Folsom Sphere of Influence. Funding estimates are based on the *50 Corridor Mobility Partnership Draft Final Report* (Parsons Brinckerhoff and DKS Associates, June 29, 2006). Source: Fehr & Peers, 2006



# 50 CORRIDOR MOBILITY PARTNERSHIP

## PHASE ONE REPORT

November 22, 2006

**PREPARED FOR:**

*Sacramento County  
City of Rancho Cordova  
City of Folsom  
El Dorado County*

**Private Partners:**

*GenCorp  
Elliott Homes  
AKT Properties  
Carpenter Ranch*

**IN ASSOCIATION WITH:**

*Caltrans  
SACOG  
Sacramento Regional Transit*

**PREPARED BY:**

*PB Americas, Inc.  
DKS Associates*

## TABLE OF CONTENTS

Executive Summary .....	1
1. Introduction.....	3
2. Development Growth Assumptions.....	5
3. Roadway Improvements .....	7
4. Transit .....	14
5. Near-Term System Performance with Priority Improvements .....	19
6. Long-term System Performance .....	23
7. Cost Estimates and Funding .....	23
8. Implementation Plan .....	33
9. Next Steps .....	36

## LIST OF TABLES

Table 1: Projected Growth South of US 50 Between Sunrise Boulevard and El Dorado Hills.....	6
Table 2: Near-Term Expected Roadway Improvements .....	9
Table 3: Near-Term Priority Roadway Improvements .....	11
Table 4: Vehicle Miles on Congested Roadways within Study Area.....	20
Table 5: Vehicle Hours of Delay 2012 Conditions with and without Near-Term Priority Improvements .....	21
Table 6: Percent of Daily Home-to-Work Person Trips by Travel Mode for Study Area.....	22
Table 7: Percent of Daily Total Person Trips by Travel Mode for Study Area.....	22
Table 8: Project Cost Summary (part 1) .....	26
Table 9: Project Cost Summary (part 2) .....	27
Table 10: Project Costs by Jurisdiction .....	28
Table 11: Funding by Transportation Development Fee (part 1) .....	31
Table 12: Funding by Transportation Development Fee (part 2) .....	32
Table 13: Funding from Transportation Development Fee by Jurisdiction.....	33



**LIST OF FIGURES**

Figure 1: Study Area ..... 4

Figure 2: Near-Term Improvements ..... 8

Figure 3: Traffic Volumes and LOS for 2012 Conditions with/without Priority  
Improvements ..... 10

Figure 4: 2030 Improvements..... 13

Figure 5: Transit Improvements..... 18

Figure 6: Vehicle Miles of Travel on Congested Roadways during Commute Hours  
within Study Area ..... 20

Figure 7: Vehicle Hours of Delay during Commute Hours within Study Area..... 21

Figure 8: Traffic Volumes and LOS for 2030 Conditions and Improvements ..... 24

Figure 9: Project Cost by Year..... 29

Figure 10: Project Cost Near-Term and Long-Term ..... 30

Figure 11: Sources of Funds by Year ..... 34

## Executive Summary

This Phase One Report has been prepared by the 50 Corridor Mobility Partnership to provide information and recommendations regarding future transportation infrastructure along and near Highway 50 in the general area of eastern Sacramento County and western El Dorado County. The 50 Corridor Mobility Partnership is a cooperative effort by the County of Sacramento, City of Rancho Cordova, City of Folsom, County of El Dorado, and several major private landowners (GenCorp, Elliott Homes, AKT Properties, and Carpenter Ranch). Participating in an advisory capacity are Caltrans, Sacramento Area Council of Governments (SACOG), and Sacramento Regional Transit (RT).

Over the past year, the Partnership has collaborated effectively to develop the best possible plan to improve mobility in this rapidly growing area. The results of that work program are contained in this Phase One Report. It verifies the conclusions reached by previous individual studies and project reports -- that without investment in new transportation projects, traffic conditions will rapidly deteriorate as the area builds out. Alternatively, the report concludes that *conditions in the area can be improved with the construction of a number of key transportation facilities*. Moving forward with these improvements will require a coordinated and sustained effort on the part of all the jurisdictions in the area, along with the cooperation of regional and state partners, and private interests. The report identifies improvements in the short term and over the next 25 years that will vastly improve local, area wide and regional mobility if built in a coordinated fashion.

The report also highlights the challenges associated with financing a plan of this magnitude. Transportation has been under-financed for a number of years and costs of construction are escalating rapidly. The value of the Partnership cannot be overstated in this regard given limited available funding at the federal, state, regional and local government levels. *The strength of the Partnership, jurisdictional unity in purpose and direction, and the support of private interests will provide a competitive edge for the program it represents*. The Partnership's role in enabling the sharing of consistent and timely information will save valuable time in the development stages of the various projects and increase the likelihood of their success.

It is the strong desire of the 50 Corridor Mobility Partnership that this Phase One Report and its recommendations be further utilized in an effort to proactively address transportation challenges of the 50 corridor and to continue in whatever form deemed appropriate in pursuit of an effective solution.

### Findings and Recommendations:

- Recognition of 2012 as a critical year for construction of near term improvements. Existing congestion, projected growth and the associated increase in traffic must be

addressed immediately. In six years conditions along the corridor will significantly degrade unless action is taken soon.

- Critical improvements were identified as near term priority projects:
  - Widening of White Rock Road from Sunrise Boulevard to Silva Valley Parkway
  - Auxiliary lanes on Highway 50 between Sunrise Boulevard and Scott Road
  - Connection of Rancho Cordova Parkway to Highway 50
  - Extension of Hazel Avenue to Easton Valley Parkway
  - Extensions of Zinfandel Drive and International Drive
- Transit improvements were identified as part of both near term and long term improvements. These included increased local bus/shuttle service, new BRT/Express Bus facilities and "passing tracks" for LRT between Hazel and Iron Point Stations.
- Completion of the HOV lanes extending from Sunrise Boulevard to downtown Sacramento and from the vicinity of Bass Lake Road in El Dorado County to the County line are Key Regional Improvements that will be a critical factor in alleviating congestion along the Highway 50 Corridor.
- The widening of Hazel Avenue to 6 lanes from Gold Country Boulevard to Madison Avenue is a key regional arterial improvement.
- The Priority Improvements would result in about a 30-percent reduction in vehicle-hours of delay during the commute hours.
- Near Term project costs total \$812 million. This includes \$340 million for Expected projects, \$424 million for Priority projects, and \$48 million in costs for project development activities for long term projects that need to get started within the near term time frame (2012). For all projects, the total cost through 2032 is about \$2.4 billion. This includes \$552 million in operational costs for transit.
- The difference between estimated project costs and the funds available from projected transportation development fees and Measure A is the amount unfunded. The cumulative unfunded amount is \$490 million in the near term and \$1.7 billion total in 2032.
- There is a need to move forward quickly with the project development of priority projects. Major new development projects are coming online in the near future. Transportation systems that accommodate such planned growth must be in place to avoid adding congestion to Highway 50 and other major arterials in the study area and to meet the goal of improved mobility within the corridor. Immediate project development work should include initiation of environmental document for White Rock Road and project scoping of Highway 50 auxiliary lanes and Hazel Avenue/Highway 50 interchange modifications including extension of Hazel Avenue to Easton Valley Parkway.

## 1. Introduction

### Purpose and Need

Highway 50 is the key transportation corridor of eastern Sacramento County and western El Dorado County. This sub-region, which includes the cities of Rancho Cordova and Folsom, has experienced dramatic growth in housing and jobs over the past decade. The roadway network is currently experiencing peak period traffic congestion. With forecasted growth of 78,000 dwelling units and 53,000 more jobs over the next 25 years, traffic conditions in this area will continue to get worse in the future.

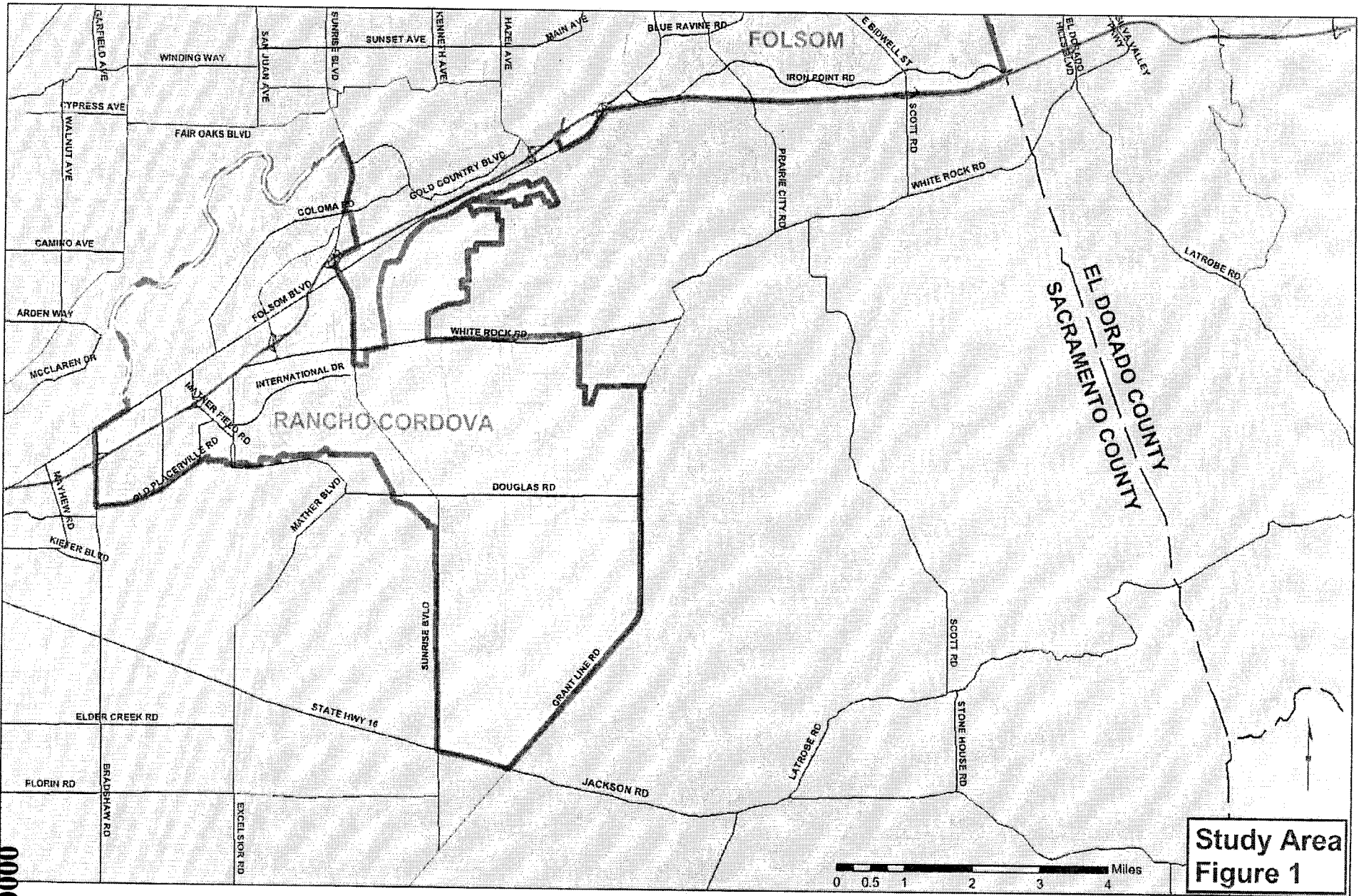
The purpose of the 50 Corridor Mobility Partnership is to develop a coordinated transportation plan for the study area that reduces congestion and improves mobility. Many transportation projects are being planned along the corridor by several jurisdictions and agencies. But these projects need to be considered holistically, and not just within jurisdiction boundaries, to address overall mobility and transportation system performance. The private sector is moving forward with development plans for more housing, more jobs, and more growth. What is needed is a public-private partnership that will facilitate planning, funding and implementation of transportation improvements to provide congestion relief to the corridor sooner than would otherwise be achieved.

The Study Area was defined roughly by Bradshaw Road on the west, American River on the north, El Dorado Hills on the east, and Jackson Highway on the south. Figure 1 illustrates the Study Area.

### Structure and Process

The 50 Corridor Mobility Partnership is a cooperative effort by the County of Sacramento, City of Rancho Cordova, City of Folsom, County of El Dorado, and several major private landowners (GenCorp, Elliott Homes, AKT Properties, and Carpenter Ranch). Participating in an advisory capacity are Caltrans, Sacramento Area Council of Governments (SACOG), and Sacramento Regional Transit (RT). The activities of the Partnership were conducted by a technical group consisting of the public works, transportation, and planning directors from the public agencies, a representative of the private landowners, and consultants for project management and transportation engineering. The technical group, which met weekly for nearly twelve months, evolved out of initial discussions between Sacramento County and GenCorp regarding the need for such an effort. This technical group provided the forum for the public jurisdictions and private sector partners to work together to identify issues critical to the successful planning of major transportation infrastructure and maximize opportunities for their timely implementation. An Executive Committee, comprised of the CEO's from each participating Partnership organization, met four times during the study and provided policy direction to the effort.

The Partnership's technical work focused on the development of a travel demand model for the study area that would allow travel forecasts for near term (2012) and long range (2030) time horizons. Transportation improvements that best addressed the projected growth in the study area were evaluated in the travel model. Conceptual-level cost estimates were developed for the proposed improvements and potential funding sources



Study Area  
Figure 1

0000013

identified. Possible implementation strategies were outlined. This Phase One Report documents the work by the Partnership to date.

## 2. Development Growth Assumptions

One of the greatest challenges in the development of an accurate travel forecast model is the assembly of accurate land use data and growth rate assumptions. The Partnership decided that alternative transportation networks should be tested with a travel demand forecasting model and improvement recommendations should be made for both near-term (2012) and long-range (2030) horizons. DKS worked with the Partnership to prepare the development forecasts for these time periods. The long-range (2030) development forecasts for the study area were based on the following sources:

- The 2030 development forecasts for the City of Rancho Cordova that were used in preparing their General Plan.
- Proposed development in the Easton project on Aerojet's property in unincorporated Sacramento County
- The land use summary for the Preferred Alternative for the "Folsom Visioning: South of Highway 50" adopted by the City of Folsom.
- The 2025 and buildout development forecasts from El Dorado County's General Plan EIR.

As shown in Table 1, in the portion of the study area south of US 50 between Sunrise Boulevard and El Dorado Hills about 78,000 new dwelling units and 53,000 more jobs are expected by 2030. This represents a growth rate of about 3,100 new dwelling units and 2,100 jobs per year.

The development forecasts for 2012 assume development of about 15,000 new dwelling units in that same area east of Sunrise Boulevard. Over the next six years, development is expected to continue in El Dorado Hills south of US 50 but most of the near-term residential development would likely occur in Rancho Cordova south of Douglas Road and in the first phase of the proposed Rio del Oro project. Development of about 2,000 dwelling units in the Easton Place and Glenborough developments were also assumed to be constructed by 2012.

Subarea	2005		2012		2030	
	Dwelling Units	Jobs	Dwelling Units	Jobs	Dwelling Units	Jobs
Sunridge/Preserve - South of Douglas Road	770	300	8,840	560	25,400	4,500
Easton/Rio del Oro - North of Douglas Road	0	21,350	5,340	23,170	26,700	44,700
Folsom SOI - South of US 50	0	0	0	0	12,900	10,300
East of Grant Line Road	0	140	0	290	3,300	2,000
El Dorado Hills - South of US 50	1,350	7,000	3,000	8,510	12,300	19,900
<b>Total</b>	<b>2,120</b>	<b>28,790</b>	<b>17,180</b>	<b>32,530</b>	<b>80,600</b>	<b>81,400</b>
<b>Growth per Year</b>			<b>2005 to 2012</b>		<b>2005 to 2030</b>	
			2,150	530	3,140	2,100

*Source: DKS Associates, 2006*

SACOG has recently prepared draft development forecasts for the 2032 horizon year of the next Metropolitan Transportation Plan (MTP) that will be adopted in 2007. Those draft forecasts represent SACOG's allocation of the estimated growth for the six-county region through 2032 to sub-areas based on land uses in the Preferred 2050 Blueprint Scenario.

The Partnership compared SACOG's draft 2032 development projections with their own 2030 development forecasts and concluded the following:

- SACOG's draft allocation of 2032 development to the Partnership's study area is lower than the Partnership's 2030 development forecasts.
- The Partnership's 2030 development forecasts look similar to SACOG's 2050 development levels under the Blueprint.
- To ensure that adequate right-of-way is preserved for the major facilities in the study area, the Partnership decided to use their own 2030 development forecasts in the study area for long-range travel demand forecasts. Outside the Partnership's study area, SACOG's draft 2032 development forecasts were assumed.

Travel forecasts were prepared using the SACOG's "SACMET" regional travel demand model that has been used by SACOG for the development of the Metropolitan Transportation Plan (MTP) and for regional air quality conformity analyses. SACMET covers the entire six-county SACOG region. The 50 Corridor Mobility Partnership is focusing on travel demand and transportation facility needs in a study area from Bradshaw Road east to El Dorado Hills and from Jackson Road north to the American River. To improve the model's capabilities for the Partnership, the regional model was

modified to provide additional detail in the model's zonal system and transportation networks in that study area.

### **3. Roadway Improvements**

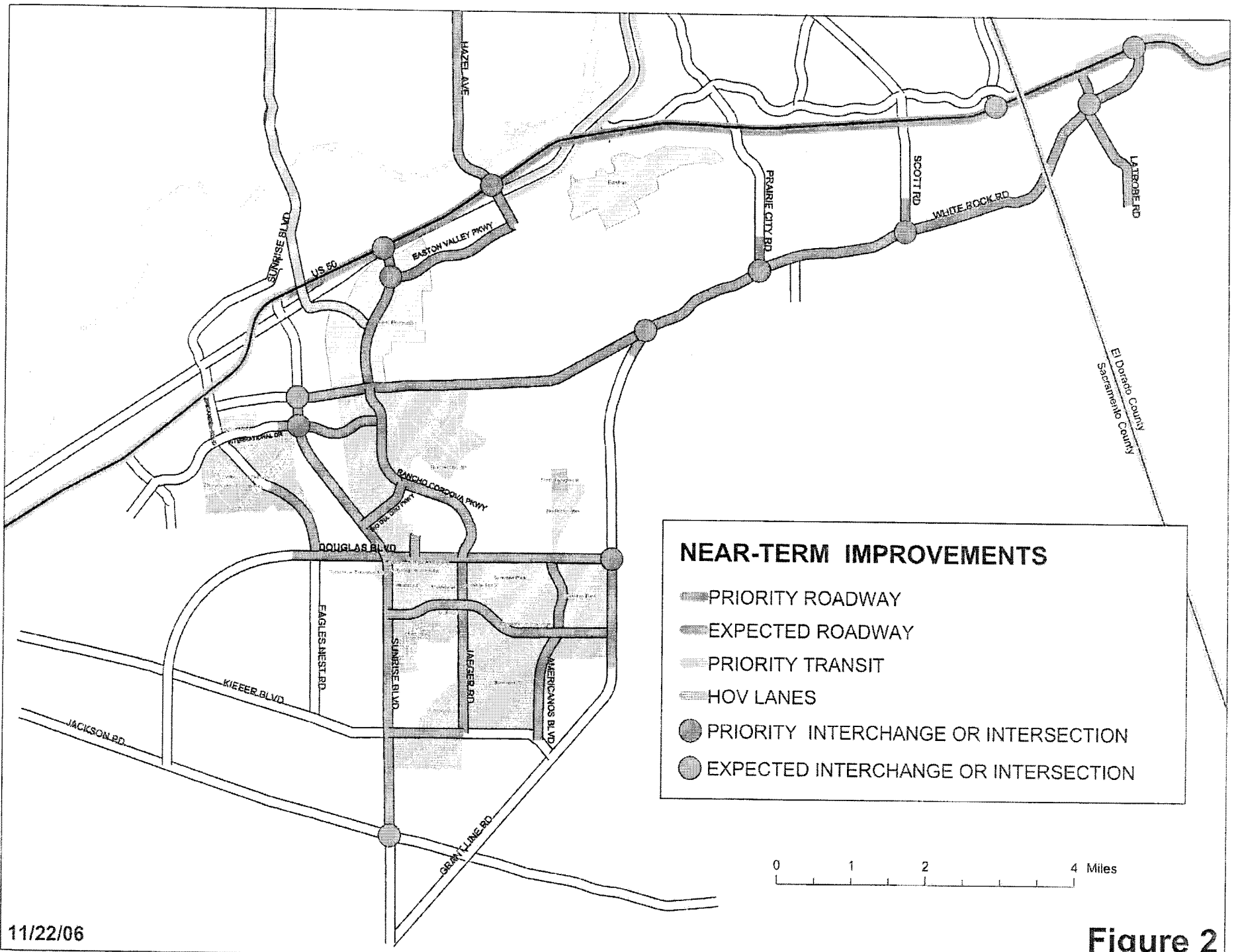
This section describes the near-term and long-term roadway improvements recommended by the Partnership for the study area.

#### **Near-Term Expected Roadway Improvements**

Over the next 6 years, implementation of some roadway improvements can be readily expected since they 1) are tied to expected development or are part of near-term capital improvement programs and 2) will not be subject to lengthy environmental/funding/approval processes. These "Near-Term Expected" roadway improvements are shown in Figure 2 and Table 2.

Included in Figure 2 is the widening of Hazel Avenue to 6 lanes from Gold Country Boulevard to Madison Avenue, a key regional arterial improvement. Other key regional improvements, extending outside the study area but critical to alleviating congestion along the Highway 50 Corridor, are the completion of the HOV lanes from the vicinity of Bass Lake Road in El Dorado County to the County line and from Sunrise Boulevard to downtown City of Sacramento in Sacramento County.





0000017

11/22/06

Figure 2

<b>Roadway</b>	<b>Segment/Location</b>	<b>Improvement</b>
Sunrise Boulevard	White Rock Road to Douglas Boulevard	Widen to 6 lanes
	Douglas Boulevard to Jackson Road	Widen to 4 lanes
White Rock Road	Sunrise Boulevard to future Rancho Cordova Parkway and El Dorado County line to Latrobe Road	Widen to 4 lanes
Douglas Boulevard	Sunrise Boulevard to Grant Line Road	Widen to 4 lanes
Rancho Cordova Parkway	Douglas Boulevard to Rio del Oro Parkway	New 2 lane road
	Rio del Oro Parkway to White Rock Road	New 6 lane road
Jaeger Road	Douglas Road to Kiefer Boulevard	New 4 lane road
Chrysanthy Road	Sunrise Boulevard to Americanos Boulevard	New 4 lane road
Kiefer Boulevard	Sunrise Boulevard to Jaeger Road	New 4 lane road
Grant Line Road	Douglas Road to Chrysanthy Road	Widen to 4 lanes
Hazel Avenue	Gold Country Boulevard to Madison Avenue	Widen to 6 lanes
Latrobe Road	South of White Rock Road	Widen to 4 lanes
US 50 Interchanges	Empire Ranch Road	New Interchange
	Silva Valley Interchange	New Interchange
US 50 Mainline	Scott Road to Empire Ranch Road	Aux lanes
	Empire Ranch Road to El Dorado Hills Boulevard	Aux lanes and climbing lanes
	El Dorado Hills Boulevard to Silva Valley Parkway	Aux lanes and climbing lanes
	Silva Valley Parkway to Bass Lake Road	Aux Lanes

### **2012 Conditions with Near-Term Expected Improvements**

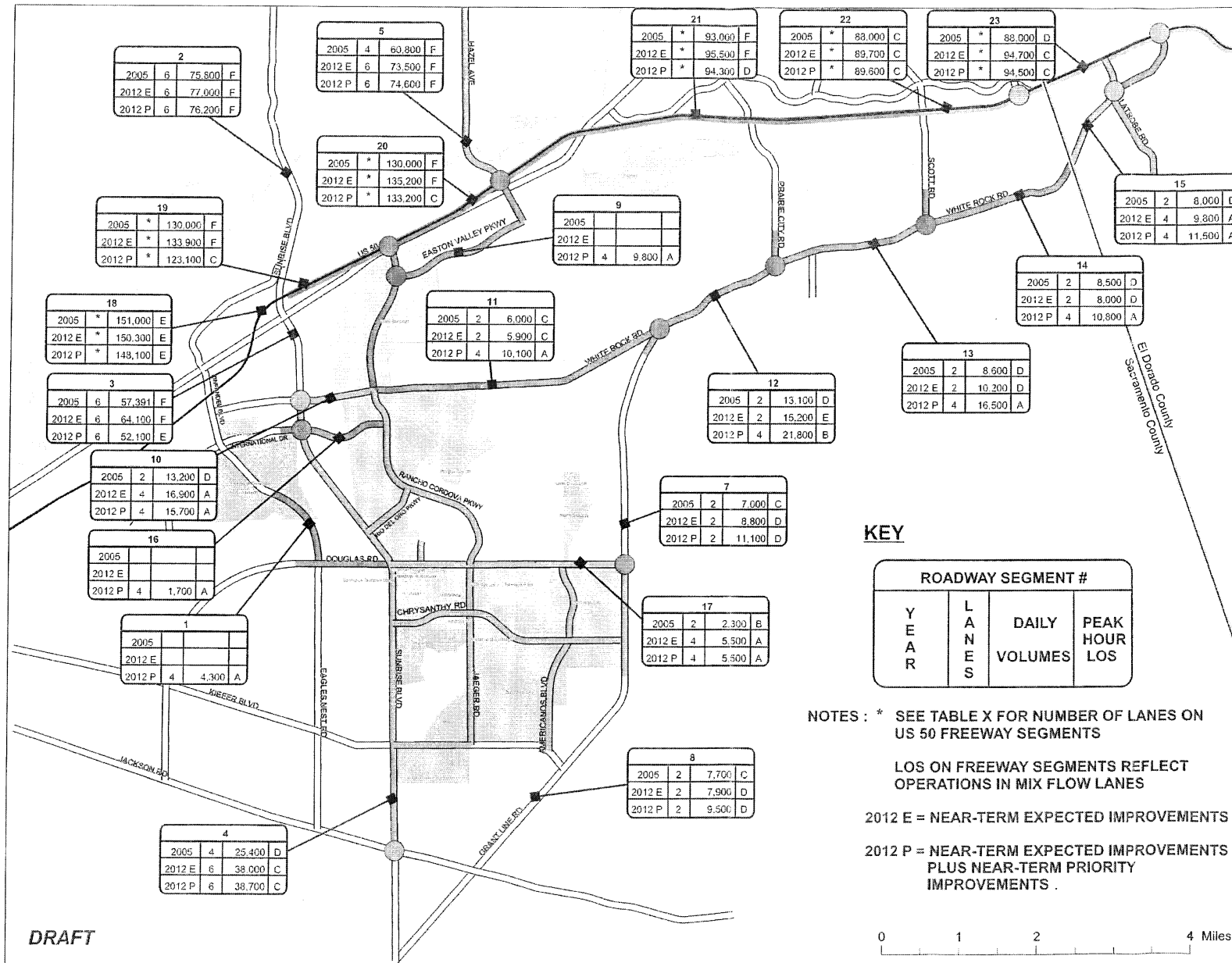
Figure 3 shows the projected daily traffic volumes and peak hour levels of service on key roadway segments in 2012 with only the Near-Term Expected Improvements. The analysis of this 2012 scenario indicates that traffic volumes and the duration of congestion during peak periods will continue to grow on the following:

- US 50 through the study area
- Sunrise Boulevard through the study area
- White Rock Road from El Dorado Hills to Sunrise Boulevard.

FIGURE 3

TRAFFIC VOLUMES AND LOS FOR 2012 CONDITIONS WITH / WITHOUT PRIORITY IMPROVEMENTS

50 CORRIDOR MOBILITY PARTNERSHIP



DRAFT

0000019

DKS Associates

This page intentionally left blank

The Partnership has focused on ways to reduce congestion on these critical facilities through strategies that provide new and improved parallel roadways to US 50 and Sunrise Boulevard and on options to avoid congested areas, especially the Sunrise Boulevard/US 50 interchange. These improvements are described below.

### **Near-Term Priority Roadway Improvements**

The Priority Improvements identified by the Partnership (see Table 3 and Figure 2), would provide several new roadway connections for people to travel within and through the study area to avoid congestion. They also include new transit routes and the widening of existing roadways. These improvements are viewed by the Partnership as a package that would both provide system-wide travel benefits and help mitigate traffic increases that would be caused by the individual projects that make up this package.

<b>Roadway</b>	<b>Segment</b>	<b>Improvement</b>
White Rock Road	Rancho Cordova Parkway to El Dorado Co Line	Widen to 4 lanes
	Latrobe Road to Silva Valley Road	Widen to 4 lanes
Rancho Cordova Parkway	White Rock Road to US 50	New 4 lane road
Hazel Avenue	Folsom Boulevard to Easton Valley Parkway	New 4 lane road
Easton Valley Parkway	Hazel Avenue to Rancho Cordova Parkway	New 6 lane road
Zinfandel Road	South of International Dr to Douglas Road	New 4 lane road
International Drive	Kilgore Road to Rancho Cordova Parkway	New 6 lane road
Douglas Road	Zinfandel Ext to Sunrise Boulevard	Widen to 4 lanes
US 50 Interchanges	Rancho Cordova Parkway	New Interchange
	Hazel Avenue	Modify Interchange
US 50 Mainline	Sunrise Boulevard to Hazel Avenue	Aux lanes
	Hazel Avenue to Folsom Boulevard	Aux lanes
	Folsom Boulevard to Scott Road	Aux lanes

The reasons why these improvements are important to implement by 2012 are summarized below.

**The widening of White Rock Road** to four lanes from Silva Valley Parkway in El Dorado Hills to Sunrise Boulevard would more than double its capacity due to improve horizontal and vertical alignments, greatly improved intersection geometrics and signal

control. These improvements would not only relieve congestion on this roadway but are important because they would:

- Improve the overall safety of the facility for all modes of travel by providing improved sight lines, added shoulders, increased pavement width, traffic signalization, curve re-alignment, and improved signage.
- Provide a multi-lane, high capacity connection for commuters between El Dorado County, Folsom and Rancho Cordova that would divert traffic from congested portions of US 50
- Begin the implementation of the Elk Grove-Rancho Cordova-El Dorado Connector on a segment that is common to all of the concepts for that connector – White Rock Road between Grant Line Road and Silva Valley Parkway

**The construction of auxiliary lanes on US 50 between Sunrise Boulevard and Scott Road** would improve operations along this congested stretch of freeway by placing the merge, diverge and weaving movements of the high volume on- and off-ramps on to a separate lane, thereby increasing the capacity of the mainline freeway lanes.

**The connection of Rancho Cordova Parkway to US 50** has long been planned to relieve traffic growth on Sunrise Boulevard and the Sunrise/US 50 interchange. However, Caltrans has expressed concerns that construction of this connection would increase traffic volumes on US 50 between Sunrise Boulevard and Hazel Avenue. The Partnership has concluded that increases in traffic on US 50 would be mitigated by other Priority Improvements discussed below.

**The Extensions of Hazel Avenue and Easton Valley Parkway** would divert traffic from US 50 west of Hazel Avenue and from Sunrise Boulevard south of US 50. These new roadway connections, along with the widening of White Rock Road, would mitigate traffic increases related to the connection of Rancho Cordova Parkway to US 50.

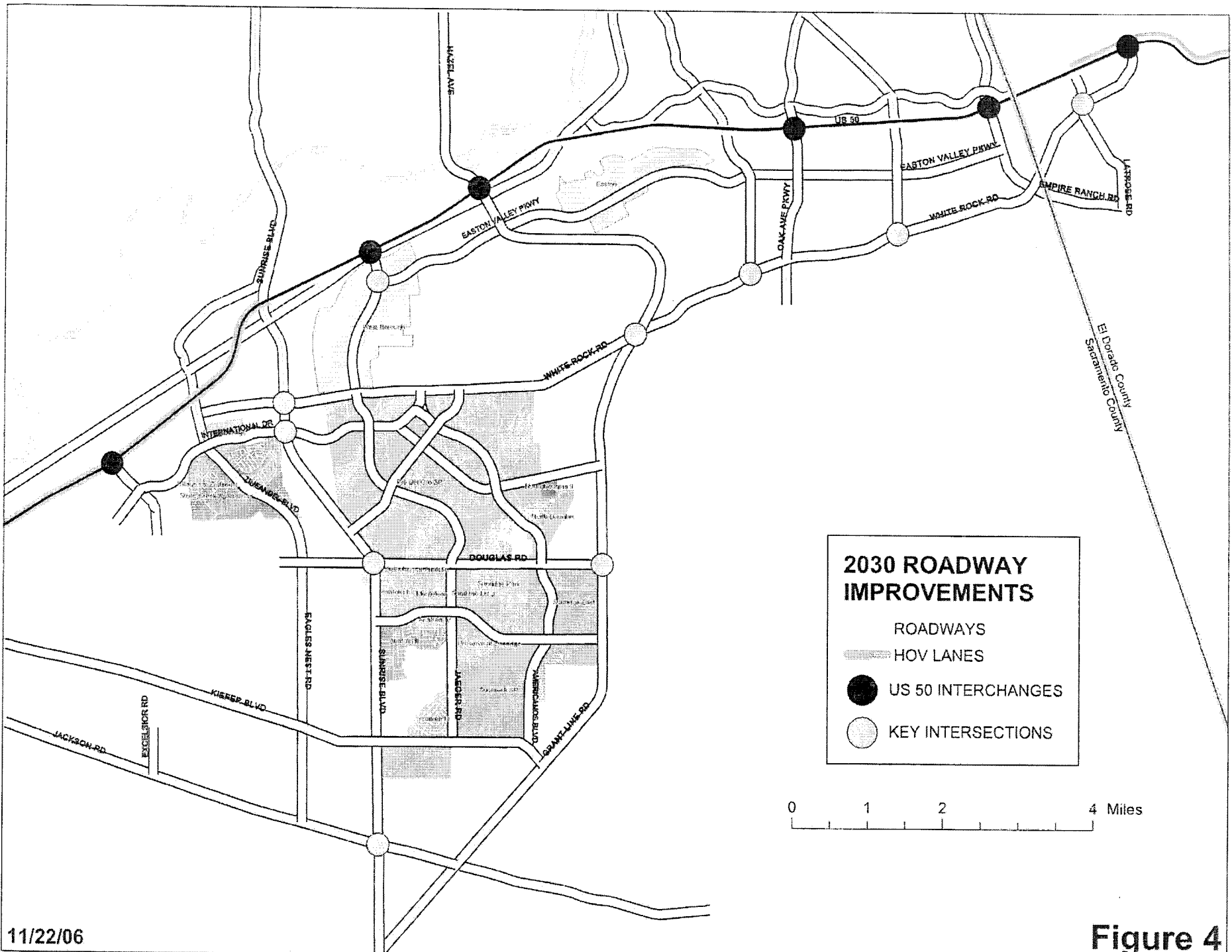
**The Extensions of Zinfandel Drive and International Drive** would divert traffic from US 50 west of Sunrise Boulevard and from Sunrise Boulevard south of US 50.

For the above reasons, the Partnership has concluded that the Priority Improvements should be implemented as a package.

### **Long-Term Roadway Improvements**

The travel demand model was used to forecast 2030 traffic volumes for alternative long-term roadway/transit systems to help the Partnership define a roadway system that attempts to meet those demands. While additional studies will be needed to fine-tune the long-range transportation system, the key roadway elements identified by the Partnership included the following (see Figure 4):

**US 50 Mainline** –Aside from the construction of auxiliary lanes between each interchange (included in the near-term improvements) and HOV lanes from Sunrise Boulevard to Downtown Sacramento and from the County line to Bass Lake Road (identified as Key Regional Improvements), no additional improvements are anticipated to the US 50 mainline from Sunrise Boulevard to Silva Valley Parkway.



0000023

11/22/06

Figure 4

To relieve congestion along US 50, the Partnership has emphasized construction of strong parallel roadway capacity and transit services.

**White Rock Road** will ultimately be widened to 6 lanes from El Dorado Hills to Sunrise Boulevard. Traffic volumes on this roadway will be heavy, especially between Prairie City Road and Grant Line Road. To provide adequate capacity, high speeds and maximum relief to US 50, the access to White Rock Road needs to be controlled to expressway standards. A grade-separated interchange will eventually be needed at the intersection of White Rock Road and Grant Line Road. Along other segments, access should only be provided at signalized intersections with an ideal and minimum spacing between signalized intersections of 1 mile and ½ mile, respectively

**Easton Valley Parkway** will provide parallel capacity to US 50, similar to Iron Point Road on the north side of the freeway. It will be constructed as a 4-lane arterial through the Folsom SOI area (east of Prairie City Road) and a six lane roadway west through the Easton project to Rancho Cordova Parkway. The Partnership plans to study improvements along Easton Valley Parkway to facilitate a BRT/Express Bus route, including defining which portions, if any, would need exclusive right-of-way or special treatments to minimize delays for buses.

**Sunrise Boulevard** will be widened to 6 lanes from Jackson Road to White Rock Road. Finding ways to accommodate the continued growth in travel demand on Sunrise Boulevard from US 50 north across the American River will continue to be a challenge. The Partnership recognizes that efforts need to be renewed to study alternatives ways to improve traffic movement through this critical regional connection.

**Hazel Avenue** will be extended to Easton Valley Parkway in the near-term and will eventually be extended south to White Rock Road at Grant Line Road.

**Grant Line Road** will be widened to six lanes from White Rock Road to Douglas Road. Four to six lanes will be needed from Douglas Boulevard to Jackson Road. The width of this later section will depend on the ultimate number of lanes on Grant Line Road through the City of Elk Grove.

**International Drive** will be extended eastward from Kilgore Road across Sunrise Boulevard and connect to White Rock Road east of Rancho Cordova Parkway. This connection is intended to divert traffic from White Rock Road and split the traffic demand between International Drive and White Rock Road as they cross major north-south roadways (i.e. Rancho Cordova Parkway, Sunrise Boulevard, and Zinfandel Road).

#### **4. Transit**

This section describes the near-term and long-term transit improvements recommended by the Partnership for the study area.

##### **Near-Term Expected Transit Improvements**

With development of about 15,000 dwelling units (a population growth of about 38,000) through 2012, some bus service can be expected to serve the new growth areas east of Sunrise Boulevard. However, the ability to provide new bus service will be limited by scarce funding for operations.



Currently RT funds its operations through three main sources:

- **Fare-box revenue**, which now covers only about 20 percent of RT's operating costs and has been declining for at least a decade
- **Transportation Development Act (TDA)**, which comes from a ¼ cent sales tax and covers about on third of RT's operating cost
- **Measure A**, which funds about on third of RT's operating costs from RT's plus Folsom's 33% share of the ½ cent sales tax. RT will take 38% of the Measure A Renewal to sustain that funding stream.

While TDA and Measure A revenues will expand with the regions population and economy, so will RT's operating costs. RT operations consume about 90% of all funds usable for that purpose, so RT's ability to expand operations is effectively capped by operating funding. Anything beyond a modest and gradual expansion of service would require new operation funds.

It was expected that with the population growth in the study area, a limited amount of the growth in TDA and Measure A revenue would be used to provide some bus service to the growth areas east of Sunrise Boulevard. It was assumed that the Near-Term Expected Transit Improvements would involve the following:

- Shuttle service from Sunridge and Rio del Oro to Sunrise LRT station. Initial service could utilize Sunrise Boulevard to Trade Center Drive but service should shift to Rancho Cordova Parkway when it is opened in order to promote transit use along this future BRT route.
- Shuttle service from Sunridge and Rio del Oro to employment areas in Downtown Ranch Cordova (along International Drive and White Rock Road). This service could involve extension of existing RT Route 73 or Route 74.
- Shuttle service from Easton to employment areas in Downtown Ranch Cordova (along International Drive and White Rock Road) when Rancho Cordova Parkway and Easton Valley Parkway are connected. This service could involve extension of existing RT Route 73 or Route 74
- Preserving exclusive right-of-way for BRT/Express Bus along Rancho Cordova Parkway from Douglas Road to US 50

#### **Near-Term Priority Transit Improvements**

The Partnership recommends implementation of both north-south and east-west Bus Rapid Transit (BRT)/Express Bus routes through the study area in the long-term (see discussion below on these facilities). The Partnership has decided that it is important to establish some initial elements of that BRT/Express Bus system and improvements to LRT in the near-term through the following:

- Constructing a BRT/Express Bus facility on exclusive right-of-way from Folsom Boulevard to the American River. This facility would use the Citrus underpass of US 50, available right-of-way along the east side of Sunrise Boulevard and the available extra width on the Sunrise Boulevard bridge over the American River to allow buses to avoid traffic congestion along Sunrise Boulevard.

- Constructing “passing tracks” for the Gold Line LRT from Hazel Avenue to Iron Point Station in the City of Folsom
- Defining an adequate BRT/Express Bus route connecting Rancho Cordova Parkway to the Sunrise LRT station and to the Citrus underpass of US 50 so that right-of-way can be preserved.
- Defining a concept for an east-west BRT/Express Bus facility along Easton Valley Parkway and International Drive, including which portions, if any, would need exclusive right-of-way or special treatment so that right-of-way can be preserved.

### **Long-Term Transit Improvements**

The Partnership envisions a robust transit system serving the study area to complement transit-friendly land uses based on the Blueprint. This system will consist of the following light rail, BRT/Express Bus, trunk line bus and local bus services:

#### **LRT Improvements and Services**

- o Double-tracking RT’s Gold Line east of the Sunrise station to allow headways to be decreased from 30 minute to 15 minute service.
- o Constructing a new Mineshaft Station between the Sunrise and Hazel stations when there is sufficient development in the Westborough project.

#### **BRT/Express Bus Improvements and Services**

- o Extension of the north-south BRT/Express Bus facility (implemented with the Near-Term Priority Improvements) south of Folsom Boulevard on exclusive right-of-way along Rancho Cordova Parkway and implementation of BRT/Express Bus service from the Sunridge area of Rancho Cordova to Citrus Heights.
- o Implementation of an east-west BRT/Express Bus service from El Dorado Hills to Downtown Rancho Cordova via Easton Valley Parkway and International Drive.

#### **Trunkline Bus Services**

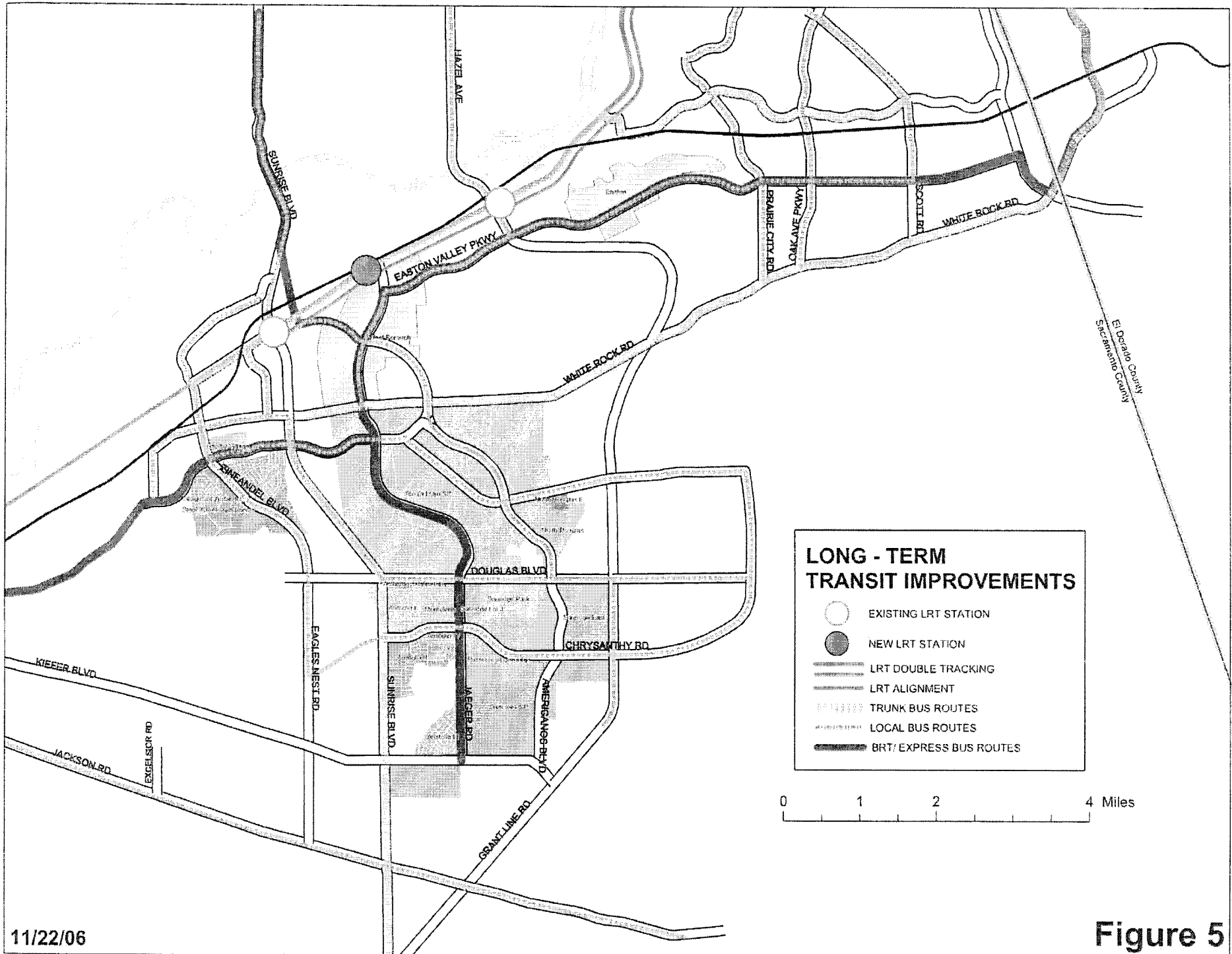
- o Implement the service envisioned in Elk Grove-Rancho Cordova-El Dorado Connector between El Dorado Hills and Elk Grove via White Rock Road, Sunrise Boulevard and Grant Line Road.
- o Frequent service from Folsom along Iron Point to Easton and Downtown Rancho Cordova

#### **Local Bus Service**








All day local bus/shuttle services would be provided along major existing and future arterial roadways in the study area including the following:

- o International Drive (East of Grant Line Road to Downtown)
- o Douglas Road (East of Grant Line Road to Zinfandel Boulevard Extension)
- o Chrysanthy Road (East of Grant Line Road to Sunrise Boulevard)
- o Zinfandel Boulevard (Douglas Road to Folsom Boulevard)
- o Americanos Boulevard (Douglas Road to White Rock Road)
- o Hazel Avenue (north of US 50 to Easton Valley Parkway)
- o Prairie City Road (north of US 50 to White Rock Road)
- o Oak Avenue Parkway (north of US 50 to White Rock Road)
- o Bidwell Street/Scott Road (north of US 50 to White Rock Road)

The near term and long term transit facilities are illustrated in Figure 5.



**LONG - TERM  
TRANSIT IMPROVEMENTS**

-  EXISTING LRT STATION
-  NEW LRT STATION
-  LRT DOUBLE TRACKING
-  LRT ALIGNMENT
-  TRUNK BUS ROUTES
-  LOCAL BUS ROUTES
-  BRT/ EXPRESS BUS ROUTES

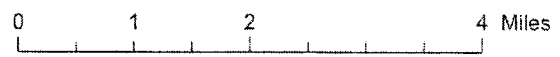


Figure 5

## 5. Near-Term System Performance with Priority Improvements

To measure the benefits of the Near –Term Priority Improvements, travel forecasts were prepared for 2012 conditions with the following two transportation networks:

- 1) Existing Plus Near-Term Expected Improvements
- 2) Existing Plus Near-Term Expected and Near-Term Priority Improvements

The transportation impacts and benefits of the Near-Term Priority Improvements are demonstrated by comparing the performance of these two transportation networks using the following measures:

- Changes in traffic volumes on key roadway segments
- Changes in levels of service on key roadway segments
- Change in system-wide vehicle-miles of travel on congested roadway segments
- Change in system-wide vehicle-hours of delay during commute hours
- Change in transit mode share in the study area.

### **Change in Traffic Volumes and Levels of Service on Key Roadways**

Figure 3 shows the estimated daily traffic volumes and peak hour levels of service in 2012 with and without the Near-Term Priority Improvements. The Priority Improvements would reduce traffic volumes along portions of US 50 and Sunrise Boulevard and improve levels of service on a number of study area roadways.

As discussed below, the benefits of these improvements are best shown in the way they reduce congestion levels system-wide.

### **Change in Systemwide Congestion and Delay**

Table 4 shows the vehicle-miles of travel (VMT) on congested (LOS F) roadways in the study area in 2012 with and without the Near-Term Priority Improvements. As shown in Table 4 and Figure 6 that VMT on congested roadways during commute periods would decrease from about 537,000 to 379,000; a reduction of about 30 percent.

Vehicle delay can be measured in a number of ways. For this analysis, vehicle delay was defined as the additional travel time that vehicles would take to travel on a roadway segment beyond the time that it would take under LOS E conditions. The additional travel time for all vehicles traveling on congested (LOS F) roadway segments in the study area for the 3-hour a.m. and 3-hour p.m. peak commute periods were combined into one system-wide measure of delay.

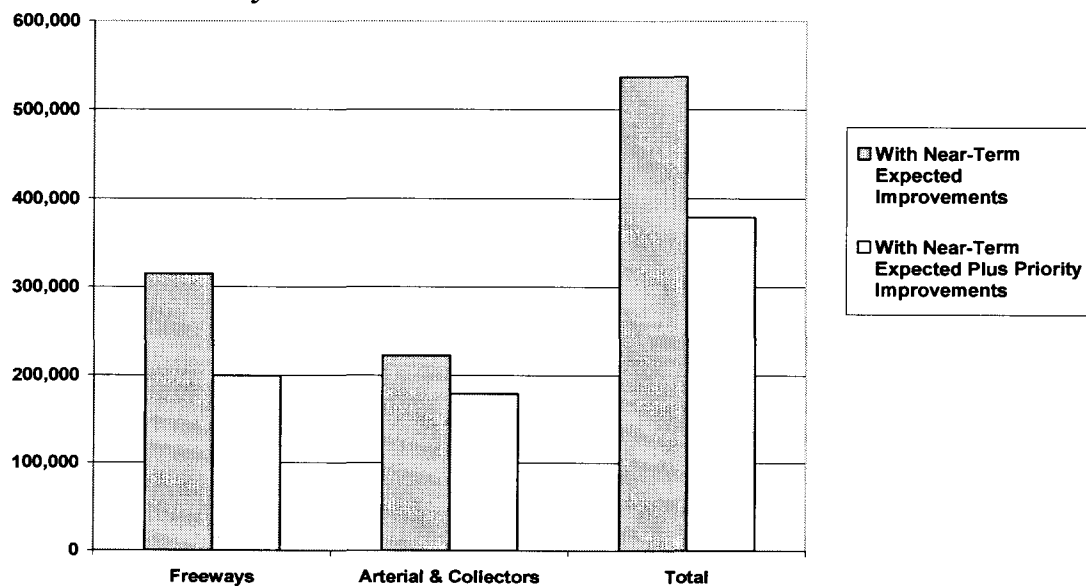
The estimated vehicle-hours of delay with and without the Near-Term Priority Improvements are shown in Table 5 and Figure 7. It shows that total vehicle hours of delay during commute periods would decrease from about 7,600 to about 5,400, a reduction of about 30 percent.

**Table 4:  
Vehicle Miles on Congested Roadways within Study Area**

Level of Service	Facility	VMT during 3 Hour AM & 3 Hour PM Peak-Periods (6-Hrs)		Percent of VMT	
		With Near-Term Expected Improvements	With Near-Term Expected Plus Priority Improvements	With Near-Term Expected Improvements	With Near-Term Expected Plus Priority Improvements
A - E	US 50	504,564	593,743	62%	75%
	Arterial & Collectors	691,437	795,813	76%	82%
	Subtotal	1,196,001	1,389,556	69%	79%
F	US 50	314,807	199,888	38%	25%
	Arterial & Collectors	222,628	179,065	24%	18%
	Subtotal	537,435	378,953	31%	21%
All	US 50	819,371	793,631	100%	100%
	Arterial & Collectors	914,065	974,878	100%	100%
	Total	1,733,436	1,768,509	100%	100%

*Source: DKS Associates, 2006*

**Figure 6: Vehicle Miles of Travel on Congested Roadways during Commute Hours within Study Area**

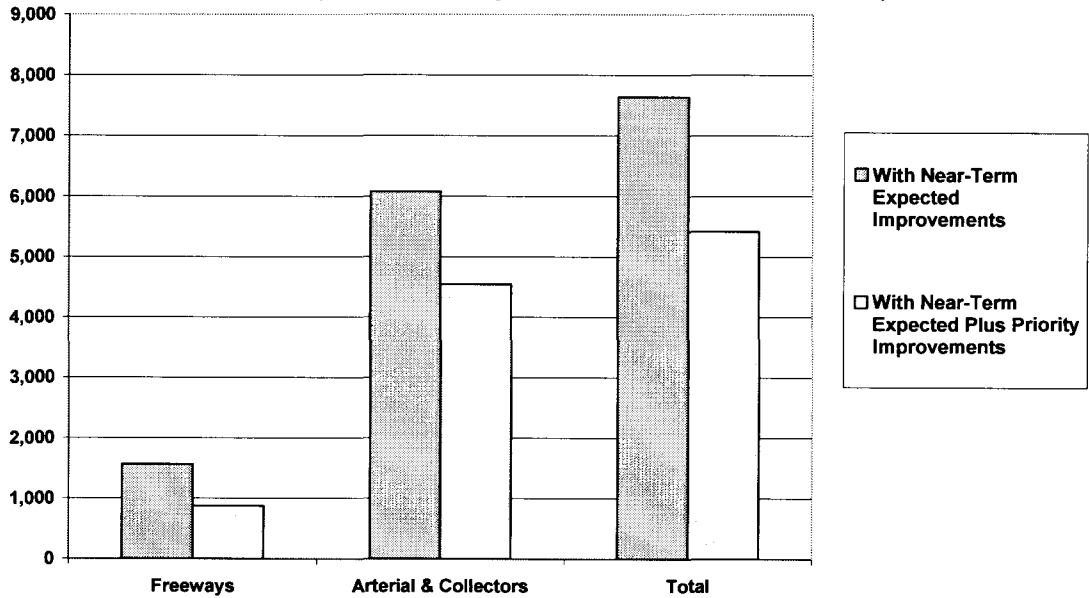


**Table 5:  
Vehicle Hours of Delay  
2012 Conditions with and without Near-Term Priority Improvements**

Facility Type	Vehicle-Hrs-Delay beyond LOS E conditions Year 2012 During 3 Hour AM & 3 Hour PM Peak Periods (6-Hrs)		
	With Near-Term Expected Improvements	With Near-Term Expected Plus Priority Improvements	Percent Change
	Freeways	1,562	879
Arterials & Collectors	6,076	4,539	-25%
All Roadways	7,638	5,418	-29%

*Source: DKS Associates, 2006*

**Figure 7: Vehicle Hours of Delay during Commute Hours within Study Area**



### **Change is Transit Mode Share in the Study Area.**

Tables 6 and 7 summarize the percentage of work trips and total trips by travel mode for 2005, 2012 and 2032 conditions. These tables indicate that with limited transit service improvements with the Near-Term Expected Improvements, transit's share of study area trips will drop slightly by 2012. If an initial BRT service is added under the Near-Term Priority Improvements, transit's share will increase over today's levels.

With the robust transit system envisioned by the Partnership for the study area to complement transit-friendly land uses based on the Blueprint, transit share of total person trips in the study area would increase substantially.

The SACMET model, together with the "4ds" model was used to estimate the choice of travel mode in 2032 conditions. The "4ds" process for estimating mode share adjustments was developed during SACOG's Blueprint project and is intended to account for the effects of density, mix of use, good pedestrian and transit design, and land use planning which are potentially missed by the SACMET travel model. Through these tools, the full reduction in auto trips due to land use design and transit services is captured.

Year/Scenario	Mode of Travel			
	Auto	Transit	Bike/Walk	Total
2005	93.57%	1.51%	4.92%	100%
2012 With Near-Term Expected Improvements	93.74%	1.39%	4.86%	100%
2012 With Near-Term Expected Plus Priority Improvements	93.59%	1.61%	4.80%	100%
2032	87.18%	5.63%	7.19%	100%

*Source: DKS Associates, 2006*

Year/Scenario	Mode of Travel			
	Auto	Transit	Bike/Walk	Total
2005	96.01%	0.29%	3.70%	100%
2012 With Near-Term Expected Improvements	96.20%	0.26%	3.54%	100%
2012 With Near-Term Expected Plus Priority Improvements	96.22%	0.28%	3.50%	100%
2032	88.39%	3.13%	8.48%	100%

*Source: DKS Associates, 2006*



## 6. Long-term System Performance

Figure 8 shows the estimated daily traffic volumes and peak hour levels of service in 2032 with the roadway and transit system envisioned by the Partnership. The analysis of 2032 conditions indicates the following:

- Most of the roadway system serving the study area will operate at acceptable levels of service.
- With new HOV lanes west of Sunrise Boulevard, new auxiliary and climbing lanes east of Sunrise Boulevard, plus new and improved parallel roadways (i.e. Easton Valley Parkway and White Rock Road), traffic volumes on US 50 will be only marginally higher in 2030 than today and the level of service on US 50 will be similar to today conditions. LOS F conditions will exist in 2030 during commute hours on US 50 between Rancho Cordova Parkway and Prairie City Road.
- Traffic volumes on White Rock Road will be heavy, especially between Prairie City Road and Grant Line Road. To provide adequate capacity, high speeds and maximum relief to US 50, the access to White Rock Road needs to be controlled to expressway standards with a grade-separated interchange at White Rock Road/Grant Line Road. Along other segments, access should only be provided at signalized intersections with an ideal and minimum spacing between signalized intersections of 1 mile and ½ mile, respectively. With this design concept, this roadway would operate a LOS E conditions during peak hours between Scott Road and Grant Line Road
- Grant Line Road will also have heavy volumes between White Rock Road and Douglas Road and should have expressway access control similar to that recommended for White Rock Road.
- Traffic volumes crossing the American River on Sunrise Boulevard and Hazel Avenue will continue to grow. The Partnership recognizes that efforts need to be renewed to study alternatives ways to improve traffic movement through these critical regional connections.

## 7. Cost Estimates and Funding

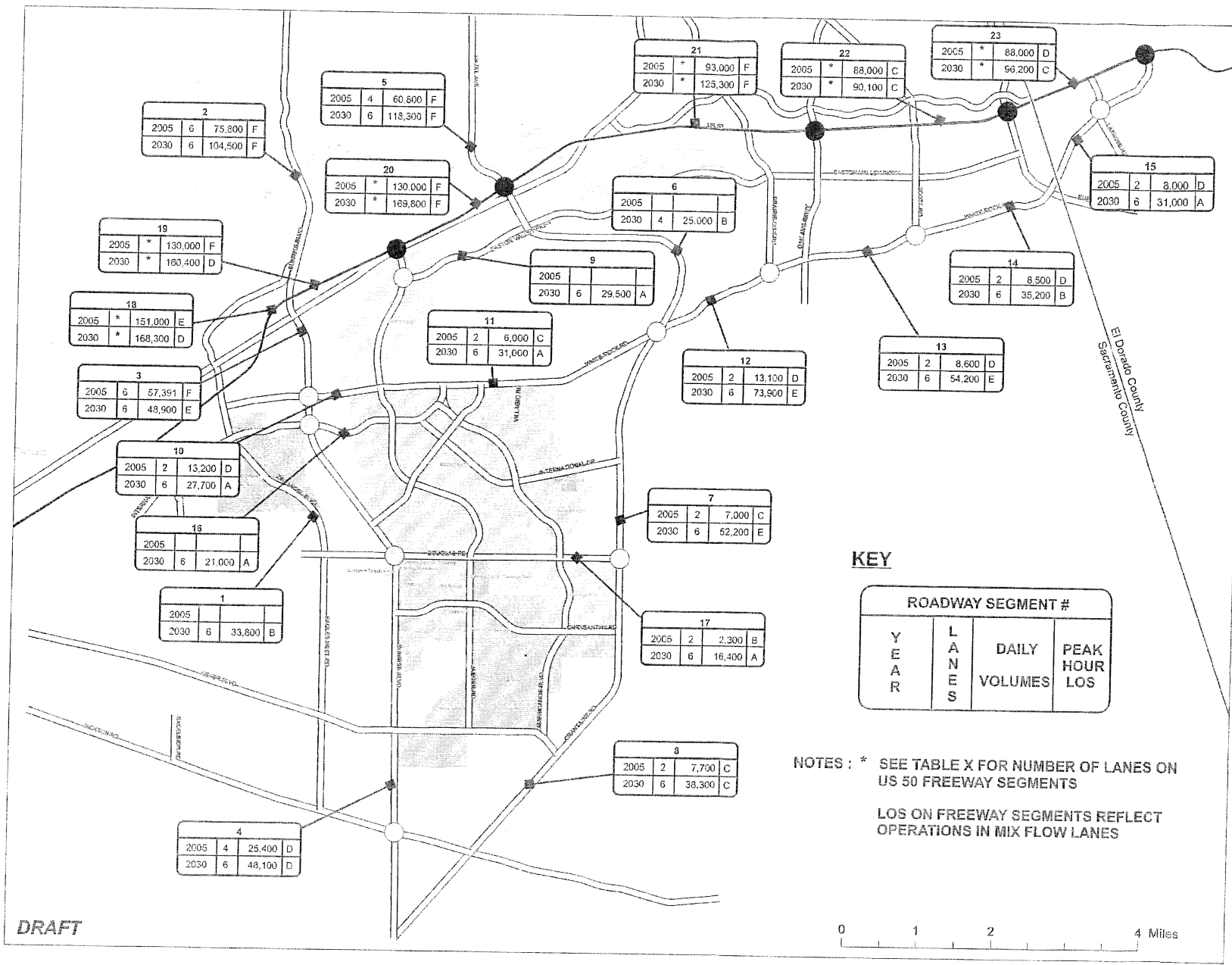
### Project Costs

For each roadway and transit project identified as a near-term or long-term improvement in the study area, conceptual-level construction cost estimates were developed. The estimates were provided by the responsible jurisdiction from existing capital improvement program data or were estimated using generic “per lane mile” unit costs. An allowance for environmental, design, construction management and other project development activities was calculated using a percentage of construction cost (typically

This page intentionally left blank

**FIGURE 8**  
**TRAFFIC VOLUMES AND LOS FOR 2030**  
**CONDITIONS AND IMPROVEMENTS**

**50 CORRIDOR**  
**MOBILITY**  
**PARTNERSHIP**



**This page intentionally left blank**

35% to 40%). Where an improvement was expected to be constructed incrementally, such as building two lanes in the near term and widening to four lanes in the long term, costs were allocated proportionally.

Both capital and operational cost estimates were developed for proposed transit improvements in the study area. The capital costs were derived from a combination of cost estimates provided by RT and estimates developed using representative unit costs from other sources. The operating costs of BRT/Express Bus, trunk line and local bus service, and modifications to LRT service were based on operating assumptions for each type of transit service.

Tables 8 and 9 provide the estimated costs for each project. Based on assumed year of construction, the construction costs and project development costs were allocated over time.

This page intentionally left blank



This page intentionally left blank



Table 9  
Project Cost  
Summary  
(Part 2)

Project Cost B				50 Corridor Mobility Partnership (Costs are in Millions)																														
Roadway	Segment	Jurisdiction	Improvements (2006-2012-2030)	Near Term \$\$	Long Term \$\$	COST <sup>1</sup>	YEAR																											
							2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Sunrise Blvd	White Rock Rd to Douglas Rd	Rancho Cordova	Grade Separation	24.4	24.4	24.4	4.9	4.9	4.9	4.9	4.9																							
	Grade Separation at Douglas	Rancho Cordova	Grade Separation		22,275	22.3																												
	Douglas Rd to Kiefer Blvd	Rancho Cordova	Grade Separation	19,875	19,875	33.8	3.1	3.1	3.1	3.1	3.1																							
	Kiefer Blvd to Jackson Rd	Rancho Cordova	Grade Separation	17,347.5	17,347.5	34.7	1.5	1.5	1.5	1.5	1.5	3.2	3.2	3.2	3.2																			
Jackson Rd to Grant Lane Rd	Sacramento County	Grade Separation	9.45	9.45	5.5																													
Grant Lane Rd	Grade Separation at White Rock	Rancho Cordova	Grade Separation		12.42	12.4																												
	White Rock Rd to Douglas	Rancho Cordova	Grade Separation		11.34	11.3																												
	White Rock Rd to Douglas	Sacramento County	Grade Separation		11.34	11.3																												
	Douglas Rd to Kiefer Blvd	Rancho Cordova	Grade Separation	9.21	6.21	12.4	0.8	0.8	2.3	2.3																								
Jagger	Douglas Rd to Kiefer Blvd	Sacramento County	Grade Separation	9.21	6.21	12.4	0.8	0.8	2.3	2.3																								
	Douglas Rd to Jackson Rd	Rancho Cordova	Grade Separation		14.58	14.6																												
	Kiefer Blvd to Jackson Rd	Sacramento County	Grade Separation		14.58	14.6																												
	Jagger to American Blvd	Rancho Cordova	Grade Separation	15.66		15.7																												
American Blvd	White Rock to Douglas Rd	Rancho Cordova	Grade Separation		26.46	26.5																												
	Douglas Rd to Kiefer Blvd	Rancho Cordova	Grade Separation	14.31	14.3	14.3	1.2	1.2	1.2	1.2	1.2	5.3	5.3																					
Douglas Rd	Mather Field to Sunrise	Sacramento County	Grade Separation	4.96	4.96	9.7	0.6	0.6	1.8	1.8																								
	Sunrise to American Blvd	Rancho Cordova	Grade Separation	18.09	18.09	18.1	1.6	1.6	1.6	6.7	6.7																							
Cherryville Rd	American Blvd to Grant Lane Rd	Rancho Cordova	Grade Separation	5.13	5.13	10.3	0.4	0.4	0.4	1.9	1.9																							
	Sunrise to Jagger	Rancho Cordova	Grade Separation	15.255	15.3	15.3	1.3	1.3	1.3	5.7	5.7																							
	Jagger to American Blvd	Rancho Cordova	Grade Separation	15.255	15.3	15.3	1.3	1.3	1.3	5.7	5.7																							
	American Blvd to Grant Lane Rd	Rancho Cordova	Grade Separation	7.695	7.7	7.7																												
Kiefer Blvd	Headway to Eschwege Rd	Sacramento County	Grade Separation		13.5	13.5																												
	Eschwege Rd to Eagle's Nest Rd	Sacramento County	Grade Separation		13.5	13.5																												
	Eagle's Nest to Sunrise Blvd	Rancho Cordova	Grade Separation																															
	Sunrise Blvd to Jagger Rd	Rancho Cordova	Grade Separation	9.99		10.0																												
Eagle's Nest Rd	Jagger Rd to Grant Lane Rd	Rancho Cordova	Grade Separation	4.59	4.6	4.6																												
	Douglas Rd to Kiefer Blvd	Sacramento County	Grade Separation		13.5	13.5																												
Jackson Rd	Kiefer Blvd to Jackson Rd	Sacramento County	Grade Separation		4,185	4.2																												
	Headway to Eschwege Rd	Sacramento County	Grade Separation		12.42	12.4																												
	Eschwege Rd to Sunrise Blvd	Sacramento County	Grade Separation		18.38	18.4																												
	Sunrise Blvd to Grant Lane Rd	Rancho Cordova	Grade Separation		3,375	3.4																												
Frederick Rd	Sunrise Blvd to Grant Lane Rd	Sacramento County	Grade Separation		3,375	3.4																												
	Mather Blvd to Kiefer Blvd	Sacramento County	Grade Separation		27	27.0																												
Village	Kiefer Blvd to Jackson Rd	Sacramento County	Grade Separation		4.86	4.9																												
	Rancho Cordova to Grant Lane Rd	Rancho Cordova	Grade Separation																															
Oak Ave	US State White Rock Rd	Folsom	Grade Separation		12,285	12.3																												
Scott Rd	US State to Eastern Valley	Folsom	Grade Separation		8,508	8.5																												
	Eastern Valley to White Rock Rd	Folsom	Grade Separation		3,24	3.2																												
Empire Ranch Rd	US State White Rock Rd	Folsom	Grade Separation		10.53	10.5																												
	White Rock Rd to Lathrop	El Dorado County	Grade Separation		9.72	9.7																												
Lathrop Rd	US State White Rock Rd	El Dorado County	Grade Separation	4.25		4.3	2.1	2.1																										
	White Rock to Empire Ranch Rd	El Dorado County	Grade Separation	12.75		12.8	6.4	6.4																										
LRT (Gold Line)	"Passing Track" East of Sunrise Sta	RT	15 min headway	0	57	57.0																												
	New Han Station	RT		0	0	0.0																												
	New Minichilli Station	RT		4	4.0																													
	Operational Costs	RT		73.4	73.4																													
Local Bus Service	Operational Costs	RT		12.3	449.8	453.1																												
	Capital Costs	RT		6.2	26.5	26.7																												
BRT	Operational Costs	RT		0.52	24.7	25.3																												
	Operational Costs	RT		0.52	24.7	25.3																												
Sheet B TOTAL COST							1175.7	219	249	20.3	44.5	94.2	63.5	87.5	55.3	70.7	50.3	62.4	28.7	28.7	44.0	48.4	37.8	40.9	43.2	58.2	62.2	35.9	32.9	32.9	32.9	32.9	32.9	

0000041

This page intentionally left blank

Near Term project costs total \$812 million. This includes \$340 million for Expected projects, \$424 million for Priority projects, and \$48 million in costs for project development activities for long term projects that need to get started within the near term time frame (2012). For all projects, the total cost through 2032 is \$2.4 billion. This includes \$552 million in operational costs for transit. Table 10 provides a breakdown of project costs by jurisdiction.

<b>Jurisdiction/Agency</b>	<b>Near Term Project Costs</b>	<b>Total Project Costs</b>
Caltrans	\$49 M	\$49 M
El Dorado County	\$96 M	\$184 M
Folsom	\$67 M	\$179 M
Rancho Cordova	\$350 M	\$766 M
Sacramento County	\$133 M	\$418 M
Regional Transit	\$117 M	\$805 M
<b>TOTAL</b>	<b>\$812 M</b>	<b>\$2,400 M</b>

Figure 9 illustrates project costs by jurisdiction and agency for each year and the cumulative total cost of all projects. Figure 10 shows these same annual costs except categorized as either a near term or long term project-related cost.

### **Funding**

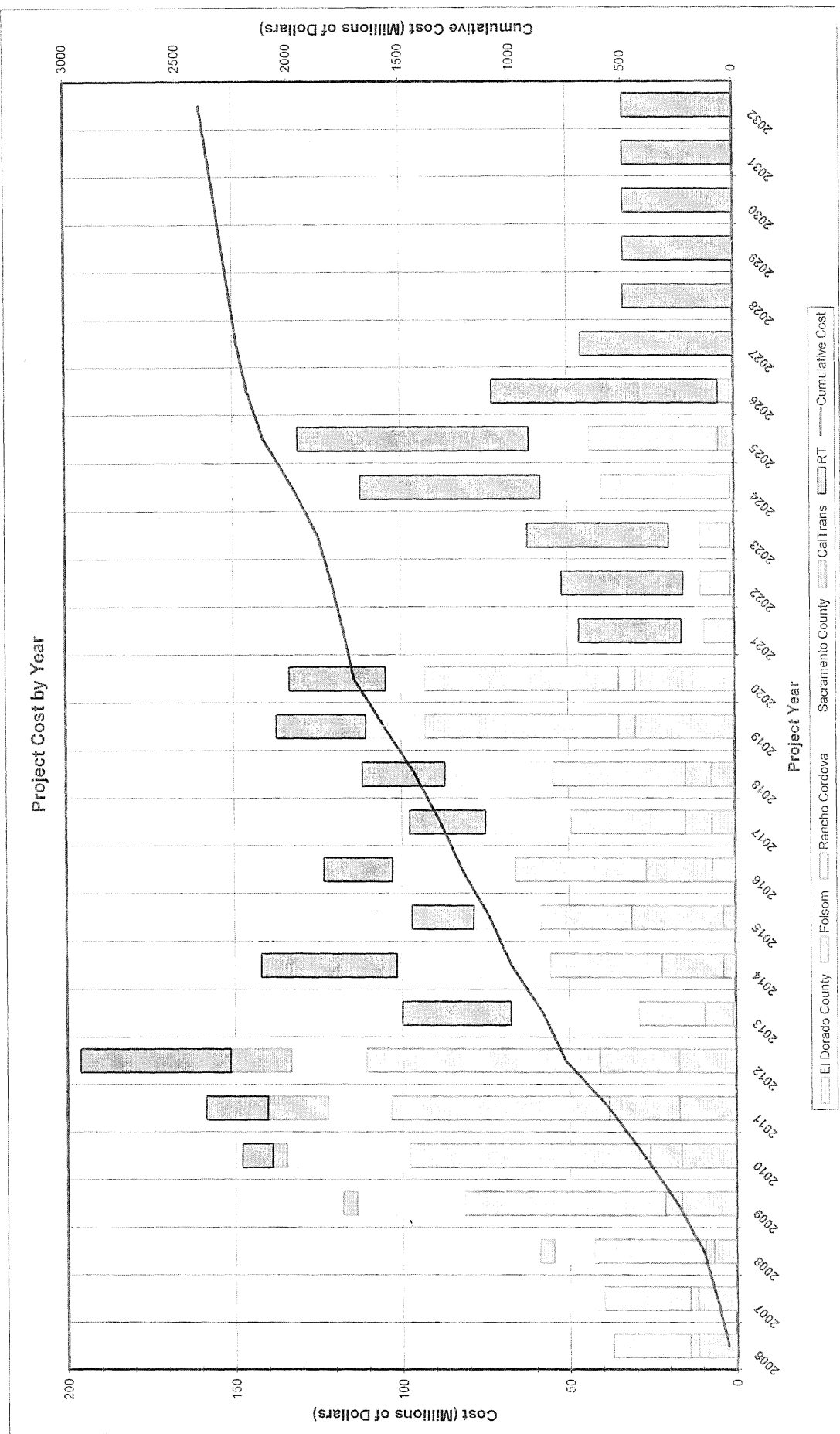
Potential funding sources for the projects include the following:

- Transportation Development Fees (Sacramento County, Rancho Cordova, Folsom, El Dorado County)
- Measure A
- Infrastructure Bond
  - o Corridor Management
  - o State and Local Partnership
- State Transportation Improvement Program (STIP)
- State Highway Operation and Protection Program (SHOPP)
- Federal Earmarks
- Transportation Development Act (TDA)
- Fare Box Revenue (for transit operations)
- Other

Each project that is eligible for transportation development fees was assigned an amount from this funding source. The amount was specified either as a percentage of project costs (e.g., 50%) or as a fixed dollar amount. Tables 11 and 12 contain the assumed

This page intentionally left blank

Figure 9

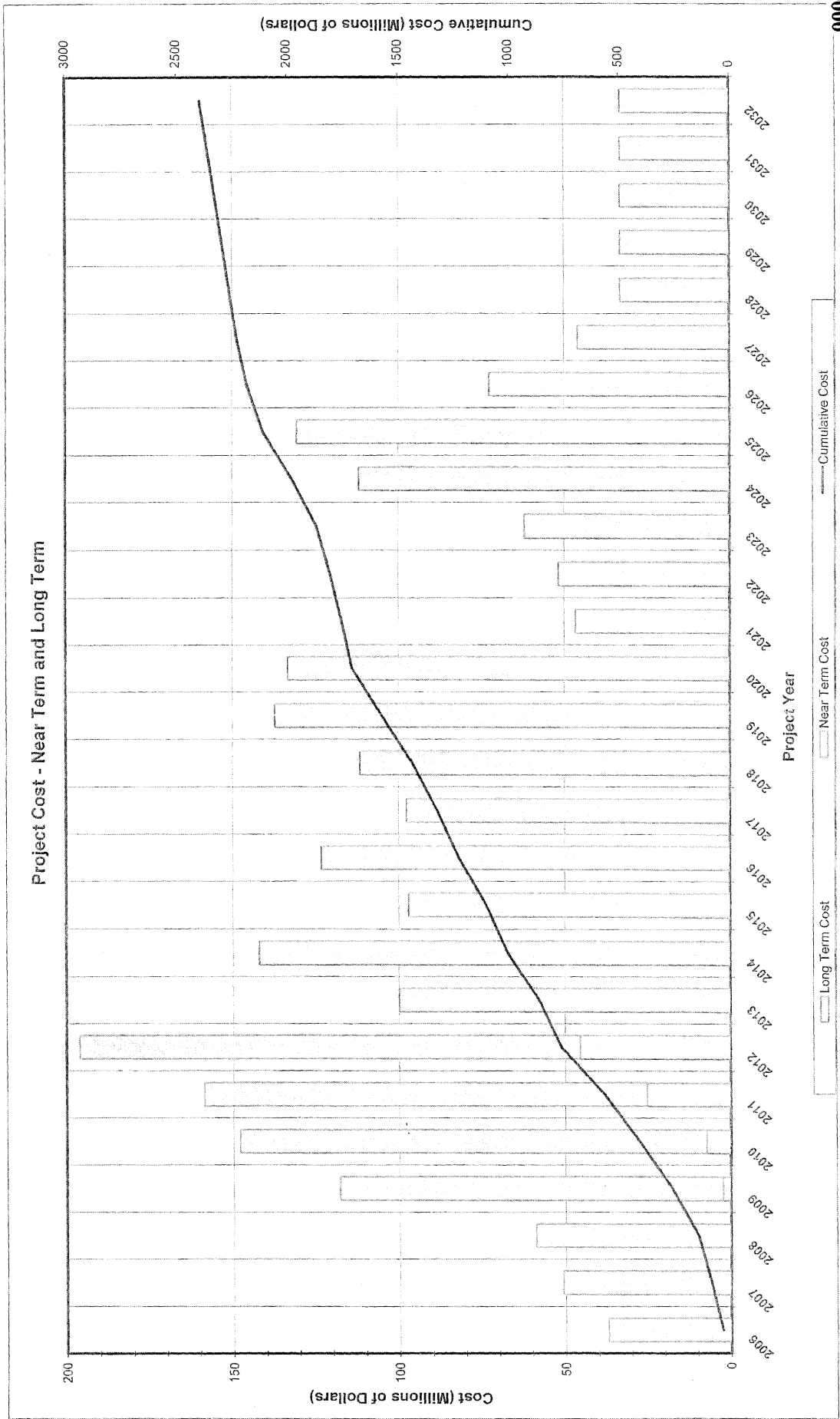


0000045

Version 6-27-06

**This page intentionally left blank**

Figure 10



0000047

**This page intentionally left blank**



Table 11  
Funding By  
Transportation  
Development Fee  
(Part 1)

Project Funding A- Transportation Development Fee			80 Corridor Mobility Partnership (Costs are in Millions)		YEAR																															
Type	Roadway	Segment	Jurisdiction	Project Years	Measure A	Non Funded	Trans Dev Fee	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032		
Facilities with BRT Components	Rancho Cordova Pkwy	US 50 to Easton Valley Pkwy	Rancho Cordova	12	0	1.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																						
		Easton Valley to White Rock Rd	Rancho Cordova	12	0	2.425	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																					
		White Rock to Rio Del Oro	Rancho Cordova	12	0	5.265	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																					
		Rio Del Oro to Douglas	Rancho Cordova	12	0	35.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																					
	Easton Valley Pkwy	Rancho C Pkwy & Easton Valley Inter BRT: 6.9 miles	Rancho Cordova	6	0	13.075	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																					
		Rancho Cordova Pkwy to City Limits	Rancho Cordova	9	0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																					
		City Limits to Hazel Ave	Sacramento County	8	0	0	15.3	1.3	1.3	3.8	3.8																									
		Hazel Ave to Prairie City Rd	Sacramento County	7	0	0	42.5									2.8	2.8	2.8	2.8	10.5	10.5	10.5	1.9	1.9												
	International Dr	Prairie City Rd to Oak Ave Parkway	Folsom	5	0	0	4.9									0.4	0.4	0.4	1.8	1.8																
		Oak Ave Pkwy to Empire Ranch	Folsom	5	0	0	27.0									2.3	2.3	2.3	10.0	10.0																
		BRT: 12.2 miles	RT	5	0	61.3	0.0																													
		RT	RT	5	0	61.3	0.0																													
Sunrise Blvd	US 50 to Fair Oaks Blvd	Sacramento County	4	0	6.8	6.8																														
	BRT: 5.6 miles	RT	6	0	37.69	0.0																														
	RT	RT	6	0	37.69	0.0																														
	RT	RT	6	0	37.69	0.0																														
White Rock Rd	Sunrise Blvd to Luyoung	Rancho Cordova	10	0	10.12	0.0																														
	Luyoung to Ranch Cordova	Rancho Cordova	10	0	24.76	0.0																														
	Rancho Cordova to City Limits	Rancho Cordova	10	0	12.15	0.0																														
	Rancho Cordova to City Limits	Sacramento County	10	0	6.68	6.68																														
	City Limits to Grant Line Rd	Sacramento County	10	0	5.87	5.87																														
	Grant Line Rd to Plains City Pkwy	Rancho Cordova	5	0	21.9	0.0																														
	Plains City Rd to Scott	Sacramento County	11	0	4.5	4.5																														
	Scott to El Dorado Co Line	Folsom	10	0	4.5	4.5																														
	Sacramento Co Line to Lathrop	El Dorado County	10	0	0	9.7																														
	Lathrop to Silva Valley	El Dorado County	10	0	0	9.7																														
	Hazard Extension	US 50 to Easton Valley Pkwy	Sacramento County	8	0	7.2	7.2																													
		Easton Valley Pkwy to White Rock Rd	Sacramento County	4	0	16.2	16.2																													
White Rock to International Dr		Rancho Cordova	5	0	9.75	0.0																														
International Dr to City Limits		Rancho Cordova	8	0	0.595	5.0																														
New Connector	City Limits to Douglas Rd	Sacramento County	9	0	0	6.8																														
	Lathrop Rd to Empire Ranch Pkwy	El Dorado County	5	0	13.75																															
	US 50 to Easton Valley Pkwy	Folsom	5	0	0	7.2																														
	Easton Valley to White Rock Rd	Folsom	5	0	0	6.6																														
US 50 Auxiliary Lanes	Sunrise Blvd to Hazel	Rancho Cordova	5	0	22.3	0.0																														
	Hazel to Folsom Blvd	Caltrans	5	0	6.8	0.0																														
	Folsom Blvd to Scott Road	Caltrans	5	0	41.9	0.0																														
	Empire Ranch to Silva Valley	El Dorado County	5	0	9.7	9.7																														
	Silva Valley to El Dorado Hills	El Dorado County	10	0	8.6	8.6																														
	Empire Ranch to El Dorado Hills	El Dorado County	5	0	2.4	2.4																														
	Empire Ranch to El Dorado Hills	Folsom	5	0	2.4	2.4																														
	Scott Rd. to Empire Ranch Rd	Folsom	5	0	5.7	5.7																														
US 50 Interchanges	Mather Field	Rancho Cordova	5	0	54.0	0.0																														
	Rancho Cordova Pkwy	Rancho Cordova	7	0	43.0	40.0																														
	Hazel Ave	Sacramento County	6	0	50.0	0.0																														
	Oak Ave Pkwy	Folsom	0	0	6.9	20.3																														
	Empire Ranch Rd	Folsom	6	0	7.1	21.3																														
	El Dorado Hills/Lathrop Rd	El Dorado County	5	0	14.4	14.4																														
Hazel Ave	US 50 to Gold Country Blvd	Sacramento County	4	0	9	9.0																														
Sheet A Trans Dev Fee FUNDING					363.4																															
TOTAL Trans Dev Fee FUNDING per Year (in Millions)					21.6	27.0	22.9	48.7	66.2	55.0	56.7	40.3	58.3	46.2	50.0	24.9	27.2	20.6	19.0	4.5	4.7	9.1	13.4	16.9	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Sheet A SUBTOTAL					9.5	11.7	14.0	32.8	35.1	36.1	41.6	15.2	19.1	22.8	34.9	34.9	27.2	20.6	16.2	0.8	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Sheet B SUBTOTAL					13.1	15.4	8.9	14.9	30.1	18.9	15.1	25.1	33.2	23.7	15.5	0.0	0.0	0.0	2.3	3.7	4.7	9.1	13.4	16.9	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (in Millions) A and B					37.1	60.7	58.9	117.8	147.9	173.8	211.1	78.7	126.8	96.9	133.2	97.5	111.5	137.2	133.2	46.5	51.7	61.9	111.8	130.8	72.5	46.8	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
Cumulative TOTAL (in Millions) A and B					37.1	67.8	149.7	264.5	412.3	586.1	797.2	875.9	953.7	1053.7	1216.5	1314.4	1425.9	1553.1	1695.3	1742.9	1794.6	1856.5	1928.4	2010.2	2101.7	2203.2	2315.7	2348.6	2381.5	2414.4	2447.3	2480.2	2513.1	2546.0	2578.9	2611.8

000049

This page intentionally left blank

Table 12  
Funding By  
Transportation  
Development Fee  
(Part 2)

Project Funding B- Transportation Development Fee													YEAR																										
50 Corridor Mobility Partnership (Costs are in Millions)													2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Roadway	Segment	Jurisdiction	Project Years	Measure A	Non Funded	Trans Dev Fee																																	
Sunrise Blvd	White Rock Rd to Douglas Rd	Rancho Cordova	5	0	14.4	19.0	2.0	2.0	2.0	2.0	2.0																												
	Frank Superpass at Douglas	Rancho Cordova	5	0	23.275	0.0																																	
	Douglas Rd to Kiefer Blvd	Rancho Cordova	10	0	26.75	5.0	1.3	0.9	0.9	0.9	0.9																												
	Kiefer Blvd to Jackson Rd	Rancho Cordova	12	0	29.695	5.0	0.4	0.4	0.4	0.9	0.9	0.9	0.9																										
	Jackson Rd to Grant Line Rd	Sacramento County	5	3.15	0	6.3																																	
Grant Line Rd	Grade Separation at White Rock	Rancho Cordova	5	0	12.42	0.0																																	
	White Rock Rd to Douglas	Rancho Cordova	4	0	4.34	7.0																																	
	White Rock Rd to Douglas	Sacramento County	4	3.9	3.9	3.8																																	
	Douglas Rd to Kiefer Blvd	Rancho Cordova	6	0	6.2	6.2	0.4	0.4																															
	Douglas Rd to Kiefer Blvd	Sacramento County	8	2.07	8.28	2.1	0.1	0.1	0.4	0.4																													
	Kiefer Blvd to Jackson Rd	Rancho Cordova	4	0	7.59	7.0																																	
Jagzer	Kiefer Blvd to Jackson Rd	Sacramento County	4	4.9	4.9	4.9																																	
	Douglas Rd to Kiefer Blvd	Rancho Cordova	6	0	10.06	5.6																																	
Americano Blvd	White Rock to Douglas Rd	Rancho Cordova	5	0	20.5	6.0																																	
	Douglas Rd to Kiefer Blvd	Rancho Cordova	5	0	11.3	3.0																																	
Douglas Rd	Market Field to Sunrise	Sacramento County	8	0	0	9.7																																	
	Sunrise to Americano Blvd	Rancho Cordova	5	0	5.09	13.0																																	
	Americano Blvd to Grant Line Rd	Rancho Cordova	5	0	6.26	4.0																																	
Chevy Chase Rd	Sunrise to Jagzer	Rancho Cordova	5	0	10.255	5.0	0.4	0.4	0.4																														
	Jagzer to Americano Blvd	Rancho Cordova	5	0	16.255	5.0	0.4	0.4	0.4																														
	Americano Blvd to Grant Line Rd	Rancho Cordova	4	0	7.695	0.0																																	
Kiefer Blvd	Bradshaw to Exchange Rd	Sacramento County	6	0	0	13.5																																	
	Exchange Rd to Eagles Nest Rd	Sacramento County	6	0	0	13.5																																	
	Eagles Nest to Sunrise Blvd	Rancho Cordova	6	0	0	0.0																																	
	Sunrise Blvd to Jagzer Rd	Rancho Cordova	3	0	0	10.0																																	
Eagles Nest Rd	Jagzer Rd to Grant Line Rd	Rancho Cordova	3	0	4.29	0.3																																	
	Douglas Rd to Kiefer Blvd	Sacramento County	6	0	0	13.5																																	
Jackson Rd	Kiefer Blvd to Jackson Rd	Sacramento County	4	0	0	4.2																																	
	Bradshaw to Exchange Rd	Sacramento County	5	0	6.2	6.2																																	
	Exchange Rd to Sunrise Blvd	Sacramento County	5	0	9.2	9.2																																	
	Sunrise Blvd to Grant Line Rd	Rancho Cordova	5	0	2.2	1.2																																	
Exchange Rd	Sunrise Blvd to Grant Line Rd	Sacramento County	5	0	2.2	1.2																																	
	Market Field to Kiefer Blvd	Sacramento County	4	0	0	27.0																																	
Village	Kiefer Blvd to Jackson Rd	Sacramento County	4	0	0	4.9																																	
	Rancho Cordova to Grant	Rancho Cordova	0	0	0	0																																	
Oak Ave	US 50 to White Rock Rd	Folsom	5	0	0	12.3																																	
	US 50 to Easton Valley	Folsom	5	0	0	5.5																																	
Scott Rd	Easton Valley to White Rock Rd	Folsom	5	0	0	3.2																																	
	US 50 to White Rock Rd	Folsom	5	0	0	10.6																																	
Empire Ranch Rd	White Rock Rd to Lafayette	El Dorado County	5	0	0	5.7																																	
	US 50 to White Rock Rd	El Dorado County	2	0	0	4.3	2.1	2.1																															
Lafayette Rd	White Rock to Empire Ranch Est	El Dorado County	2	0	0	12.8	6.4	6.4																															
	"Painting Truck" East of Sunrise Sta	RT	6	0	57	0.0																																	
LRT (of Gold Line)	New Haven Station	RT	5	0	0	0.0																																	
	New Marshall Station	RT	5	0	4	0.0																																	
	Operational Costs	RT	1	0	73.4	0.0																																	
	Operational Costs	RT	1	0	452.1	0.0																																	
Local Bus Service	Capital Costs	RT	1	0	28.7	0.0																																	
	Operational Costs	RT	1	0	24.3	0.0																																	
Sheet B Trans Dev Fee FUNDING						274.4	13.1	15.4	8.9	14.9	30.1	18.9	13.1	25.1	39.2	23.7	15.5	0.0	0.0	0.0	2.3	3.7	4.7	9.1	13.4	18.9	4.6	0.0	0.0	0.0	0.0	0.0							

0000051

**This page intentionally left blank**

allocation over time of transportation development fees by project. Table 13 summarizes the amount of transportation development fees identified by each jurisdiction.

<b>Jurisdiction</b>	<b>Fee Applied to Near Term Projects</b>	<b>Fee Applied to Total Projects</b>
El Dorado County	\$79 M	\$115 M
Folsom	\$43 M	\$139 M
Rancho Cordova	\$122 M	\$142 M
Sacramento County	\$55 M	\$242 M

Measure A is the voter-approved ½-cent sales tax funds that are to be used exclusively for transportation planning, design, construction, and operations and maintenance of transportation projects listed in the Sacramento County Transportation Expenditure Plan. The transportation projects that were assigned Measure A funds are as follows:

- Segments of White Rock Road and Grant Line Road that are consistent with the proposed I-5/99/50 Connector alignment
- Hazel Avenue improvements from Highway 50 to Gold Country Boulevard
- Sunrise Boulevard from Highway 50 to Fair Oaks Boulevard

These projects were allocated \$9 million in the near term and \$43 million total in Measure A funds.

The difference between estimated project costs and the funds available from transportation development fees and Measure A is the amount unfunded. Table 11 summarizes the cumulative unfunded amount as \$490 million in the near term and \$1.7 billion total. Figure 11 illustrates the funding sources by year, unfunded amounts, and cumulative project costs and funding.

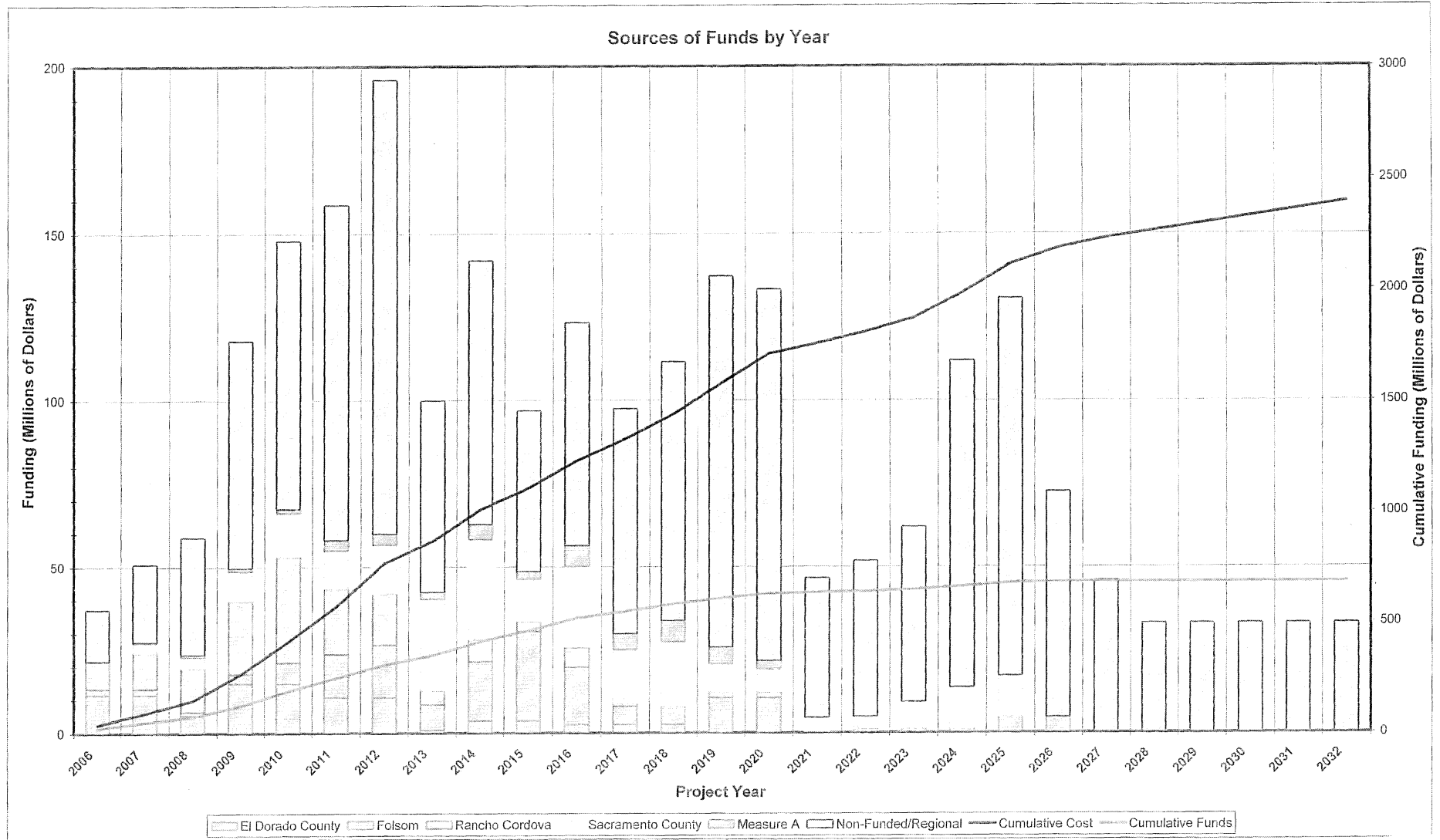
Other potential sources of funding (listed previously) are expected to apply to some of the proposed projects. This will reduce the funding “gap”. However, the amount available from these sources is unknown. Working together as a Partnership of public agencies and private partners will enhance the opportunity to bring other sources of funds to the transportation infrastructure needs of the sub-region.

## **8. Implementation Plan**

To implement a \$812 million transportation improvement program by 2012 will require a well-organized focused effort by all public jurisdictions and private partners. There are several organizational frameworks that could be considered for this purpose.

This page intentionally left blank

Figure 11



000055

Version 6-27-06

This page intentionally left blank



### Recommended Actions

- Continuation of the 50 Corridor Mobility Partnership. The effort by the Partnership to date has demonstrated the value in this cooperative arrangement between local jurisdictions, private partners and regional agencies. The implementation of the overall program of near term projects, both Expected and Priority, would benefit from the Partnership continuing, perhaps under a more formal MOU agreement.
- Connector JPA. As currently proposed, the Connector JPA would have all four Partnership jurisdictions as parties to the agreement plus the City of Elk Grove. The purpose of the JPA would be to implement the Connector between Elk Grove, Rancho Cordova and El Dorado County. Segments of White Rock Road and Grant Line Road are projects that are identified as priorities by the Partnership and that may also be part of the Connector alignment. The Connector JPA could be structured to have separate Project Authorities tiered within it that would focus on specific projects that are part of the overall Connector. A White Rock Road Project Authority would have responsibility for implementation of the White Rock Road segments including preliminary engineering, project-specific environmental documentation, final design, permitting, real estate acquisition, and project construction. Governance of the Project Authority would be established by the Connector JPA, but logically would consist of the Partnership's public jurisdictions. Separate cooperative agreements between the Project Authority and private partners could provide the mechanism to facilitate the synergy and benefits of public-private collective action for the timely implementation of White Rock Road improvements.

### Other Actions Considered but Not Recommended

- Separate Responsibilities (i.e., business as usual). This is the existing structure of each individual jurisdiction having exclusive responsibility for all aspects of planning, design, funding, and constructing the transportation facilities within their borders. Normal coordination between public agencies would continue. Private developers would follow the current development plan approval process with each responsible jurisdiction. But without the collective participation of multiple jurisdictions and private partners in the overall planning, funding and implementation, projects will be constructed in piecemeal fashion according to the priorities, resources and funding capabilities of the individual jurisdictions. The broader perspective that addresses overall transportation system performance and regional mobility, and that may provide additional resources and funding sources for timelier implementation, would be lost.
- Existing Joint Powers Authority (JPA). The existing Folsom – El Dorado County JPA could be used to implement projects that are of joint interest to the City of Folsom and El Dorado County. However, this would limit the benefit of collective action to the eastern portion of the study area and to the private partners that have proposed projects in that area.
- White Rock Road JPA. A new JPA, formed to implement the improvements along White Rock Road, would have all four public jurisdictions as members of the governing board. This organizational structure would facilitate the planning, design, funding and construction of White Rock Road from El Dorado County to Rancho Cordova. Other transportation projects from the Partnership's priority list might also

be implemented by a White Rock Road JPA. But the JPA structure does not allow private entities to be part of the governing body. Assuming a Connector JPA will be formed, a tiered Project Authority for White Rock Road (described above) would provide the same focus on timely implementation of White Rock Road but without the complications of forming another JPA.

Regardless of the organizational structure adopted, there is a need to move forward quickly with the project development of priority projects. Major new development projects are coming online in the near future. Transportation systems that accommodate such planned growth must be in place to avoid adding congestion to Highway 50 and other major arterials in the study area and to meet the goal of improved mobility within the corridor.

## 9. Next Steps

The 50 Corridor Mobility Partnership has successfully accomplished several major goals and objectives:

- Key transportation projects have been identified that will best address future mobility in the study area
- The contribution of these projects in reducing congestion and improving system wide performance has been quantified
- Both roadway and transit facilities have been included in the long term (2030) and near term (2012) transportation improvements
- The proposed improvements are compatible with the principles and assumptions of the regional Blueprint and each of the jurisdiction's general plans
- Project costs have been estimated with potential sources of funding identified
- Alternative implementation strategies have been identified

The *Next Steps* in this process is the initiation of or bringing to completion the following activities:

- There is a substantial funding "gap" between the estimated cost of the priority projects and the amount of funding from identified sources (transportation development fees and Measure A). Additional effort is required to further define other sources of funds that could be applied to individual projects. This would also include consideration of innovative public-private financing arrangements. The best chance of securing additional funding is through a multi-jurisdictional effort like the Partnership. Phase Two of the 50 Corridor Mobility Project will focus on refining estimated project costs and potential sources of revenue and will develop an overall finance plan for the program.
- The organizational structure for implementation of priority projects needs to be defined. This may involve the formation of a White Rock Road Project Authority

under the proposed Connector JPA in addition to the continuation of the 50 Corridor Mobility Partnership.

- Time is of the essence. Project development activities need to get started quickly, especially on the priority projects that require long lead time for environmental clearance and that need to be incorporated into the private development plans. Specific project actions that should start immediately are the following:
  - Collectively initiate preliminary design and environmental studies in support of an environmental document for White Rock Road.
  - Initiate scoping documents for US 50 auxiliary lanes within the study area and Hazel/US 50 interchange modifications and Hazel extension to Easton Valley Parkway.
  - Consider advance funding from private sector to begin such project development work in a timely fashion.

The Partnership has provided a valuable service by defining the transportation infrastructure needed to reduce congestion and improve mobility within the study area. These *Next Steps* activities will allow the Partnership to bring its effort to a logical and successful conclusion.

