



## Sacramento Regional Transit

### ***Twenty Year Plan – Transit Master Plan October 1993***

#### ***Existing Transit Master Plan Adopted October 1993***

In 1973, RT became the primary transit service provider in the Sacramento region. In 1987, RT opened its first light rail system that operated service in two corridors between Downtown Sacramento and outlying areas. In 1988 with the passage of Measure A, the Sacramento region voted to give its support for further expansion of public transit with the implementation of a local sales tax and bond measures to finance construction of rail projects (1989 Propositions 108 and 116). In response to these actions, RT developed an improved bus feeder network to complement rail transit service. These improvements were responsible for increases in system ridership.<sup>1</sup>

From 1989 to 1991, RT conducted a System Planning Study to provide the basis for development of a long range transit development plan, and to qualify their transit alternatives for the federal and State of California funding processes. Upon completion of the Systems Planning Study in 1991, the RT Board of Directors directed agency staff to develop a Transit Master Plan using the study as its foundation. Between 1993 and 2005, RT had not produced an update to the 1993 plan. It is expected that RT will update the 1993 Transit Master Plan beginning in late 2006 or 2007.

#### ***Mission of the 1993 Transit Master Plan***

- The 1993 Transit Master Plan adopted a Mission Statement that provided a framework for expanding transit service that would:
- Increase transit ridership
- Enhance regional travel and mobility
- Guide transit infrastructure investment
- Secure stable financial resources for transit capital and operating needs
- Encourage the development of transit oriented land uses
- Provide a framework for the preservation of future transit rights-of-way
- Integrate with regional air quality improvement strategies
- Support effective and efficient district management strategies, and
- Provide a regional blueprint for prioritizing transit infrastructure investment by geographic location and level of development intensity.

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<sup>1</sup> Twenty Year Transit Master Plan – Sacramento Regional Transit – 1993.



RT's Transit's Master Plan was developed to easily integrate with other regional long range planning documents such as transportation and circulation plans produced by Sacramento County, Sacramento Area Council of Governments (SACOG) and other jurisdictions such as the City of Rancho Cordova.

### **Vision of the 1993 Transit Master Plan**

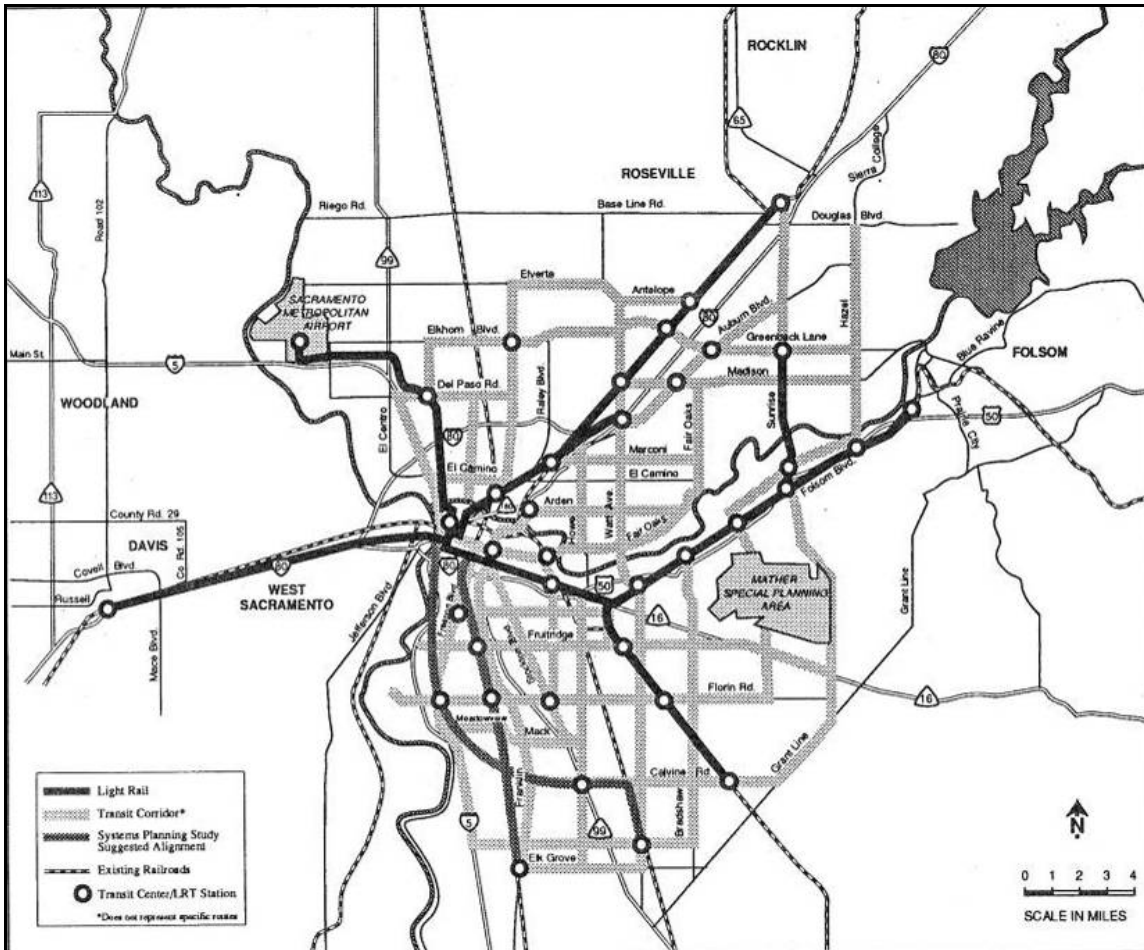
RT's 1993 Transit Master Plan described a long-range service expansion program that included:

- Service area expansion
- Light rail development in eight corridors
- Transit fleet expansion to 500 vehicles
- 200 light rail vehicles and 60 electric rail vehicles
- Major capital investments in new bus operating and maintenance facilities
- An additional light rail facility
- Provisions for right-of-way acquisition and investment
- Track
- Stations
- Transit centers
- Park and ride lots and other passenger amenities
- Passenger information systems
- Maintenance equipment, and
- Communications equipment.

In 1993, RT estimated that the transit investment described above would add in the range of 200,000 to 450,000 boardings per day, and it was expected that all of the new services would be fully integrated with all other modes that were available. Figure C-1 shows the transit corridors that RT expected to develop between 1993 and 2013.



Figure C-1. RT's 20-Year Conceptual Transit Corridors



## Population Trends

The greater Sacramento area experienced significant population growth during the 1980s, and on average the four-county region added 37,750 new residents per year between 1980 and 1991. SACOG forecasted in 1993 that the region's population would increase 49% between 1988 and 2010 and that most of the growth would occur in outlying areas along the major highway corridors in the communities of Folsom, El Dorado Hills, Galt and in southern Placer County. (Rancho Cordova was not yet an incorporated city, but the prediction of increased growth in the suburbs of Sacramento has proven to be true, hence the reason for this study.<sup>2</sup>)

<sup>2</sup> Twenty Year Transit Master Plan – Sacramento Regional Transit – 1993.



## APPENDIX C: BACKGROUND PLANNING INFORMATION

*Community, Mobility, and Environment*

The prevalence of two-income households traveling in different directions has resulted in a departure from the “traditional” travel patterns of “suburb to CBD” for jobs and shopping. This has resulted in a significant increase in inter- and intra-suburban cross-town (suburb to suburb) trips generated in the region. At the time of this study in the Sacramento area, almost 80% of the daily trips were not work-related. These growth and travel patterns have had significant impacts on the region’s transportation systems. And as population and employment shifted outward from the CBD, travel demand has intensified in the growth corridors along Interstate 5, Interstate 80, Highway 50 and Highway 99. Table C-1 shows the 1993 Projected Population Growth for the Sacramento Region 1988 – 2010, and Table B-2 shows the 1993 Projected Employment Growth for the Sacramento Region 1988 - 2010.

Table C-1. Sacramento Region 1988 – 2010 Projected Population Growth

Jurisdiction	1988 Population	Est. 2010 Population	Percent Growth
<b>Sacramento County</b>	<b>961,900</b>	<b>1,382,814</b>	<b>44</b>
Folsom	23,350	73,100	213
Galt	7,450	26,871	261
Isleton	920	1,008	10
City of Sacramento	334,700	491,329	47
Unincorporated	595,480	790,506	33
<b>Sutter County</b>	<b>60,900</b>	<b>79,100</b>	<b>30</b>
Live Oak	3,980	5,708	43
Yuba City	23,050	34,803	51
Unincorporated	33,870	38,589	14
<b>Yolo County</b>	<b>133,500</b>	<b>201,400</b>	<b>51</b>
Davis	43,200	65,000	50
West Sacramento	27,550	37,576	36
Winters	3,790	7,900	108
Woodland	36,950	59,110	60
Unincorporated	22,010	31,843	45
<b>Yuba County</b>	<b>56,600</b>	<b>66,600</b>	<b>18</b>
Marysville	11,400	11,552	1
Wheatland	1,830	2,314	26
Unincorporated	43,370	52,734	22
<b>South Placer County</b>	<b>54,425</b>	<b>161,959</b>	<b>298</b>
Lincoln	6,225	18,674	200



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*Community, Mobility, and Environment*

Jurisdiction	1988 Population	Est. 2010 Population	Percent Growth
Rocklin	13,850	45,022	225
Roseville	34,350	98,263	186
<b>El Dorado County<sup>3</sup> (western portion)</b>	<b>46,980</b>	<b>110,614</b>	<b>135</b>
<b>Regional Total</b>	<b>1,314,305</b>	<b>2,002,687</b>	<b>52</b>

Source: RT Systems Planning Study

Table C-2. Sacramento Region 1984 – 2010 Projected Employment Growth

County/Community Area	1984	2010	Percent Growth
<b>Sacramento County</b>	<b>342,782</b>	<b>688,276</b>	<b>101</b>
Franklin/Laguna	508	16,828	3,212
South Natomas	4,782	67,329	1,308
North Natomas	1,299	12,909	894
Vineyard	686	3,184	364
Elk Grove	3,532	12,596	257
Folsom Area	6,197	20,558	232
Consumnes	501	1,666	233
Galt	1,140	4,132	262
North Sacramento	21,101	58,445	177
Rancho Cordova	33,371	79,830	139
Land Park/Pocket/Meadowview	20,086	45,161	125
East City	37,044	77,085	108
Delta	3,460	7,427	115
South Sacramento	33,077	54,720	65
Rio Linda/Elverta	1,302	2,551	96
Citrus Heights	14,259	21,481	51
Downtown	72,427	99,969	38
North Central Area	36,340	48,621	34

<sup>3</sup> Area includes Placerville and unincorporated El Dorado County west of Placerville. 1988 population estimated from growth rates provided by El Dorado County Community Development Department.



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### Community, Mobility, and Environment

County/Community Area	1984	2010	Percent Growth
Orangevale	3,636	4,140	14
Carmichael	7,636	8,475	11
Fair Oaks	2,800	3,003	7
Arden Arcade	36,378	37,591	3
Rancho Murieta	129	129	0
Southeast	1,091	451	-59
<b>Sutter County</b>	<b>17,943</b>	<b>30,588</b>	<b>70</b>
Live Oak	461	1,023	122
Yuba City	14,654	26,066	78
Unincorporated	2,828	3,499	24
<b>Yolo County</b>	<b>49,500</b>	<b>87,691</b>	<b>77</b>
Davis	17,466	28,132	61
West Sacramento	9,938	20,999	111
Winters	1,280	2,669	109
Woodland	19,889	34,319	73
Unincorporated	927	1,572	70
<b>Yuba County</b>	<b>19,725</b>	<b>24,763</b>	<b>26</b>
Linda/Olivehurst	4,042	6,710	66
Marysville	8,918	10,250	15
Wheatland	469	630	34
Unincorporated	6,296	7,173	14
<b>South Placer County</b>	<b>26,721</b>	<b>79,790</b>	<b>199</b>
Lincoln	2,579	14,355	457
Rocklin	2,189	14,825	475
Roseville	21,953	50,610	131
<b>El Dorado County (western portion)<sup>4</sup></b>	<b>26,721</b>	<b>79,790</b>	<b>199</b>
<b>Regional Total</b>	<b>456,671</b>	<b>911,108</b>	<b>100</b>

Source: RT Systems Planning Study

<sup>4</sup> El Dorado County not included in regional total.



### Public Transit

When the 1993 RT Twenty Year Master Plan was published, RT operated a light rail line that was 18.3 miles in length that extended radially from the CBD toward the east and northeast suburbs. The bus system was generally designed to be complementary in nature to the rail line as a feeder system along with providing cross town and other local bus services. It was expected that the starter system that was in place in 1993 would need to be expanded in order to meet the growing needs of the Sacramento region.

### Inter-Agency Coordination

Transit system development in the Sacramento region is affected by the interaction of a number of agencies that exist at federal, state and local levels. Some agencies have an advisory role with RT, providing review and input to RT's short and long-range planning process. Other agencies have a financial role, whereby they allocate tax money based on a qualifying criteria or law. These agencies are:

**Federal** – The US Department of Transportation Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA), disperse both formula grant and discretionary monies to RT based on RT's compliance with specific qualifying criteria.

**State** – The California Department of Transportation (Caltrans) has both an advisory and financial relationship with RT. Caltrans reviews and approves RT's transportation improvement programs and RT's state transportation funding applications.

The California Transportation Commission (CTC) interacts with RT on a financial level. The CTC reviews, prioritizes and disburses discretionary state transportation funds.

**Regional** – SACOG interacts with RT on both a planning and financial level. RT and SACOG coordinate on development of the transit elements of SACOG's Regional Transportation Plan (RTP) and other transportation studies. SACOG is also responsible for disbursing federal and state funds to RT.

The Sacramento Metropolitan Air Quality Management District (SMAQMD) develops programs to achieve and maintain state and federal air quality standards. SMAQMD's relationship with RT is advisory on issues of mutual concern.

**Local** – The Sacramento Transportation Authority (STA) is a joint city-county agency responsible for prioritization and dispersion of tax receipts that are generated by the half-cent sales tax, as well as the lead agency for the state-mandated Congestion Management Program. The County of Sacramento also coordinates with RT on transportation systems management, land use development, right-of-way preservation and transit service issues.

### RT Service Area

The transit network of the Sacramento region began its development in serving a well defined urban core. This urban core strongly supported the public transit systems of the past. The automobile and the changes in behavior it brought quickly redefined the urban landscape of the Sacramento region. The rapid growth of suburban areas required RT and its



predecessors to develop transit services in these areas. Continued growth of downtown, due to its role as the State Capital of California, encouraged development of a system which connected these suburban areas with downtown. However, the development pattern of suburban communities like Rancho Cordova discouraged transit usage. Because of this, the region's transit services continued to be concentrated in the urban core of Sacramento, downtown, and those residential and commercial districts surrounding it.

### **Evolution of Service**

Public transit, as with most public infrastructure, is most efficiently and effectively provided in areas with adequate population and employment density to justify capital and operating expenses. RT prioritizes the enhancement of existing transit service and will support reutilization, redevelopment and infill development in the existing urban areas of the service area.

RT supports the development of transit service in new growth areas based on several variables. As communities like Rancho Cordova continue to grow and evolve, RT committed that it would evaluate their existing services and demand for service expansions as a whole and determine where scarce resources could best be put to use.

Before RT would commit to extending service to new areas of the service area, it would evaluate proposed services based on a number of criteria including:

- Population density
- Employment density
- Land use design
  - Orientation
  - Accessibility
- Person trip characteristics and focus
- Jurisdictional coordination
- Local community support efforts.

### **Travel Markets**

RT serves a number of travel markets and in an attempt to provide the most efficient service possible, RT must balance sometimes competing objectives in serving these diverse markets. RT's mission is to ensure adequate levels of mobility for all segments of society.

### **The Work-Related Trip**

It is not unexpected that 50% of all trips by bus and 80% of all trips by LRT during peak periods are work-related trips. Most of these trips are destined for downtown Sacramento, and as the capital of California, Sacramento has a strong base of employment in the Central City which heavily utilizes transit. The system of trunk line light rail and bus transit focused





on downtown Sacramento will ensure convenient and reliable transit service for this travel market. However, in recent years, there has been a significant movement of population and employment to the suburbs. The fastest growth in employment in the year 2010 will be in the suburbs.

In 1993, these high growth areas were predicted to be:

- Arden/Arcade
- East Sacramento
- Rancho Cordova
- South Placer County/Roseville
- South and North Natomas

In 1993 RT began developing a network of feeder bus routes overlaid upon the trunk line system connected by timed transit centers. This network was intended to provide high levels of mobility to meet the needs of suburb to suburb commuters.

### ***The Non-Work-Related Trip***

Despite the high numbers of transit trips made for work purposes during the peak travel periods, the majority of transit trips on the RT system have non-work-related purposes. The presence of strong non-work travel demand is highly important to efficient use of personnel and equipment. RT provides mobility to social services, health care, shopping, educational opportunities and recreation sites. RT committed itself to improving its services to these facilities and sites. RT will coordinate with local jurisdictions, health care and social service providers to ensure that health care and social service facilities are located and designed with transit accessibility in mind.

### ***System Design***

RT has developed a comprehensive and balanced transit system which can efficiently and effectively serve the needs of the service area. The backbone of this system is a trunk line system of light rail transit and high frequency bus service corridors. Overlaid upon this system is a grid network of feeder bus routes, as well as a system of community based circulator services, providing maximum connectivity opportunities through a system of time-transfer transit centers. Rancho Cordova benefits from a number of bus routes and the Folsom LRT line within its jurisdiction.

### ***Service Mode***

When developing its service plans RT carefully considers the appropriate mode for transit service delivery. Factors such as ridership, transportation network interface, population and employment density and accessibility will be taken into account in making mode choice decisions.



### Light Rail Transit

The light rail transit system serves as the spine of a multimodal system of low emission public transportation for the Sacramento region. Light rail transit provides high frequency, high capacity trunk line service in major travel network. The LRT extension to the Folsom area has only recently become a reality and was not a part of the 1993 plan. This new extension has opened a number of new light rail stations in Rancho Cordova that provide an opportunity for a fast trip into downtown Sacramento as well as connectivity to local bus routes that provide service to Rancho Cordova and nearby areas.

### HOV/Busway

RT has developed a regional system of High Occupancy Vehicle (HOV) lanes throughout the Sacramento region. RT will continue to work to coordinate these plans with its transit system development to ensure proper phasing and implementation of HOV facilities which enhance its overall transportation network.

### *Electric Trolley Bus*

Electric trolley buses provide an intermediate mode in RT's planned system of low emission transit services. Electric trolley buses combine low maintenance requirements, increased acceleration, quietness and environmentally friendliness with the flexibility of utilizing existing roadways as well as exclusive rights-of-way. RT will utilize trolley buses in those corridors that require high frequency transit service, but are unable to support the increased capital expense required for light rail.

### Standard Bus

The typical clean-fueled bus will continue to be the vehicle of choice to operate the majority of RT's transit routes. Buses will be required to provide service in suburban areas that are unable to support service frequencies of 15 minutes or less. In new growth areas, peak period feeder service is provided to light rail and trolley bus corridors. It is expected that 70% of total revenue hours will be operated by buses.

### Route Network

By 1993, Sacramento had developed a route network that had downtown as its focus with routes operating in a radial fashion from the center of town. "Radial" networks provide rapid movement of people to the urban core, but may force longer indirect trips for those not wishing to end their trip downtown.

As the region began to grow, it was expected that development patterns and travel behavior would emerge in ways that would focus fewer and fewer trips on the downtown area. Suburb to suburb trips were expected to increase significantly far into the future.

Due to these travel pattern changes, RT began to alter its route planning practices by developing multidirectional routes that focused service upon a network of timed transfer points or transit centers. These transit centers maximized connection opportunities for riders by not requiring a trip downtown and then a transfer to a route that they really wanted in the first place.



### **Land Use**

In 1993, RT developed guidelines and standards for coordinating land use development with transit services by addressing both regional policy and project site oriented planning issues. Policy planning activities focused on the link between land use and transit as one of many strategies for managing growth, regional air pollution, traffic congestion and other quality of life concerns. The evolution of Sacramento County's Transit Oriented Development (TOD) Design Guidelines is part of the sensitivity being applied to planning approaches being developed to improve the link between transit and land use.

The purpose of coordinating land use patterns with transit service is to improve transit system efficiency and use. A productive transit system, in turn, can offer a solution to community problems and social, economic and environmental benefits. The land use and transit relationship is only a part of the larger, dynamic urban system involving many other variables.

The City of Rancho Cordova is very interested in realizing the benefits of combining the planning of future transit services with the planning of development through land use planning. The City realizes that increasing congestion is a quality of life issue that must be addressed.

### **Land Use Patterns**

Strengthening the link between land use patterns and the transit system can also improve transit system usage. Land use patterns are a critical determinant of travel demand. In turn, the structure of the transportation system can influence the character of land use development. Linking land use to support transit usage ranges from regional policy planning issues to focused physical planning issues.

- Establish a clear and consistent boundary in Sacramento County beyond which urban services, including transit, will not be provided and urban development will not be permitted
- Increase development concentrations and enhancing pedestrian accessibility in the Sacramento Central city and at limited number of suburban activity centers (focused around transit centers)
- Locate major new development projects along existing, proposed and adopted light rail and bus transit corridors
- Provide incentives, such as joint development for in-fill land uses contiguous to where transit and urban services already exist or have been scheduled for implementation
- Require site design evaluation for transit access and operational requirements such as geometric design, passenger loading areas, and transit user amenities
- Require site designs and land use mixes that support and enhance pedestrian accessibility to transit



## APPENDIX C: BACKGROUND PLANNING INFORMATION

### *Community, Mobility, and Environment*

- Require minimum density and intensity levels for developments within transit corridors that depend upon the regional location, transit mode, and service level desired
- Coordinate transportation demand management strategies with land use strategies such as parking supply and pricing policies, to increase transit attractiveness.

