

## **CHAPTER 1: PURPOSE OF AND NEED FOR TRANSPORTATION IMPROVEMENTS**

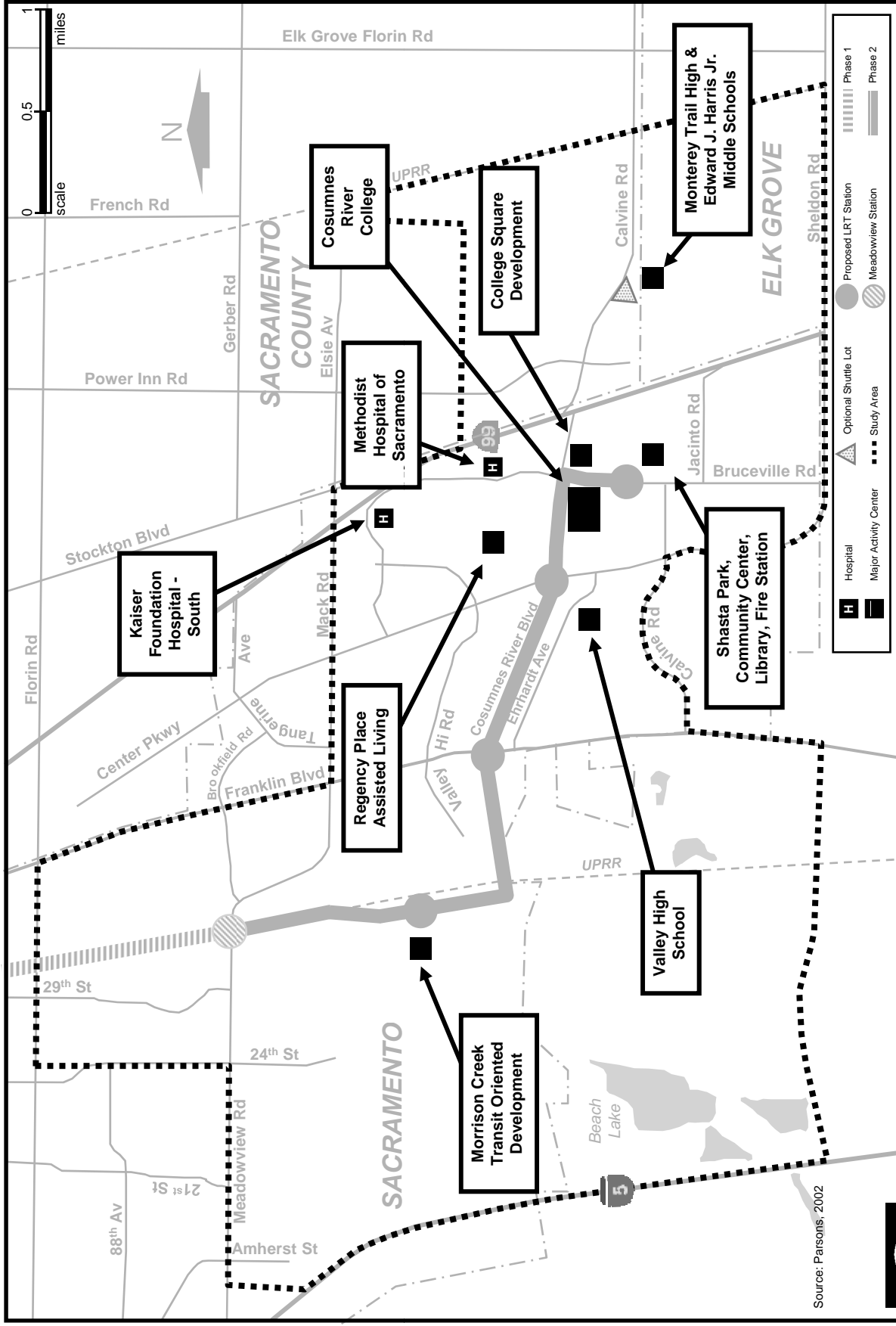
A Purpose and Need statement identifies and describes the transportation problem(s) that a proposed action is intended to address and specifies the underlying purposes of and need for the proposed action. In this case, the proposed action is the Locally Preferred Alternative Phase 2 (LPAP2) Light Rail Transit (LRT) extension of the Sacramento LRT system 4.3 miles into Southern Sacramento, with four LRT stations and associated facilities (e.g., park-and-ride lots) and amenities. As a fundamental requirement of the National Environmental Policy Act (NEPA), the Purpose and Need statement provides a basis and tool for evaluation of alternatives to the proposed action and the basis and framework for decision-making regarding the proposed action. This purpose and need statement also addresses the CEQA Guidelines Section 15124 (b) provision for a statement of project objectives.

### **1.1 PURPOSE OF THE PROPOSED ACTION**

The purpose of the LPAP2 LRT extension is to improve public transit services in the fast-growing South Sacramento Corridor to provide faster, more convenient access between South Sacramento and downtown Sacramento as well as to other corridor activity centers.

Meeting this primary project purpose would also address the following related purposes that were developed from the original goals and objectives of the South Sacramento Corridor, as defined in the original corridor environmental document. Subsection 7.7.1, Goals and Objectives, presents a comprehensive set of the original goals and objectives from the 1994 *South Sacramento Corridor AA/DEIS/DEIR*.

- Enhance regional connectivity through expanded, interconnected LRT services along the primary travel corridors in Sacramento County, by connecting the project area with Interstate 80 (I-80) east (existing Northeast LRT Line), US 50 (existing Folsom LRT Line with extensions), and State Route 99 (SR 99)/I-5.
- Accommodate future travel demand in the corridor by increasing transit capacity and expanding modal options (by considering LRT and other enhanced transit services along with conventional transit).
- Reduce the growth in increasing traffic congestion on SR 99 and I-5 between downtown Sacramento and the communities of Elk Grove, Laguna Creek, and Laguna West, and on the major north-south arterials in South Sacramento, such as Franklin Boulevard and Bruceville Road.
- Improve regional air quality by reducing auto emissions.
- Improve mobility options to employment, education, medical, and retail centers for corridor residents, in particular low-income and ethnic minority populations and provide a mobility option to the use of congested highways.
- Support local economic and land development goals by increasing transit service to current and future corridor activity centers. Figure 1.1-1 depicts major activity centers in the South Sacramento Phase 2 Corridor.



**MAJOR ACTIVITY CENTERS IN THE SOUTH SACRAMENTO  
PHASE 2 CORRIDOR**  
Figure 1.1-1

South Sacramento Corridor  
Phase 2 Project



Extending LRT service south from the South Sacramento Corridor Phase 1 terminus at Meadowview Road would provide much needed additional capacity to address an anticipated growth in corridor person trips of over 50 percent by the year 2030. When operations begin in or around 2012, the service would connect South Sacramento residents with approximately 39 miles of LRT lines serving the north, east, and south sections of Sacramento County, thereby enhancing direct public transit access to other regional activity centers. Future extensions could expand the LRT network further, from Downtown Sacramento north to the Sacramento Airport and from the LPAP2 LRT line south into Elk Grove. In the long term, the light rail system is planned to extend across the County line into neighboring Placer and Yolo Counties.

The project would complement and expand existing travel choices in South Sacramento. As a competitive alternative to the private auto (in terms of both the cost and time for travel reliability), LPAP2 would divert auto trips from heavily traveled roadways and ease traffic congestion, in particular on SR 99 and I-5. By allowing more trips to be made on transit to the downtown Sacramento commercial and office core, the growth in parking requirements would lessen and circulation impacts would be less severe. A secondary effect of reduced traffic, roadway congestion, and parking requirements would be a decrease in auto emissions and concomitant improvement in air quality in what is already a severe non-attainment area for ozone, carbon monoxide, and particulate matter.

The LRT Project is expected to generate 2,535 new transit trips and 2,273 hours of user benefit (on an average weekday). It will improve air quality in a region currently designated as a severe non-attainment area for ozone and moderate non-attainment area for PM<sub>10</sub> under the federal Clean Air Act

Improved transit service (increased capacity and more reliable service) to Cosumnes River College would directly serve a community college, residential areas, the College Marketplace Development, and other commercial development. Improved service on the corridor could intercept trips on SR 99 at the Cosumnes River College. It would improve access to the State, County, and City office district and to adjoining retail and entertainment/convention districts in downtown Sacramento. Improved access is also an important precondition for shaping land uses and successfully focusing business development that leads to increased employment opportunities.

Evaluation of the project with respect to the project purpose and related needs above and the goals and objectives referenced below is included in Section 7.7, Evaluation of Alternatives. This project purpose is consistent with the goals and objectives described in the *South Sacramento Corridor AA/DEIS/DEIR*, published in September 1994, and with the *Sacramento Regional Transit Multi-Corridor Study* published in September 2001. The project conforms to stated policies of the City of Sacramento and the County of Sacramento. Both entities promote transit as a key feature for orderly and sustainable growth. The *Sacramento County General Plan* supports transit-oriented development based upon implementation of future light rail lines and transit stops. The South Sacramento Corridor Project and other elements of the Sacramento Regional Transit District's rail program are included in the *Sacramento County General Plan*, the Sacramento Area Council of Government's (SACOG's) *Metropolitan Transportation Plan*, and the California State Transportation Improvement Program.<sup>1</sup>

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<sup>1</sup> The *General Plan* was adopted by County Board Resolution No. 93-1577 on December 15, 1993; an update affecting several elements was begun in 2001 with a three-year schedule to completion. The most recent *Metropolitan Transportation Plan* (MTP) was adopted in July 2002. The MTP process identifies regional transportation improvement projects for the State Transportation Improvement Program (STIP), which is updated biannually.

## 1.2 NEED

The South Sacramento Corridor is located within one of the fastest-growing urban areas in the State of California and the nation. According to the U.S. Census, the Sacramento consolidated metropolitan statistical area population grew from 1.5 million to 1.8 million, a 21 percent increase between 1990 and 2000. The South Sacramento Corridor has been a primary focus of metropolitan growth and includes major development and redevelopment opportunities that are expected to attract a large share of future population and employment activity.

### 1.2.1 South Sacramento Corridor

Metropolitan Sacramento is divided by the Sacramento and American Rivers. The Sacramento River runs generally north-south and is the boundary between Sacramento County on the east and Yolo County on the west. The American River runs generally east-west and separates southern from northern Sacramento.

The "South Sacramento Corridor" is defined as the area east of the Sacramento River and south of the Downtown Sacramento within Sacramento County. The eastern boundary of the corridor is approximately Elk Grove-Florin Road and Watt Avenue, expanding to the Cosumnes River in the vicinity of Elk Grove, and the southern limit is roughly Kammerer Road. The corridor, shown in Figures 1.2-1 and 1.2-2, includes both incorporated and unincorporated areas. The City of Sacramento and the City of Elk Grove are the incorporated areas. Unincorporated communities include Fruitridge, Florin, and Laguna Creek.

The South Sacramento Corridor is subdivided into two subareas for data tabulation purposes. The Phase 1 subarea lies north of Meadowview and Mack Roads, and corresponds to the South Sacramento Corridor Phase 1 light rail extension (open for revenue service in 2003). The Phase 2 subarea lies south of Meadowview and Mack Roads, and constitutes the area most directly served by the alternatives under consideration in this document.

### 1.2.2 Current and Future Population and Employment

The South Sacramento Phase 2 Corridor is the fastest growing portion of Sacramento County. Elk Grove, at the south end of the corridor, is the fastest growing community in California, and the Sacramento Region is the third fastest growing region in the state. As shown in Figure 1.2-3, total households in the Phase 2 Corridor are projected to more than double from 82,400 in Year 2000 to 179,100 by 2030. Employment is projected to grow even faster, increasing from 36,800 in Year 2000 to over 104,800 by Year 2030.

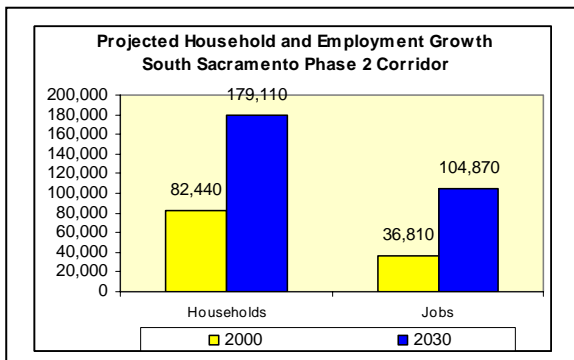
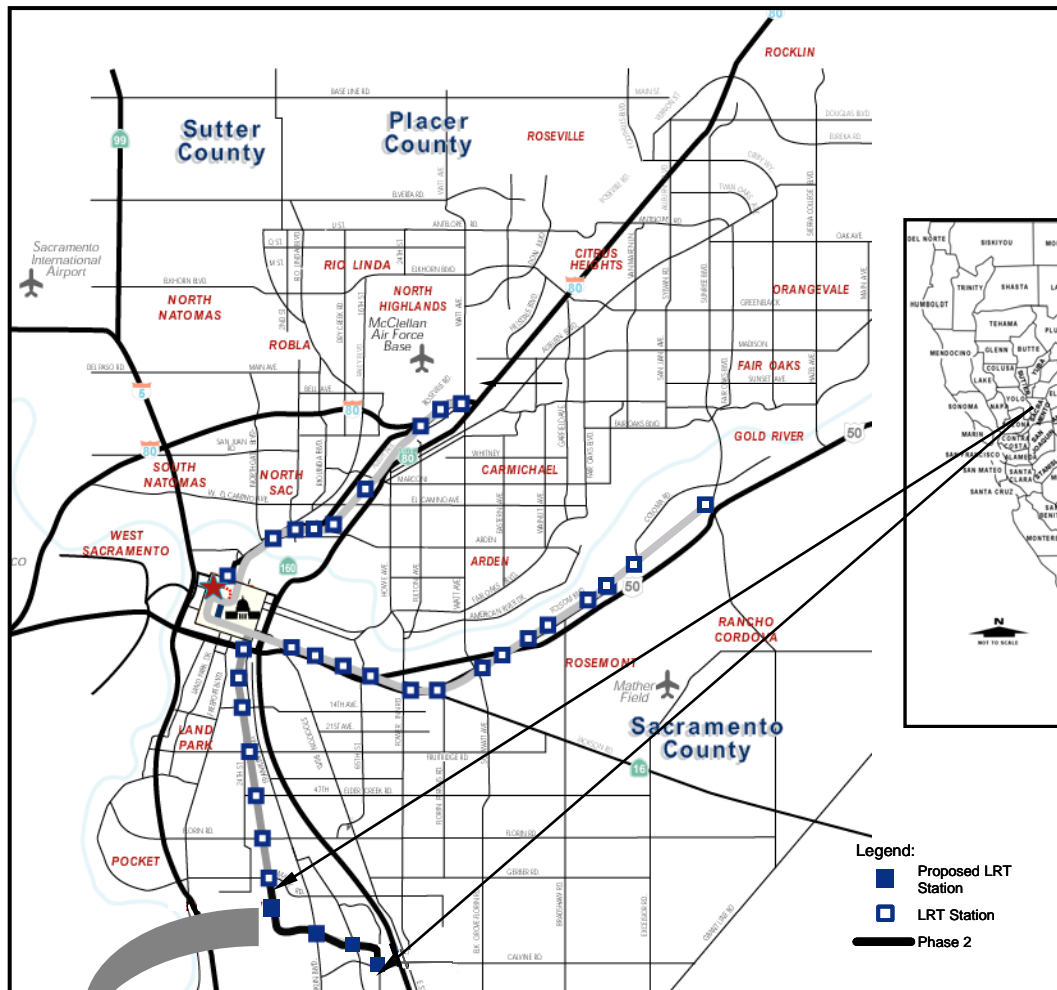
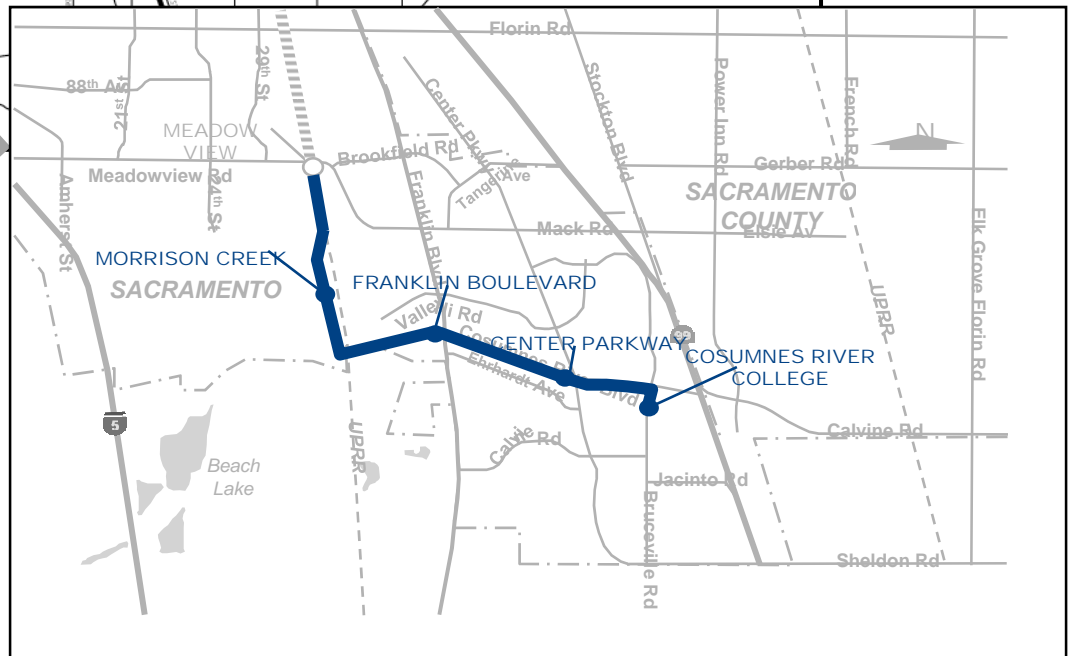
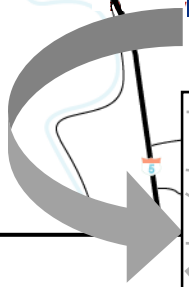


Figure 1.2-3: Growth in Corridor

In addition, employment in Downtown Sacramento – a primary destination for Phase 2 Corridor residents – is expected to increase by 55 percent (over 30,000 jobs) between 2000 and 2030, with 289,000 new person trips to Downtown added over this period. *This increase in jobs attracts over 156,000 new person trips to the CBD Core with more than 22 percent produced from the South Corridors.*

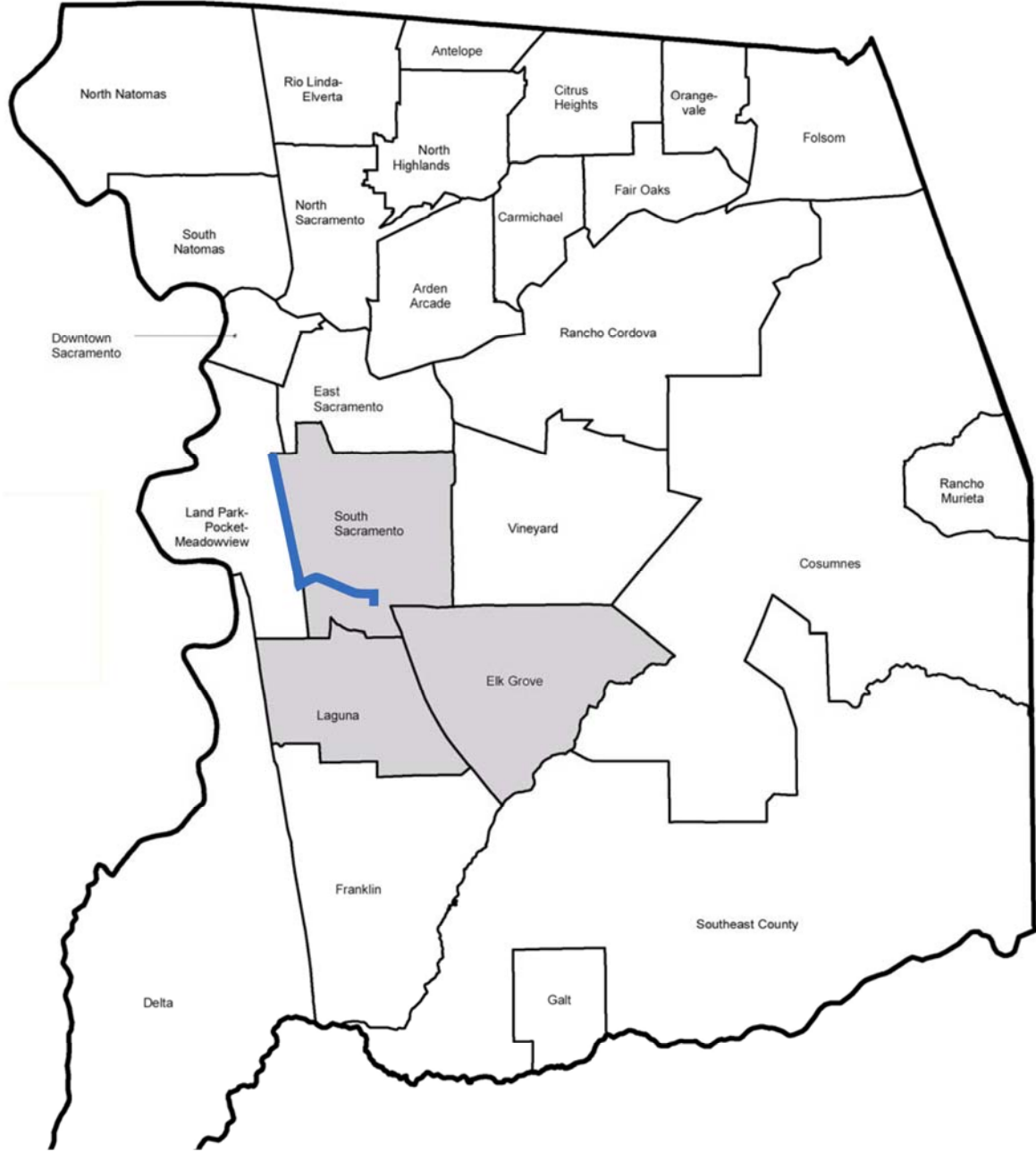


- Legend:
- Proposed LRT Station
  - LRT Station
  - Phase 2



South Sacramento Corridor  
Phase 2 Project

**SOUTH SACRAMENTO CORRIDOR**  
**Figure 1.2-1**



Legend:  
■ Regional Analysis Districts Served by South Sacramento Corridor Phase 2 Project  
— South Sacramento Corridor Phase 2 Project

Source: SACOG, 2001, and Parsons, 2003



South Sacramento Corridor Phase 2 Project

# SACRAMENTO COUNTY REGIONAL ANALYSIS DISTRICTS

## Figure 1.2-2

Meanwhile, City of Sacramento parking policies continue to purposefully restrict the growth of downtown's parking supply as per the Central City Parking Master Plan's specific objective as stated by the City Council; ensuring that parking supply and rates support transit, other alternative modes, and air quality. These policies result in parking demand growth outpacing increases in supplied parking. The anticipated outcomes are parking cost increases and shifts in parking supply from all-day (employee) parking to short-term (business and visitor) parking; both of which serve to make transit more attractive. To illustrate this trend, the City raised parking prices by 25% (from \$1.00 to \$1.25 per hour) on all Pay-&-Display stations and at all traditional parking meters, and raised parking citation fines by \$5.00 as of July 1 2008. The LRT Project helps to alleviate this by reducing the need for downtown parking by 1,300 spaces over the No Build alternative and by 900 spaces over the TSM alternative. Given the planned provision of park-and-ride facilities along the alignment (particularly the 2,000-space parking garage at CRC just off of Route 99, a major parallel facility for travel downtown), a significant level of travel-time benefits are attributable to this market. Approximately 10 percent of travel-time benefits are for trips destined for the corridor itself, with reverse-commute trips ending at CRC representing the largest single corridor market.

Table 1.2-1 summarizes population and employment trends in the South Sacramento Corridor and in the rest of the Sacramento region.

<b>Table 1.2-1: Current and Future Households and Employment</b>						
<b>Geographic Area</b>	<b>2000</b>	<b>% of Total</b>	<b>2030</b>	<b>% of Total</b>	<b>Growth</b>	<b>% Growth</b>
<b>Households</b>						
South Sacramento Corridor						
Phase 1 Area	58,710	9.0%	73,730	6.5%	15,020	25.6%
Phase 2 Area	82,440	12.7%	179,110	15.8%	96,670	117.3%
Total Corridor	141,150	21.7%	252,840	22.3%	111,690	79.1%
Downtown Area						
CBD Core	3,470	0.5%	4,910	0.4%	1,440	41.5%
Rest of Downtown	13,630	2.1%	19,400	1.7%	5,770	42.3%
Downtown Total	17,100	2.6%	24,310	2.1%	7,210	42.2%
Rest of Region	493,320	75.7%	854,890	75.5%	361,570	73.3%
<b>Total Region</b>	<b>651,570</b>	<b>100.0%</b>	<b>1,132,040</b>	<b>100.0%</b>	<b>480,470</b>	<b>73.7%</b>
<b>Employment</b>						
South Sacramento Corridor						
Phase 1 Area	45,810	5.7%	60,260	4.3%	14,450	31.5%
Phase 2 Area	36,820	4.6%	104,870	7.5%	68,050	184.8%
Total Corridor	82,630	10.3%	165,130	11.8%	82,500	99.8%
Downtown Area						
CBD Core	55,010	6.9%	85,000	6.1%	29,990	54.5%
Rest of Downtown	35,740	4.5%	49,100	3.5%	13,360	37.4%
Downtown Total	90,750	11.3%	134,100	9.6%	43,350	47.8%
Rest of Region	629,050	78.4%	1,101,010	78.6%	471,960	75.0%
<b>Total Region</b>	<b>802,430</b>	<b>100.0%</b>	<b>1,400,240</b>	<b>100.0%</b>	<b>597,810</b>	<b>74.5%</b>
<i>Source: SACOG, data used for preparation of the 2006 Metropolitan Transportation Plan.</i>						

The Phase 2 subarea is expected to experience a more substantial residential and employment growth. Households are projected to increase from 82,440 in Year 2000 to *179,110* in Year *2030*, an increase of about *117.3* percent. Employment is projected to increase from 36,820 to *104,870*, an increase of *68,050* or *184.8* percent, over the same time period.

### 1.2.3 Current and Future Travel Demand

Person trip demand in the LPAP2 subarea is expected to grow by approximately *124* percent between 2000 and *2030* as shown in Table 1.2-2. Trips that have at least one trip end in the subarea are expected to total *1.9* million per day by *2030*. Over *65* percent of these will be totally within the subarea. Of the rest, the majority will have the other end in the South Sacramento Corridor Phase 1 subarea, or U.S. 50 corridor. The existing highway and transit systems will not be able to accommodate this growth in travel demand without significant improvements.

<b>Table 1.2-2: Person Trip Demand in South Sacramento Corridor</b>				
<b>SSCP2 Trips to/from...</b>	<b>HBW</b>	<b>All Other</b>	<b>Total</b>	<b>% of Total</b>
<b>Year 2000</b>				
LPAP2 Area	33,679	445,639	479,318	56.5%
Downtown Sac.	20,325	17,914	38,239	4.5%
SSCP1 Area	18,409	116,812	135,221	15.9%
Watt I-80	9,917	15,864	25,781	3.0%
Folsom/US-50	31,635	61,068	92,703	10.9%
<u>All Other Corridors</u>	<u>28,112</u>	<u>48,407</u>	<u>76,519</u>	<u>9.0%</u>
<b>Total</b>	<b>142,077</b>	<b>705,704</b>	<b>847,781</b>	<b>100.0%</b>
<b>Year 2030</b>				
LPAP2 Area	<i>111,376</i>	<i>1,169,244</i>	<i>1,280,620</i>	<i>67.3%</i>
Downtown Sac.	<i>33,148</i>	<i>30,242</i>	<i>63,390</i>	<i>3.3%</i>
SSCP1 Area	<i>28,560</i>	<i>179,277</i>	<i>207,837</i>	<i>10.9%</i>
Watt I-80	<i>11,956</i>	<i>23,545</i>	<i>35,501</i>	<i>1.9%</i>
Folsom/US-50	<i>50,090</i>	<i>126,744</i>	<i>176,834</i>	<i>9.3%</i>
<u>All Other Corridors</u>	<u><i>50,463</i></u>	<u><i>87,789</i></u>	<u><i>138,252</i></u>	<u><i>7.3%</i></u>
<b>Total</b>	<b><i>285,593</i></b>	<b><i>1,616,841</i></b>	<b><i>1,902,434</i></b>	<b><i>100.0%</i></b>
<b>Percent Increase</b>				
LPAP2 Area	<i>230.7%</i>	<i>162.4%</i>	<i>167.2%</i>	
Downtown Sac.	<i>63.1%</i>	<i>68.8%</i>	<i>65.8%</i>	
SSCP1 Area	<i>55.1%</i>	<i>53.5%</i>	<i>53.7%</i>	
Watt I-80	<i>20.6%</i>	<i>48.4%</i>	<i>37.7%</i>	
Folsom/US-50	<i>58.3%</i>	<i>107.5%</i>	<i>90.8%</i>	
<u>All Other Corridors</u>	<u><i>79.5%</i></u>	<u><i>81.4%</i></u>	<u><i>80.7%</i></u>	
<b>Total</b>	<b><i>101.0%</i></b>	<b><i>129.1%</i></b>	<b><i>124.4%</i></b>	
Source: DKS Associates, <i>2008</i>				

Travel forecasts show that nearly three-quarters of all travel time benefits generated by the LPAP2 LRT Extension project are attributable to commuters destined for downtown Sacramento, with LRT

providing service on a dedicated right-of-way that is competitive with express bus travel times on congested highway facilities for such trips.

### 1.2.3.1 FREEWAY AND ARTERIAL TRAFFIC

Freeways will be required to handle most of the corridor’s travel growth and the region has committed to a series of freeway improvements (see Section 2.2.3). Four major freeways serve South Sacramento. North-south facilities include I-5 and SR 99, both providing access to the south and west sides of downtown Sacramento. East-west facilities include Business 80 and US 50. Business 80 runs along the south side of downtown Sacramento and is coincident with SR 99 and US 50 until these facilities diverge approximately one mile east of the downtown. Business 80 turns north, SR 99 turns south, and US 50 continues to the east.

Because they run north-south through the entire length of the corridor, I-5 and SR 99 are the critical freeway links in the South Sacramento roadway network and the most affected by corridor growth. I-5 is currently a 10-lane facility north of Business 80, six lanes south to Laguna Boulevard, then four lanes to the County line. Existing average daily traffic south of Meadowview Road is *115,000* vehicles per day (See Table 1.2-3).

Location	Year 2000			Year 2030			Increase
	Count ADT	Lanes Mixed Flow (HOV)	LOS/ V/C	Projected ADT	Lanes Mixed Flow (HOV)	LOS/ V/C	Percent Growth
<b>SR 99</b>							
<i>Florin to Mack</i>	<i>165,000</i>	4(2)	F <i>1.72</i>	<i>205,400</i>	4(2)	F <i>1.96</i>	<i>24%</i>
<i>Mack to Calvine</i>	<i>136,000</i>	4(2)	F <i>1.42</i>	<i>175,700</i>	4(2)	F <i>1.68</i>	<i>29%</i>
<i>Calvine to Sheldon</i>	<i>132,000</i>	4(2)	F <i>1.38</i>	<i>152,900</i>	4(2)	F <i>1.46</i>	<i>16%</i>
<i>Sheldon to Laguna</i>	<i>122,000</i>	4(2)	F <i>1.27</i>	<i>149,000</i>	4(2)	F <i>1.42</i>	<i>22%</i>
<b>I-5</b>							
<i>Florin to Meadowview</i>	<i>107,000</i>	6(2)	D <i>0.79</i>	<i>162,900</i>	6(2)	F <i>1.13</i>	<i>52%</i>
<i>Meadowview to Laguna</i>	<i>115,000</i>	6(0)	E <i>0.96</i>	<i>172,400</i>	6(0)	F <i>1.44</i>	<i>50%</i>

Source: DKS Associates, 2007.

Traffic volumes are projected to increase substantially throughout the length of I-5 as the area grows. By 2030, average daily traffic will be on the order of *172,000* vehicles south of Meadowview Road, a *50* percent increase. The rapid growth in traffic expected between Meadowview Road and Laguna Boulevard is a direct reflection of the considerable residential and employment growth projected for the area and southern Sacramento County in general.

SR 99 will experience similar patterns of traffic growth by 2030. This facility is six lanes between Florin Road and Elk Grove Boulevard, including two high occupancy vehicle (HOV) lanes, one in each direction. Access to this freeway within the corridor area is primarily via interchanges at Mack Road and Cosumnes River Boulevard/Calvine Road. The average daily traffic volume on SR 99 south of

Cosumnes River Boulevard/Calvine Road is about *136,000* vehicles per day. SR 99 traffic is projected to reach *175,700* vehicles daily south of Cosumnes River Boulevard/Calvine Road in *2030*, a *29* percent increase.

The projected growth in traffic will produce a steady deterioration in conditions in coming years. I-5 is currently below capacity between Meadowview and Laguna, but severe congestion is projected for *2030* operations south of Meadowview. SR 99 is currently over capacity. During the 1990s, SR 99 was widened to accommodate High Occupancy Vehicle (HOV) lanes from Elk Grove Boulevard north to the Sacramento Central City. However, no additional improvements are planned for this section of SR 99 by *2030*. The projected increase in volumes will cause traffic congestion on SR 99 to expand to more hours of the day and extend southward to Elk Grove. By *2030*, SR 99 will suffer severe congestion during peak periods over the length of the corridor. Projected demand volume-to-capacity will exceed 1.0 (indicating more demand for travel than the roadway can physically accommodate) for all segments of I-5 and SR 99 in the study area. Freeway level of service (LOS) will be "F," reflecting low speeds and frequent delays due to queuing. This freeway congestion will cause traffic diversions to numerous parallel arterial roadways in the corridor and thereby add to the anticipated congestion levels along those roadways.

Major arterials serving South Sacramento will also experience increasing congestion as the area continues to develop. The widening of Bruceville Road and Cosumnes River Boulevard and other future roadway improvements will help accommodate projected growth although levels of service at some intersections will degrade to LOS D or E conditions even with the planned improvements.

**1.2.3.2 PUBLIC TRANSIT SERVICES**

RT proposes to improve its transit services substantially in South Sacramento and elsewhere. The South Line LRT Phase 1 was opened for service in September 2003. Table 1.2-4 shows current and projected future transit trips in the corridor. Transit boardings are expected to more than triple between 2000 and 2030, while linked transit trips are expected to grow by 130 percent.

<b>Table 1.2-4: Transit Riders per Day in South Sacramento Corridor No-Action Alternative</b>		
<b>All Transit Trips</b>	<b>2000</b>	<b>Projected 2030</b>
Boardings	14,300	45,700
Linked Transit Trips	11,000	25,300
Source: DKS Associates, May 2004.		
Note: Data shown is for No-Action Alternative, for more information see Tables 3.2-6 and 3.2-7.		

Express bus demand from Elk Grove to downtown Sacramento is currently running over capacity. Review of April and May, 2002 ridership data for RT express lines 52, 59, and 60 indicated that lines 52 and 60 are running over their seated capacity per trip while line 59 is running at 80 percent of seated capacity. The overloading of express buses is likely to increase due to the ongoing rapid growth in the area fueling increased commuting to downtown Sacramento jobs

Given the expected highway congestion, these trip data emphasize the need for efficient transit service. The LPAP2 LRT Alternative's superior system continuity and operation on a separate guideway rather than on congested streets and freeways provide travel time savings over the bus-based TSM Alternative. Compared to the TSM Alternative, the LPAP2 provides transit travel time savings of 3 to 27 percent for trips to Downtown Sacramento from areas in the LPAP2 Corridor. System-wide travel time savings (calculated using FTA's SUMMIT software) show that the total travel time savings for the LPAP2, relative to a TSM Alternative, are 2,273 hours per weekday, or 668,262 hours per year.

Ninety-five percent of the time savings accrue to trips beginning in the LPAP2 Corridor. For trip destinations, 74 percent of the time savings accrue to trips ending in Downtown Sacramento; nine percent to trips ending in the LPAP2 Corridor; 10 percent to trips ending in the Phase 1 Corridor; and 6 percent to trips ending in the Folsom/ US 50 Corridor.

The biggest obstacle to realizing projected transit ridership is likely to be the problems faced by buses operating in mixed-flow traffic on congested roadways. Bus travel times will increase (and likely discourage transit use) unless buses can operate apart from the mixed-flow traffic stream. Access to HOV lanes may allow faster travel, but congested arterials feeding the major HOV facilities (e.g., SR 99) and within downtown Sacramento will continue to affect speeds adversely. Travel time studies have shown that bus transit trips between major activity centers in the South Sacramento Corridor would typically be five to 30 minutes longer than transit trips using exclusive right-of-way, such as the proposed LPAP2.

#### **1.2.4 Air Quality**

Increasing congestion and slowing travel times for both auto and transit threaten to worsen air quality in the region. Metropolitan Sacramento currently has the tenth worst air quality in the United States and is an Environmental Protection Agency designated non-attainment area for ozone. Automobiles are responsible for 70 percent of this air pollution.

*Table 1.2-5 presents three years of data from the Sacramento – T Street and Del Paso Manor air monitoring stations to demonstrate pollution trends. SO<sub>2</sub> data are from the Del Paso Manor monitoring station; all other data are from the T Street station. The table also indicates federal and state standards for these pollutants, and where these pollutant standards have been exceeded.*

*As shown in Table 1.2-5, federal or State standards for carbon monoxide, nitrogen dioxide, or sulfur dioxide were not exceeded during the three-year period. The State one-hour ozone standard was exceeded from one to six times between 2004 and 2006. Federal standards for eight-hour ozone were exceeded zero to three times between 2001 and 2003; state ozone standards were exceeded two to six times during the same period. While the federal standard for PM<sub>10</sub> was not exceeded, the State standard was exceeded from one to eight times between 2004 and 2006. In addition, the federal PM<sub>2.5</sub> annual concentration was exceeded in 2005 and 2006.*

The Sacramento Metropolitan Air Quality Management District's adopted *Air Quality Attainment Plan* and Sacramento County's *General Plan* both include the development of light rail and increased use of alternative-fuel vehicles as major clean air policy objectives. The LPAP2 Project would directly address these objectives.

**Table 1.2-5: Air Quality Standards, Ambient Measurements and Violations, in the Project Vicinity**

<b>Pollutant</b>	<b>Federal Standard</b>	<b>State Standard</b>	<b>Year</b>	<b>Maximum Level</b>	<b>Violation Days (Federal/State)</b>
Ozone (O <sub>3</sub> ) 1 hour	N/A	0.09 ppm	2004	0.105	NA /1
			2005	0.108	NA /4
			2006	0.106	NA /6
Ozone (O <sub>3</sub> ) 8 hour	0.08 ppm	0.07 ppm	2004	0.075	0/NA
			2005	0.087	1/NA
			2006	0.090	3/NA
Particulates (PM <sub>10</sub> ) 24 hours	150 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>	2004	58.0	0/1
			2005	55.0	0/4
			2006	111.0	0/8
Particulates (PM <sub>2.5</sub> )	12 µg/m <sup>3</sup> – annual	35 µg/m <sup>3</sup> – 24 hr	2004	NA/52.5	NA/0
			2005	12.5/63.8	Yes/0
			2006	12.9/54.0	Yes/0
Carbon Monoxide (CO) 8 hour	9.0 ppm	9.0 ppm	2004	2.96	0/0
			2005	3.64	0/0
			2006	NA	0/0
Nitrogen Dioxides (NO <sub>2</sub> )	0.053 ppm – annual	0.18 ppm – 1 hr	2004	0.017/0.072	0/0
			2005	0.016/0.071	0/0
			2006	0.016/0.077	0/0
Sulfur Dioxide (SO <sub>2</sub> )	0.14 ppm – 24 hr	0.25 ppm – 1 hr	2004	0.003	0/ NA
			2005	0.003	0/ NA
			2006	0.002	0/ NA

Notes:  
 ppm = parts per million  
 µg/m<sup>3</sup> = micrograms per cubic meter  
 NA = not available  
 Violation days = number of days exceeding federal or State standard  
 Source: California Air Resources Board Website, July 2007.

By attracting more passengers to transit, the LRT Project leads to an improvement in air quality as shown in Table 1-2. The LRT Project will reduce criteria pollutants and precursor emissions, as well as greenhouse gases compared to the No Project and TSM Alternative. Reducing air pollution will help the Sacramento region address its severe (ozone) and moderate (PM<sub>10</sub>) EPA air quality designations. The LRT Project will also reduce energy consumption by 11,542 million BTUs per year.

<b>Pollutant</b>	<b>Compared to No-Project</b>	<b>Compared to TSM</b>
CO	-12.96	- 8.97
NOx	- 2.43	- 1.68
VOC	- 0.72	- 0.5
PM <sub>10</sub>	- 0.30	- 0.21
PM <sub>2.5</sub>	- 0.28	- 0.19
Greenhouse Gases (CO <sub>2</sub> )	- 6,507.18	- 4,504.97

## **1.2.5 Other Needs**

Transit improvements by themselves will not make a major impact on congestion and air quality unless combined with other efforts to change travel behavior. Some important steps, particularly germane to South Sacramento, that would enhance transit use and help meet the transportation needs of the corridor include:

- Better coordination of transportation services, especially improved system connectivity; and
- Land use planning supportive of transit use.

The LPAP2 Project facilitates both steps.

### **1.2.5.1 CONNECTIVITY**

The LPAP2 Project would extend light rail service through areas with the highest existing and projected 2022 transit ridership in the region. South Sacramento residents would be connected directly with the present LRT network and its extensions to Folsom and the downtown Sacramento Intermodal Terminal. The Intermodal Terminal identified in the MTP will eventually offer connections to Amtrak, intercity rail and buses, commuter bus services, local bus service, paratransit service, and private shuttles and charters. Ultimately, the Sacramento rail system would provide critical linkages to the major employment and residential centers within three counties. Future extensions of the LRT network under consideration include service to Sacramento International Airport and the neighboring cities of Davis and Roseville. Davis includes the University of California at Davis campus, and Folsom and Roseville are growing communities, with major high technology employers. Figure 1.2-4 illustrates these potential connection points to the existing LRT. Good connectivity to mainline transit services is important for maintaining and expanding transit ridership. Without convenient network access, ridership in South Sacramento would be adversely affected by increased travel time requirements.

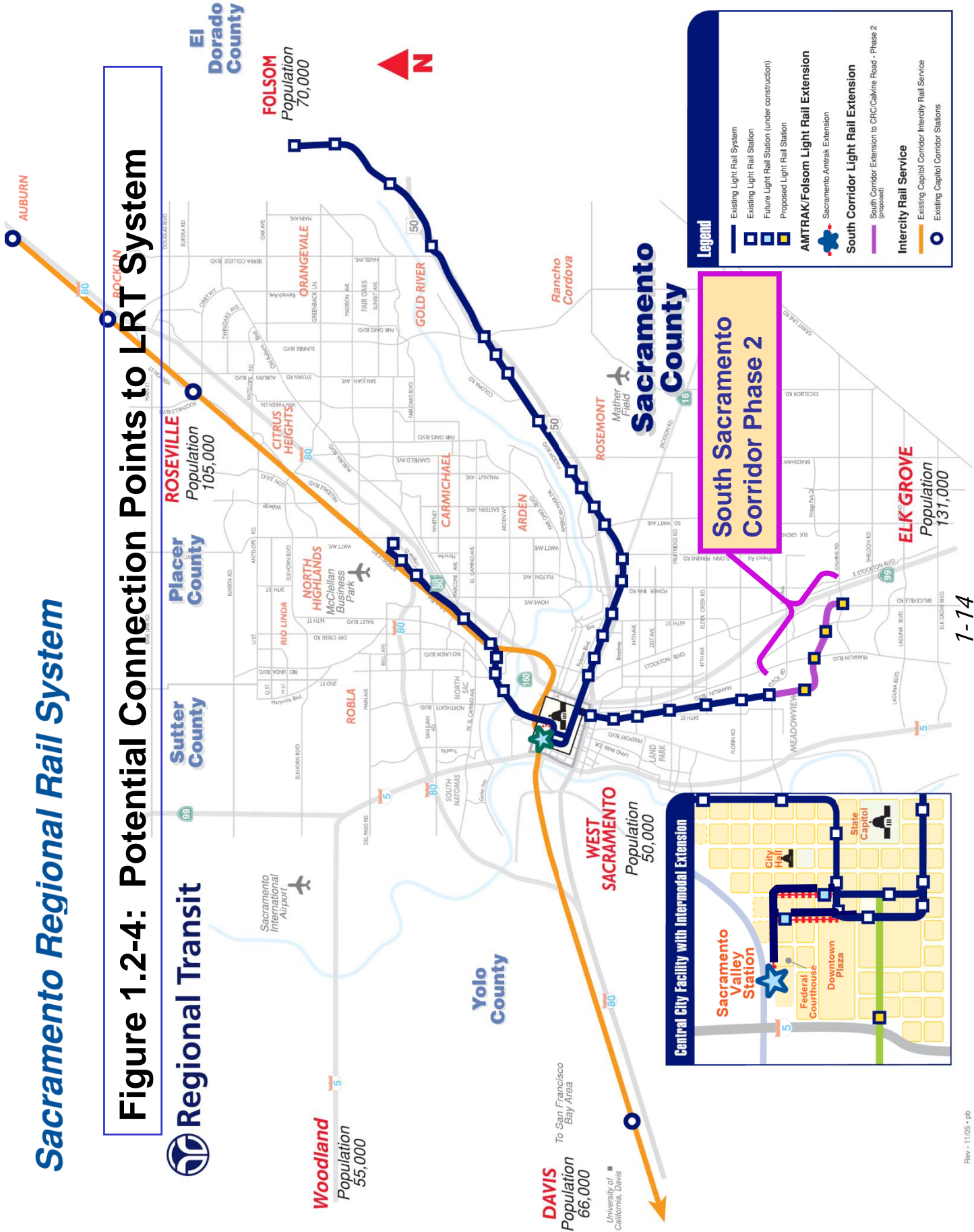
### **1.2.5.2 LAND USE PLANNING**

Within the South Sacramento Corridor, considerable land is available for both residential and commercial/industrial development. Opportunities exist for infill development that would relieve pressure for the conversion of agricultural land and open space. For example, redevelopment is proposed for part of the UPRR yard adjacent to Sacramento City College and the SPRR yard on the north side of downtown Sacramento. Economic development/revitalization opportunities are under study along roadway corridors served by the proposed South Sacramento Corridor Project, e.g., along Broadway Avenue, Franklin Boulevard, Meadowview Road, and Stockton Boulevard. Transit is a tool to help shape urban development patterns, and fixed-guideway services offer more potential than bus-only services to influence future land uses.

Sacramento RT, working with local land use planners and local jurisdictions, has developed an aggressive Transit for Livable Communities (TLC) program. The TLC program is designed to encourage mixed use transit oriented development around new light rail stations and to encourage infill around existing stations.

# Sacramento Regional Rail System

## Figure 1.2-4: Potential Connection Points to LRT System



The LPAP2 Project will support coordinated transportation and land use planning. The Project includes construction of a light rail station designed to serve proposed transit oriented development near the Morrison Creek Station. The Morrison Creek Station would be easily accessible by foot or bike and be designed to encourage transit use by residents of the new neighborhood. Other stations on the extension will also include convenient pedestrian access to further reduce vehicle trips and increase transit's attractiveness. RT planners have worked closely with land use planners from the City of Sacramento and property owners near the proposed LRT stations (Stone-Boswell near the Morrison Creek Station and College Square near the CRC Station) to pursue and promote transit oriented development in these LPAP2 station areas.

*The City of Sacramento is currently developing their 2025 General Plan Update and a comprehensive community plan update for the areas currently covered by the Airport-Meadowview and the western part of the South Sacramento Community Plans. Issues being addressed include land use changes to promote transit-oriented development around light rail stations along the South Sacramento Corridor light rail extensions, a review of existing and proposed land uses to implement smart growth policies, and land use and transportation issues for undeveloped areas in the south part of the City. Other local and development plans and policies for the study area are described in Section 4.10.2.*