

CHAPTER 6 - THE PEOPLE'S PLAN: STAKEHOLDER AND PUBLIC INPUTS

Sacramento Regional Transit Master Plan

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6 The People’s Plan: Stakeholder and Public Inputs

Introduction: The Outreach Process

6.1 As noted in Chapter 4, the development of the TransitAction Plan was done through a highly consultative process that included meetings, presentation, open houses, questionnaires, surveys, interviews and interactive online activities. This multi-faceted approach included the active participation from:

- I Advisory panels;
- I Key stakeholders; and
- I General public.

Advisory Panels

6.2 A number of advisory panels were used to gather input and to help shape the TransitAction Plan. These included:

- I Technical Advisory Committee (TAC);
- I Financial Advisory Panel;
- I Mobility Advisory Council (MAC); and
- I Partnership Group.

Technical Advisory Committee

6.3 The TAC was the key stakeholder group which brought together staff from the state, the region and the local agencies covered by RT. It included representatives from:

- I California Department of Transportation;
- I Sacramento Metropolitan Air Quality Management District;
- I Sacramento Area Council of Governments;
- I Walk Sacramento;
- I Sacramento State University;
- I Counties of Sacramento, El Dorado and Yolo
- I Cities of Sacramento, Citrus Heights, Rancho Cordova, and Elk Grove; and
- I Paratransit.

Financial Advisory Panel

- 6.4 This panel consisted of a group of national financial experts who reviewed financing options and proposals that could be used to generate sufficient capital and operating funds to deliver the TransitAction Plan. Further information regarding the input of the Financial Advisory Panel can be found in Chapter 9.

Mobility Advisory Council

- 6.5 The MAC was primarily responsible for evaluating and providing feedback on the Americans with Disabilities Act (ADA)/ Paratransit plans and proposals as well as voicing their support for major increases in network coverage and service hours of the TransitAction Plan.

Partnership Group

- 6.6 The Partnership Group brought together the organizations from the TAC as well as other key stakeholders and agencies to form a group of over 100 participants, including local community groups, redevelopment advisory committees and other neighborhood associations.

Community Outreach - Phase 1

- 6.7 Between March and June 2008, presentations, open houses and forums were held with over fifty organizations across Sacramento County and input was received with respect to a variety of both general and specific element of transit service provision. This outreach exercise included:
- Eight public workshops/open houses;
 - Presentations to all City Councils, the Board of Supervisors and other transportation partner agencies;
 - A Modern Bus and New Technologies Seminar;
 - A schools program;
 - An interactive website;
 - Newsletters, phone line, advertising, and flyers; and
 - Media engagement.
- 6.8 This phase of consultation was primarily focused on presenting the scenarios detailed in Chapter 5, and asked the following questions:
- Which scenario do you prefer?
 - What characteristics do you want in a transit system?

- 6.9 As noted in Chapter 4, feedback was collected through a questionnaire that was available online and was distributed at all the community meetings and events.
- 6.10 The Transit Master Plan website was launched to provide a key portal for the public and enabled them to keep up to date with the planning process. A screenshot of the home page of the website is shown in Error! Reference source not found..

FIGURE 6.1 TRANSIT MASTER PLAN WEBSITE

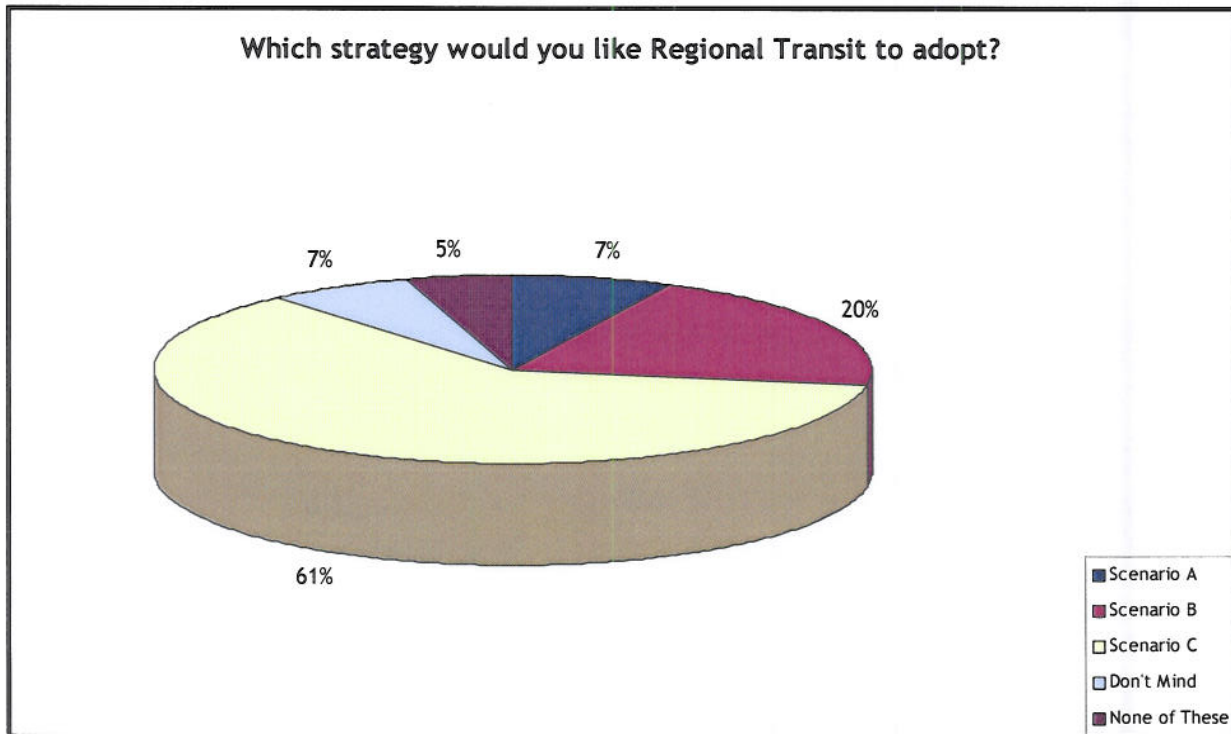


Conclusions of Outreach Phase 1

6.11 The feedback received from the first phase of the outreach program provided some interesting and positive information. The majority of the feedback was received via the website where over 2,000 online surveys were completed.

6.12 Responses to the question, ‘Which strategy (scenario) would you like RT to adopt?’ confirmed that over 80% of the public would like RT to improve transit services beyond the existing network. Substantial support of over 60% of respondents would like to see a comprehensive improvement of transit services as proposed under Scenario C. Figure 6.2 illustrates the results.

FIGURE 6.2 ONLINE SURVEY RESULTS REGARDING PREFERRED SCENARIOS



6.13 The public also had the opportunity to comment on the characteristics of transit service which they felt were most important and least important. The most important characteristics were:

- Safe and secure services (65%);
- Reliable and punctual services (64%);
- High frequency services (36%);
- Affordable fares (32%); and
- Fast journey times (31%).

- Easy for everyone to get on and off services (40%);
- Direct services so no need to transfer (39%); and
- Friendly and helpful staff and drivers (35%).

6.14 The least important characteristics were:

6.15 From the surveys, key personal details were collected to help create a profile of respondents. The data is presented in below in Table 6.1 and Table 6.2.

TABLE 6.1 ONLINE SURVEY RESPONDENT DATA: TRANSIT USE

Frequency of Transit Use		Purpose of Transit Use	
Most Days	34%	Get to work	67%
1-4 Days/Week	17%	Get to school	4%
1-3 Times/Month	11%	Go shopping	4%
Less than Once/Month	19%	Get to doctor/access social services	3%
Never	19%	Social or recreational trips	11%
		Other	12%

TABLE 6.2 ONLINE SURVEY RESPONDENT DATA: PERSONAL ATTRIBUTES

Household Income		Age Group	
Less than \$10k	3%	Under 25	6%
\$10k-\$15k	3%	25-34	18%
\$15k-\$20k	1%	35-44	20%
\$20k-\$25k	3%	45-54	28%
\$25k-\$35k	6%	55-64	21%
\$35k-\$50k	14%	Over 64	7%
\$50k-\$75k	26%		
\$75k-\$100k	21%	Gender	
More than \$100k	23%	Female	60%
		Male	40%

6.16 These results illustrate some interesting points:

- There was a good balance of regular transit riders (51%) and those who rarely use transit (38%);
- There was a good balance of male (40%) and female (60%) respondents;
- The majority of respondents use transit to commute to and from work (67%), while a significant portion use transit for social, recreational and other trips (23%);
- The majority of the respondents have an above average household income (70% above \$50,000); and
- Over half the respondents (56%) were over 45 years of age.

6.17 The first phase of outreach generated a vast array of specific and general suggestions and recommendations on how to improve or change Scenario C. Based on those suggestions and an internal review of the network, a number of changes were made. The specific details of the final, TransitAction Plan network are presented in Chapter 7.

Community Outreach - Phase 2

6.18 The scenario evaluation presented in Chapter 5 along with the first phase of outreach confirmed Scenario C as the preferred TransitAction Plan. However, as noted in the conclusions of Chapter 5, there remained a gap in the available funding to build and operate the network.

6.19 A second phase of outreach was therefore undertaken in the fall and winter 2008, to discuss and get input on the public's 'willingness to pay' for increased transit service including identifying project priorities and understanding how much people are willing to pay for expansion.

6.20 The tool used to collect this information was an interactive online 'game' which enabled participants to add or remove transit projects while illustrating how each choice affected the total 'capital costs', the 'annual cost per household' and the 'total score', which was a combination of transportation choices, congestion relief and environmental benefits offered by the participants' selection of improvements. Figure 6.3 illustrates a screen image from the 'willingness-to-pay' game.

Figure 6.3 Willingness-To-Pay Exercise

The screenshot shows a web browser window displaying a simulation interface. The title bar reads "Balance the costs and benefits of your Transit Network - Flash Game - Windows Internet Explorer". The address bar shows the URL "http://visuals.adgworld.net/score/flashgame/gameComplex.html".

The main content area has a dark blue background with the title "Balance the costs and benefits of your transit network" and the "Regional Transit Master Plan" logo. A progress bar at the top indicates the "Total Cost of Improvements".

On the left, a sidebar lists improvement categories with progress indicators: Regional Rail, Light Rail, Streetcar and European Street Tram, High Frequency Bus, Community Based Bus, Passenger Experience, and Safety and Security.

The central panel features an isometric city map with blue callout boxes. A "Light Rail improvements" list is overlaid on the map, with the following items and their status:

- Network-wide frequency increases (5 min peak / 10 min off-peak): Yes
- Downtown-Natomas-Airport: Yes
- Elk Grove Extension: Yes
- Citrus Heights Extension: Yes
- Roseville Extension: No
- El Dorado Extension: Yes

A "Close" button is located below the list.

On the right, a red box displays "Capital Costs (Millions \$): \$5,380" and "Annual Cost per Household: \$643". Below this, it states "Equivalent to 10 tanks of gas per year" with an icon of a gas tank.

At the bottom, three progress bars represent "Transportation Choices", "Congestion Relief", and "Environment". The "Your Total Score Is: 88/100" is displayed in large red text. Buttons for "Restart", "Quit", "Save", and "Help" are visible.

The browser's status bar at the bottom shows "Done", "Local intranet", and "100%" zoom.

6.21 Almost 900 responses were received and overall there was still a high level of support of large scale transit investments with average respondent willing to pay almost \$570 per household per year (approximately 70% of the total package) - all during a period of economic decline in the US.

6.22 Respondents were able to select the projects that were most favored as well as different levels of service across the modes. A summary of the results is presented below.

- I A broad level of support for investment in LRT & European Street Tram:
 - I Downtown European Street Tram North Loop: 77%
 - I Downtown European Street Tram South Loop: 72%
 - I DNA: 72%
 - I Elk Grove (blue line): 72%
 - I Roseville (blue line): 74%
 - I Citrus Heights (blue line): 68%
 - I El Dorado (gold line): 65%
 - I Citrus Heights - Rancho Cordova European Street Tram: 58%
 - I Rancho Cordova Streetcar: 56%
- I Bus network frequency improvements:
 - I 5-min service on Hi-Bus network (vs. 10-min): 54%
 - I 10-min service on the Community-based Network (vs. 20-min): 62%
- I Regional Rail:
 - I 15-min peak service (vs. 30-min): 54%
- I Passenger improvement responses show a very high level of support for improvements to transit access and information:

- I Improvements to stops and shelters: 74%
- I Sidewalk and access improvements: 71%
- I Improvements to ticketing and information: 76%
- I Safety improvements received the highest levels of support:
 - I Extra police on the network: 80%
 - I Cameras on vehicles and at stops/stations: 83%

Conclusions of the Public Outreach Process

6.23 Across the various elements of the outreach program, from the RT Board to the general public, there is a general consensus that more needs to be done to improve the transit system in Sacramento County. There is a clear level of support for an ambitious course of action that includes a more integrated and attractive service covering a larger geographic area and with higher levels of service frequency. The input from key stakeholders has suggested that these improvements should begin with improvements to the existing infrastructure followed by new modes, new service areas and an expanded transit offer.

6.24 A key message from both internal and external stakeholders however, is that transit investment has to be linked to land use changes and that the implementation of the major projects included in Scenario C will be dependent on significant intensification of land use in those corridors to support the transit investment.

CHAPTER 7 - THE TRANSITATION PLAN

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7 The TransitAction Plan

Introduction

- 7.1 The input received from the public and stakeholders alike showed a clear preference for dramatic increases in transit service and investment for the Sacramento region. In addition, the evaluation of the scenarios presented in Chapter 5 demonstrated that Scenario C, particular once land use and complementary measures were included (Scenario C+), should be the focus of the TransitAction Plan.
- 7.2 This chapter provides further detail on the preferred package of transit investments that make up the TransitAction Plan. It moves from the cartoon scenarios presented in Chapter 5, to the detail of the plan.

An Integrated Offer - With Land Use, Between Modes

- 7.3 Transit project development in Sacramento, like many other cities, has frequently followed the path of least resistance with the first light rail corridors developed as conversions of under-utilized rail freight corridors. So while this has meant that unlike many other cities, Sacramento was able to build light rail, it has also resulted in relatively less development and lower levels of ridership along the network than might have been expected.
- 7.4 The ridership forecasting work completed has clearly demonstrated that transit service provided in isolation of land use and Transportation Demand Management (TDM) measures will not be enough to make significant changes in the way people move in Sacramento. This TransitAction Plan has therefore been developed to ensure that Regional Transit (RT) becomes an integral partner in the planning of transit alongside

land use. As part of the development of this plan, RT has developed a set of transit-oriented development (TOD) Guidelines (full copy provided in the Appendix to provide the local jurisdictions with the guidance toward land use policies to create transit-supportive communities. This integration of transit and land use planning is a key aspect of the Federal Transit Administration's (FTA) funding framework and signals the implementation of a new direction for transit development.

- 7.5 With an established land use framework incorporated into the General Plans of the local jurisdictions, RT will be able to plan its transit investments in bus, light rail and streetcar with greater certainty and enable them to cater for passenger needs by providing an integrated transit network.

The Blueprint Challenge: Transit-Oriented Development and Increasing Mode Share

- 7.6 In order to support and realize the benefits of the Blueprint Preferred Land-use Scenario, the Sacramento region will need an improved transit system to provide people with a real transportation choice.
- 7.7 As noted in Chapter 3, the existing mode share for transit in the region is relatively low and to have a real impact on congestion levels, environmental impacts and quality of life, transit will need to be used for a greater percentage of all trips.
- 7.8 SACOG has set a target of 4% transit mode share by 2050 which, although not a huge percent of all trips, would represent a fourfold increase in mode share over trips made today.
- 7.9 To achieve this kind of shift, two things will be needed: a vastly improved transit network offering more frequent transit services to more places for longer hours of

the day and land use that supports transit. Without land use and transit investment made together, neither change will get the full potential benefit. This chapter provides the details of the specific transit investments included in the TransitAction Plan as well as some specific ideas on how to better plan and integrate land use decisions alongside transit.

An Energy-Efficient Transit System

- 7.10 With growing global and local concerns about energy security, the costs of oil and the environmental impacts of using fossil fuels, it is important that RT, as a public agency, continues to provide leadership and be involved in the debate about energy independence and climate change.
- 7.11 Almost a decade ago, RT made the decision to switch from diesel buses to compressed natural gas (CNG). This decision which supports better air quality and the positive impact it has had on the local environment and financial health of RT over the past few years is a testament to RT's staff and directors who made the decision. Over the life of this plan, RT will need to continue to monitor and evaluate new fuel and energy sources to ensure that it continues to use the most energy-efficient and cost-effective sources available.
- 7.12 As an integral component of the TransitAction Plan and the way that RT does business - from large scale project development, planning and policy decisions to small day-to-day decisions it makes in materials procurement and HR policies - RT will continue to push and challenge its own way of operating to help ensure that it provides the region with a well managed and energy efficient transit system.

Passenger Requirements - From Lifeline to Lifestyle

- 7.13 The TransitAction Plan has a clear focus on 'Putting the Passenger First.' It is a simple phrase and has guided the development and planning of the transit network and services planned for RT.
- 7.14 In order to build ridership and improve the cost effectiveness of the public transit system, RT needs to attract new customers to its services and this means a fundamental shift in the way that transit services are planned, delivered and perceived in Sacramento. Transit cannot be just for people who have to use it, but a real transportation choice that provides people with mobility options that are fast, direct, frequent and convenient - a move from a lifeline to a lifestyle service.

The Components of the TransitAction Plan

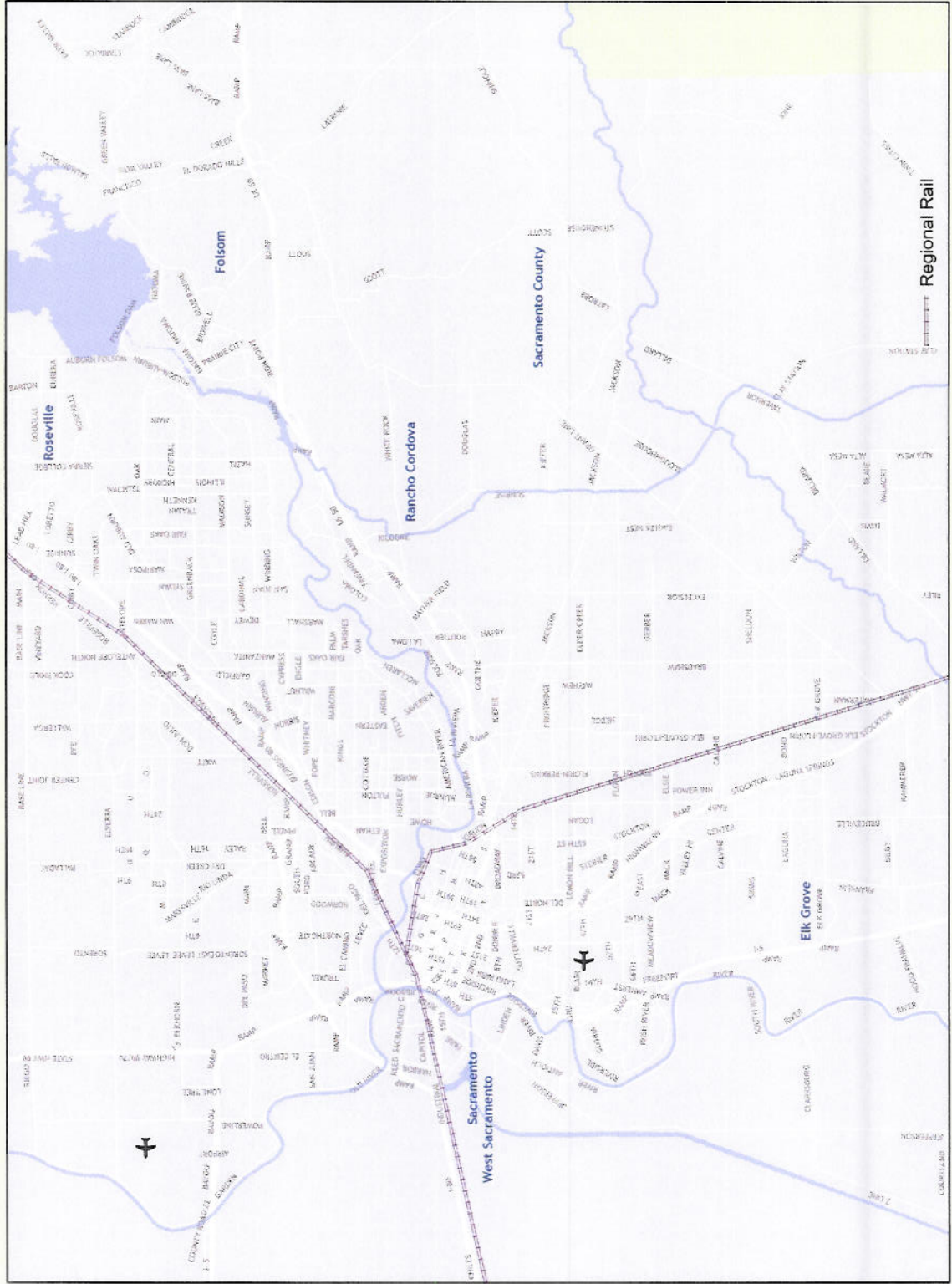
- 7.15 The scenario maps used for the public consultation process provided the public and stakeholders with a set of options on which to comment and provide feedback. As noted in Chapter 6, a number of specific changes were recommended and included in the final Scenario C map. Figure 7.1 shows the updated map and includes the following changes:
- Streetcar/European tram services extended to Broadway - loop service on J Street, Alhambra Blvd, Broadway and 5th Avenue;
 - Rancho Cordova streetcar/European tram service extended north to Citrus Heights - Sunrise Blvd. to Greenback Lane;
 - Bus Rapid Transit (BRT) service included along/adjacent to Jackson Highway.
- 7.16 With a clear preference from the public and the results of the evaluation pointing

towards Scenario C, the following sections provide the detail of the specific projects and elements to be pursued through the implementation of the TransitAction Plan.

Regional Rail

- 7.17 Sacramento is currently served by Capitol Corridor intercity rail services running from Colfax/Auburn to San Jose. Current services include 16 trains per day westbound/southbound and 16 trains per day eastbound/northbound.
- 7.18 As part of the TransitAction Plan, RT will work with Amtrak, Capitol Corridor Joint Powers Authority, Union Pacific Railroad (UPRR), their partners and stakeholders to improve the frequency of rail services serving this corridor - particularly from Davis through Sacramento Valley Station to Roseville and Rocklin.
- 7.19 To provide frequent, passenger-friendly commuter service, it is proposed that this service be increased to four trains per hour in the peak periods. In order to achieve this increase, additional rolling stock will be required as well as further agreements with the other railway operators to provide sufficient 'train paths' for the services.
- 7.20 In addition to rail services in the Capitol Corridor, the TransitAction Plan also includes the introduction of a new service from Stockton and Galt north into Sacramento. This service is also proposed as a four train per hour peak period service and would serve the commuters in the south of the county and beyond.
- 7.21 Each of these services is shown in Figure 7.2.

FIGURE 7.2 2035 REGIONAL RAIL NETWORK



Light Rail Transit

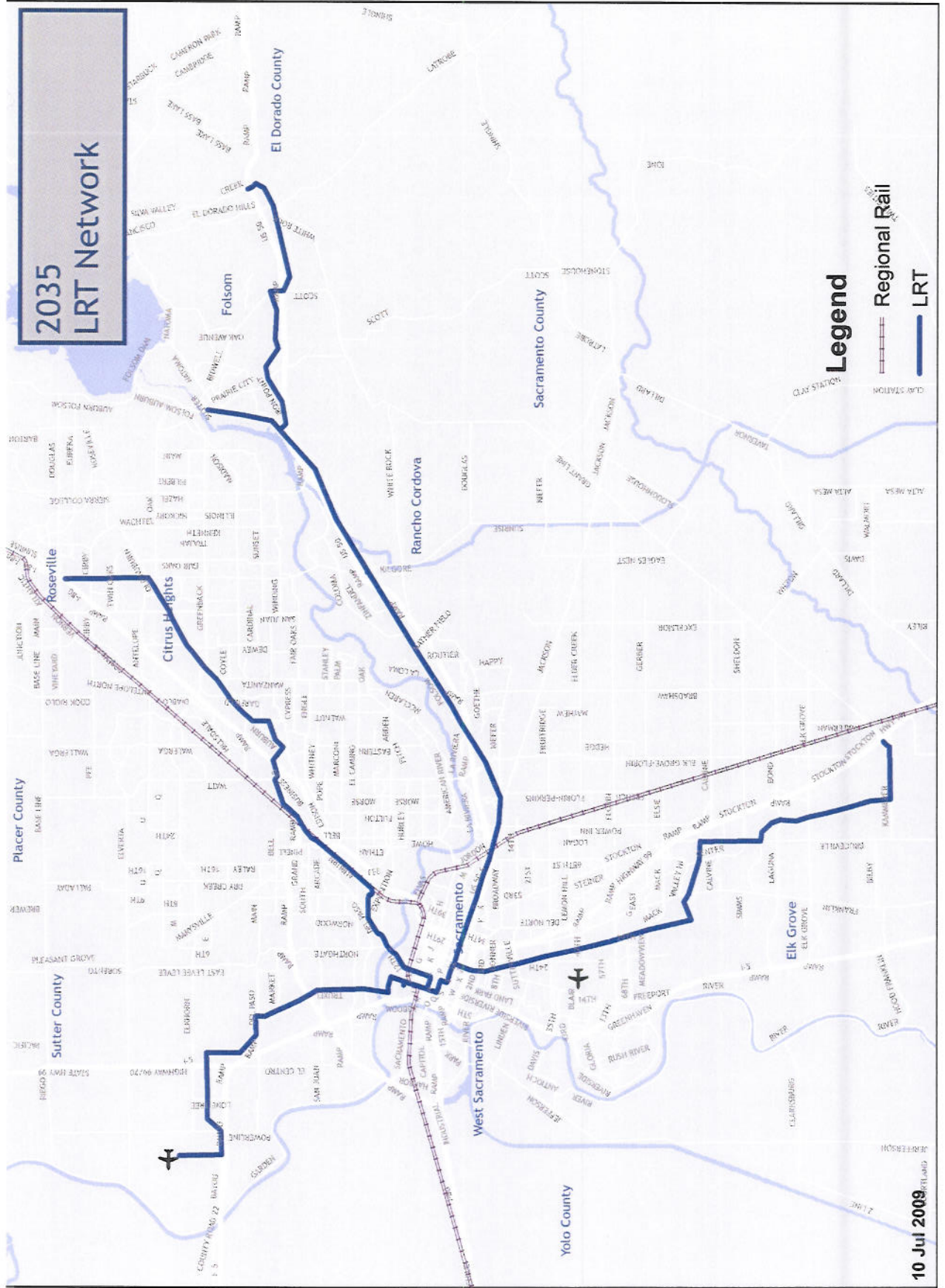
7.22 Sacramento’s light rail network began operating in 1987 with its Starter Line. Since that time, the network has continued to expand and grow and the two lines - the Blue Line running from the northeast at Watt/I-80 through downtown south to Meadowview and the Gold Line running from Historic Folsom through Rancho Cordova to the Sacramento Valley Station Downtown - now carry almost as many passengers each day as the entire bus network.

7.23 The TransitAction Plan, and much of the support for the major elements within it, therefore includes further expansion of the light rail network as a key component of the regional high capacity transit network. Table 7.1 provides a summary of the network expansion plans. Figure 7.3 presents a map of the various lines and then further details of each project are provided below.

TABLE 7.1 SUMMARY OF THE LIGHT RAIL NETWORK EXPANSION PROJECTS

Alignment / Extension	Length (mi.)	Stops	Average Spacing (mi.)
Downtown-Natomas-Airport LRT	12.8	13	1.07
Gold Line LRT Extension to El Dorado County	9.6	10	1.07
Blue Line LRT Extension to Citrus Heights	6.4	10	0.71
Blue Line LRT Extension to Roseville	3.7	6	0.74
Blue Line LRT Extension to Elk Grove	8.3	5	2.08

FIGURE 7.3



Downtown-Natomas-Airport Light Rail

7.24 RT has been planning and developing the Downtown-Natomas-Airport (DNA) Light Rail project for over a decade. Plans are currently well developed to build and operate the first segment of this line - the Minimum Operable Segment (MOS1) from Downtown to Richards Boulevard. The TransitAction Plan therefore builds on the work already underway and includes a full-double track route all the way through Natomas to Sacramento International Airport (SMF).

7.25 The indicative 12.8 mile route shown in Figure 7.3 includes the following stations: Railyards, Richards, Sequoia Pacific, El Camino/Truxel, Natomas Gateway, Arena Blvd., Arco Arena, East Town Center, Natomas Town Center, Commerce Parkway, South, Commerce Parkway, North, Greenbriar, Metro Airpark, and Airport.

7.26 Table 7.2 summarizes the key destinations this extension serves.

TABLE 7.2 DNA LRT KEY DESTINATIONS

Key Destination	Impact of Amenity	Scale of Amenity
Sacramento Valley Rail Station	Interchange	Interstate Rail Commuter Rail Intercity Bus Local Bus
Downtown Sacramento	Employment	Central Business District
	Shopping	Downtown Plaza and other retail
Natomas Marketplace / Sacramento Gateway	Shopping	1.2 million sq. ft.
Arco Arena	Events	200 events/year
Sacramento International Airport	Passengers	10.6 million pax/year
	Employees	1,000+

Gold Line Light Rail Extension to El Dorado County

7.27 This extension, from Iron Point on the Gold Line, was identified through previous planning efforts by both the City of Folsom and El Dorado County and would be largely driven by local plans and desires to support intensification of land use in the corridor.

Road; Stonebriar Drive; Latrobe Road and Silva Valley Parkway / El Dorado Freeway.

7.28 The indicative 9.6 mile route shown in Figure 7.3 includes the following ten stations (nine new): Iron Point Station ; Black Diamond Drive; Prairie City; Oak Avenue Parkway; Palladio Parkway/Bidwell Street; Placerville / El Dorado Freeway; Placerville Road/White Rock

7.29 Table 7.3 summarizes the key destinations this extension serves.

TABLE 7.3 EL DORADO LRT EXTENSION KEY DESTINATIONS

Key Destination	Impact of Amenity	Scale of Amenity
Gold Line Connections to Rancho Cordova and Downtown Sacramento	Employment Shopping Colleges Hospitals	Numerous opportunities
Folsom Premium Outlets	Shopping	300,000 sq.ft.
Intel Corporation	Employees	6,800+
Chapman University College - Folsom	Students	1,000+
Broadstone Neighborhood	Shopping	1.5 million sq.ft.

Blue Line Light Rail Extension to Citrus Heights

7.30 The existing Blue Line Light Rail terminates at Watt/I-80 station with a stub terminus extending between the north and south bound freeway lanes near the Watt Avenue / I-80 junction. An extension of the Blue Line north would be a largely street-running extension starting at Watt/I-80 and terminating in Citrus Heights at (or near) the intersection of Auburn Blvd., Old Auburn Road and Sylvan Road. It is expected that a further extension would then continue from near that intersection north/northeast to Roseville.

7.31 The indicative alignment was shown in Figure 7.3 and of note is that it:

- Would require a significant structure/tunnel to pass over/under the freeway;
- Directly serves American River College;

- Would intersect with a north-south running European Street Tram from Rancho Cordova to Citrus Heights (at Auburn and Greenback); and
- Includes stops at all of the retail nodes on Auburn Boulevard highlighted as important areas of commercial activity by the City of Citrus Heights.

7.32 The 6.4 mile route includes the following ten stations (nine new): Watt-I80; Auburn/Orange Grove; American River College (Orange Grove/College Oak); Auburn/Madison; Auburn/Garfield; Auburn/Manzanita; Auburn/Greenback; Auburn/Van Maren Lane; Auburn/Coachman Way; and Auburn/Old Auburn/Sylvan Road.

7.33 Table 7.4 summarizes the key destinations this extension serves.

TABLE 7.4 CITRUS HEIGHTS LIGHT RAIL EXTENSION KEY DESTINATIONS

Key Destination	Impact of Amenity	Scale of Amenity
Blue Line Connections to Downtown Sacramento	Employment Shopping	Numerous opportunities
Heritage Oaks Hospital	Patient Beds	120+
American River College	Students	36,000+
	Employers	1,000+
European Street Tram Connections to Rancho Cordova (proposed)	Shopping Employment	Sunrise Marketplace and other opportunities
Retail Nodes Along Auburn Boulevard	Shopping Employment	Auburn & Old Auburn Auburn & Greenback Auburn & Garfield Auburn & Madison

Blue Line Light Rail Extension to Roseville

7.34 As noted in the previous section, an extension of the Blue Line to Roseville would be a continuation, or further phase, of a north/northeastern extension of the existing Blue Line. The southern terminus is assumed to be the northern terminus of the Citrus Heights extension (i.e. at (or near) the intersection of Auburn Blvd., Old Auburn Road and Sylvan Road) and then the alignment continues to run on-street along Old Auburn Boulevard and then north on Sunrise Boulevard to Roseville Gateway College.

7.35 The indicative alignment was shown in Figure 7.3 and of note is that it:

- Would intersect with a Hi-Bus corridor on Antelope and Sunrise Boulevard;
- Terminates at Sierra College - Roseville Gateway; and
- Includes stops at all of the retail nodes on Auburn Boulevard highlighted as important areas of commercial activity by the City of Citrus Heights.

7.36 The 3.7 mile route includes the following six stations(fivenew):Auburn/Old Auburn/Sylvan Rd; Auburn/Sunrise; Sunrise/Antelope; Sunrise/Twin Oaks; Sunrise/Cirby Way; and Roseville Gateway.

7.37 Table 7.5 summarizes the key destinations this extension serves.

TABLE 7.5 ROSEVILLE LIGHT RAIL EXTENSION KEY DESTINATIONS

Key Destination	Impact of Amenity	Scale of Amenity
Blue Line Connections to Downtown Sacramento	Employment Shopping	Numerous opportunities
Retail Nodes Along Old Auburn Blvd and Sunrise Blvd	Shopping Employment	Sunrise & Cirby Sunrise & Old Auburn
BRT/Hi-Bus Connections to Antelope and Roseville Center (proposed)	Shopping Employment Hospital Colleges	Numerous opportunities
Sierra College - Roseville Gateway	Students	600+

Blue Line Light Rail Extension to Elk Grove

7.38 RT already has committed to building an extension of the Blue Line south to Cosumnes River College (CRC) with a terminus on Bruceville Road and this is therefore assumed in the ‘base case’ for the TransitAction Plan. However, a further extension is proposed south from CRC to the south/southeast to a southern terminus at the future Elk Grove Promenade Shopping Center.

7.39 The indicative alignment was shown in Figure 7.3 and of note is that it:

- Would intersect with Hi-Bus corridors serving routes from Cosumnes River College, as well as routes from Elk Grove

along Grant Line Road and towards Rancho Cordova; and

- Follows the alignment in the adopted Elk Grove General Plan - Circulation Element (adopted in 2003 and amended in 2007).

7.40 The 8.3 mile route includes the following five stations (four new): Cosumnes River College; Bruceville/Sheldon Road; Bruceville/Big Horn Blvd; Big Horn/Elk Grove Blvd; and Elk Grove Promenade Shopping Center. Table 7.6 summarizes the key destinations this extension serves.

TABLE 7.6 ELK GROVE LIGHT RAIL EXTENSION KEY DESTINATIONS

Key Destination	Impact of Amenity	Scale of Amenity
Blue Line Connections to Downtown Sacramento	Employment Shopping Colleges	Numerous opportunities
Laguna Crossroads	Shopping	423,000 sq.ft.
Elk Grove Promenade (under construction)	Shopping	1.1 million sq.ft.

Streetcar and European Street Tram

- 7.41 Sacramento was one once one of America’s great streetcar cities with streetcars running throughout Downtown, Midtown and providing access to and from the growing suburbs. In the mid-1930’s the City had more than a dozen different routes operating, but with the end of World War II and the dawn of the motor car and the development of the bus industry, the streetcars slowly disappeared from Sacramento’s streets.
- 7.42 As part of the TransitAction Plan, four new streetcar/tram systems are planned for the Sacramento region. They are a combination of American-style streetcar services similar to those seen in Portland, Oregon with

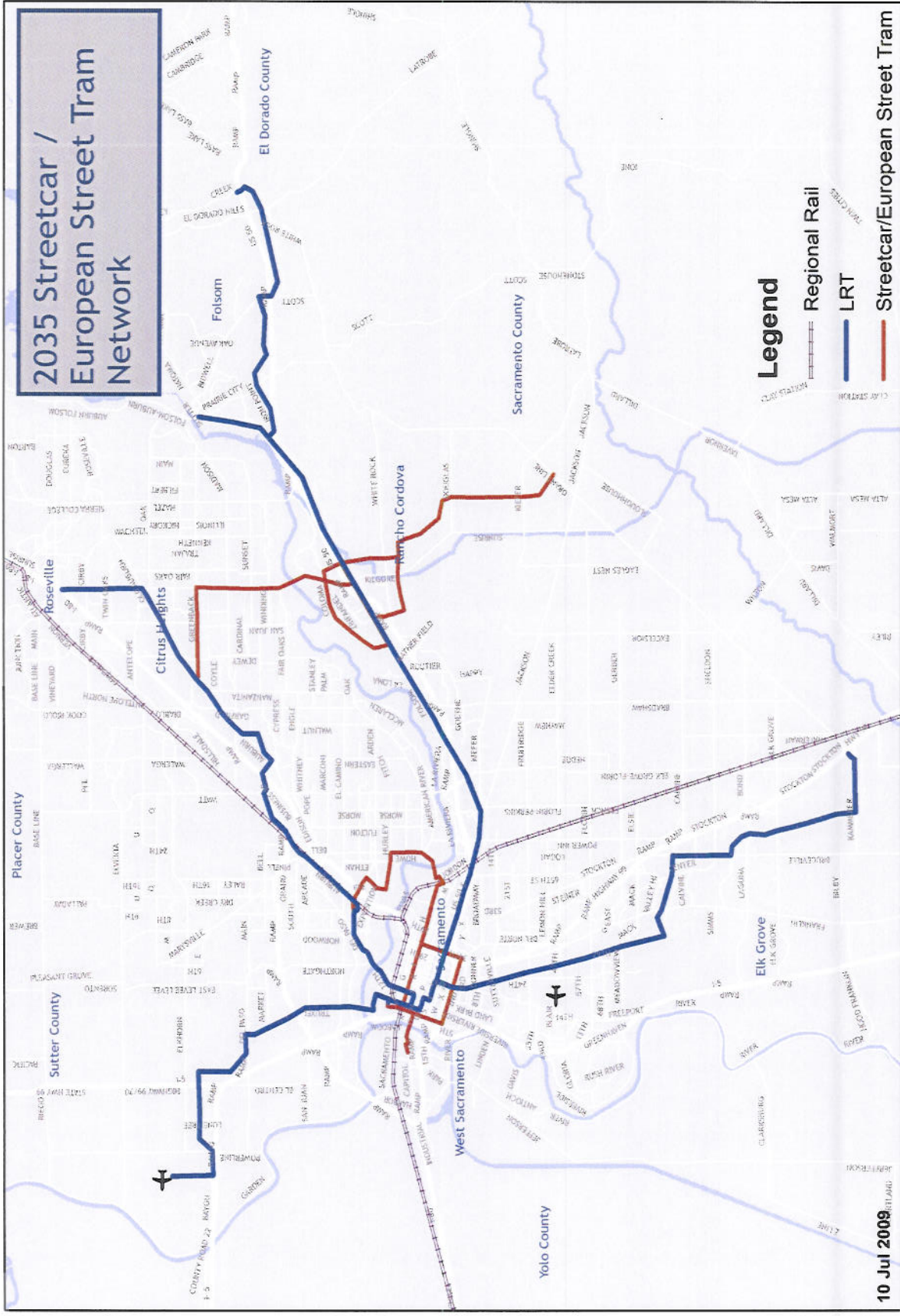
smaller vehicles running in mixed operation with traffic and European Street Trams similar to the systems in many western European cities with slightly longer, higher capacity vehicles.

- 7.43 Table 7.7 provides a summary of the Streetcar and European Street Tram network plans and Figure 7.4 presents a map of the various lines. Further details of each project are provided below.

TABLE 7.7 SUMMARY OF STREETCAR AND EUROPEAN STREET TRAM PROJECTS

Alignment / Extension	Length (miles)	Stops	Average Spacing
Downtown European Street Tram - North Loop	10.3	21	0.52
Downtown European Street Tram - South Loop	8.7	21	0.44
Citrus Heights - Rancho Cordova European Street Tram	7.9	14	0.61
Rancho Cordova Streetcar	18.7	25	0.78

FIGURE 7.4



Downtown European Street Tram

- 7.44 The TransitAction Plan includes a European Street Tram service linking West Sacramento to Downtown with an extension eastwards through Midtown to CSUS, Cal Expo and Arden/Arden Fair Mall. A service is also shown on Broadway on the south side of Downtown. For operational purposes, this loop network has been split into two routes: a northern loop. Each is assumed to be operated using low-floor light rail vehicles - European Street Trams - with the alignment detail of each described below.

North Loop

- 7.45 The southern terminus for this loop would be in the Railyards development site. While the specific location of the terminus may change as the development plans and phasing are further developed, for the purposes of the TransitAction Plan, it has been assumed to stop on Railyards Boulevard adjacent to the DNA Light Rail stop at Railyards Blvd and 7th Avenue. The route would then serve Downtown on J-Street, east through midtown to CSUS and then head north on Howe Avenue before turning west into the Cal Expo site.
- 7.46 While it is likely that this site will be redeveloped and the roadway configuration changed, for planning purposes, the alignment largely follows existing roads and includes two stops. North of Cal Expo, the streetcar serves Arden Fair Mall before heading west to connect with the Blue Line Light Rail at Royal Oaks Light Rail station.
- 7.47 The 10.3 mile alignment is shown in Figure 7.4 and includes 21 stops (19 new) at: Railyards Blvd & 7th; Sac Valley Station; Westfield Shopping Plaza (6th & J); City Plaza Park (10th & J); Convention Center (14th & J); 20th & J; Sutter Hospital (28th & J); Alhambra & J; Mercy General Hospital (39th & J); 48th & J; 56th & J; North State University Drive; CSUS Transit Center; Fair Oaks Blvd/Campus Commons Drive; Fair Oaks Blvd/Howe Avenue; Howe Ave/Northrop Avenue; Howe Ave/Hurley Way ; Cal Expo and Fair 1; Cal Expo and Fair 2; Arden Fair Mall; and Royal Oaks station.
- 7.48 Table 7.8 summarizes the key destinations this extension serves.

TABLE 7.8 DOWNTOWN EUROPEAN STREET TRAM NORTH LOOP KEY DESTINATIONS

Key Destination	Impact of Amenity	Scale of Amenity
DNA Connections to Natomas, Sacramento Int'l Airport and Arco Arena	Shopping Airport Events	Numerous opportunities
Downtown Plaza	Shopping	1.2 million sq.ft.
California Air Resources Board	Employees	1,000+
California Environmental Protection Agency	Employees	1,000+
Sacramento Convention Center	Visitors	1 million/year
Sutter General Hospital	Patient Beds	300+
Mercy General Hospital	Patient Beds	340+
	Employees	1,000+
California State University Sacramento	Students	29,000
	Employees	1,000+
Arden Fair Mall	Shopping	1.1 million sq.ft.
Blue Line Connections to Downtown or towards Citrus Heights	Employment Shopping Hospitals Colleges	Numerous opportunities

South Loop

7.49 The South Loop will provide a downtown circulation service that will help support the revitalization of parts of West Sacramento, Downtown and the Broadway Corridor. The western terminus is assumed to be at West Sacramento City Hall - consistent with the streetcar project being developed in partnership between the City of Sacramento and the City of West Sacramento. The route shares the track downtown with the north loop on J Street as far as Alhambra where it would head south to Broadway and then return back west to Downtown terminating in the Railyards development site. As with the North Loop, the terminus would be on Railyards Boulevard adjacent to the DNA Light Rail stop at Railyards Blvd and 7th Avenue.

7.50 The 8.7 mile route is shown in Figure 7.4 and includes 21 stops (19 new although seven would be shared with the North Loop) at: West Sacramento City Hall; Raley Field Station; Old Town Station (Capitol Mall/Front Street); 5th and Capitol; Westfield Shopping Plaza (6th & J); City Plaza Park (10th & J); Convention Center (14th & J); 20th & J; Sutter Hospital (28th & J); Alhambra & J; Alhambra and Stockton Blvd; 29th Street station; Alhambra / Broadway; Broadway / Franklin; Broadway station; Broadway / Riverside Blvd; Broadway / 5th Street; 5th and R Street; 5th and Capitol; Sac Valley station; and Railyards Blvd & 7th.

7.51 Table 7.9 summarizes the key destinations this extension serves.

TABLE 7.9 DOWNTOWN EUROPEAN STREET TRAM SOUTH LOOP KEY DESTINATIONS

Key Destination	Impact of Amenity	Scale of Amenity
DNA Connections to Natomas, Sacramento Int'l Airport and Arco Arena	Shopping Airport Events	Numerous opportunities
Downtown Plaza	Shopping	1.2 million sq.ft.
California Air Resources Board	Employees	1,000+
California Environmental Protection Agency	Employees	1,000+
Sacramento Convention Center	Visitors	1 million/year
Sutter General Hospital	Patient Beds	300+
California Social Services Department	Employees	7,500
California Child Abuse Prevention Office	Employees	1,000+
California Water Resources Department	Employees	1,000+
California Employment Development Department	Employees	1,000+

Rancho Cordova Streetcar

7.52 The Rancho Cordova Streetcar was identified as a priority project in the City of Rancho Cordova's 2006 Transit Master Plan and is supported through RT's TransitAction Plan. At full build, it will be an 18.7 mile network with the seven stages that were grouped into three phases of implementation:

- Stages 1-3 - 10 stops, 7.5 miles;

- Stages 4-5 - 7 stops, 5.4 miles; and
- Stages 6-7 - 8 stops, 5.9 miles.

7.53 All three stages are shown together in Figure 7.4; however, for the purposes of the TransitAction Plan, it is assumed that the service would be built in phases to match the planned development and changing land uses in the City of Rancho Cordova.

7.54 Table 7.10 summarizes the key destinations this extension serves.

TABLE 7.10 RANCHO CORDOVA STREETCAR KEY DESTINATIONS

Key Destination	Impact of Amenity	Scale of Amenity
Gold Line Connections to Downtown and Folsom	Employment Shopping Hospitals Colleges	Numerous opportunities
Vision Service Plan	Employees	1,900
Capital Village Town Center	Shopping	300,000 sq.ft.
Delta Dental	Employees	1,000+
Local Retail Nodes	Shopping	Rancho Cordova Town Center Mills Shopping Center

Citrus Heights - Rancho Cordova European Street Tram

- 7.55 Through consultation with the City of Citrus Heights, a European Street Tram was identified as a priority project serving the Sunrise-Greenback corridor into Citrus Heights town center. While further detailed planning work will be required to determine the precise alignment, stops and termini (as well as the financial viability of the project), it is assumed that the northern terminus would be at Greenback and Auburn Blvd and that the southern terminus would be in Rancho Cordova at the Sunrise station.
- 7.56 The indicative 7.9 mile route includes 14 stops, including: Sunrise LRT P&R; Sunrise/Zinfandel Dr; Sunrise/Gold Express Drive; Sunrise/Gold Country Blvd; Sunrise/Fair Oaks Blvd; Sunrise/Winding

Way; Sunrise/Sunset Avenue; Sunrise/Madison Avenue; Sunrise Festival & Marketplace at Birdcage Malls; Greenback/Birdcage St; Greenback/Mindan Way; Greenback/Regency Drive; Greenback/Van Maren Lane; and Greenback/Auburn Blvd.

- 7.57 The alignment is shown in Figure 7.4 and of note is that it:
- Would intersect with Hi-Bus routes on Sunrise (from Rancho Cordova) and north/northwest on Sunrise/Antelope;
 - Connects the Gold Line (at Sunrise station) and the Blue Line (Citrus Heights Extension at Greenback/Auburn Light Rail); and
 - Connects with the Rancho Cordova streetcar network.
- 7.58 Table 7.11 summarizes the key destinations this extension serves.

TABLE 7.11 CITRUS HEIGHTS-RANCHO CORDOVA EUROPEAN STREET TRAM KEY DESTINATIONS

Key Destination	Impact of Amenity	Scale of Amenity
Gold Line Connections to Downtown and Folsom	Employment Shopping Hospitals Colleges	Numerous opportunities
Sunrise Marketplace	Shopping	2 million sq.ft.
Hi-Bus Connections to Folsom and Citrus Heights	Employment Hospitals Colleges	Mercy San Juan Mercy Folsom Folsom Lake College
Blue Line Connections to Downtown and Roseville	Employment Shopping Hospitals Colleges	Numerous opportunities

Bus Services - The Hi-Bus Network

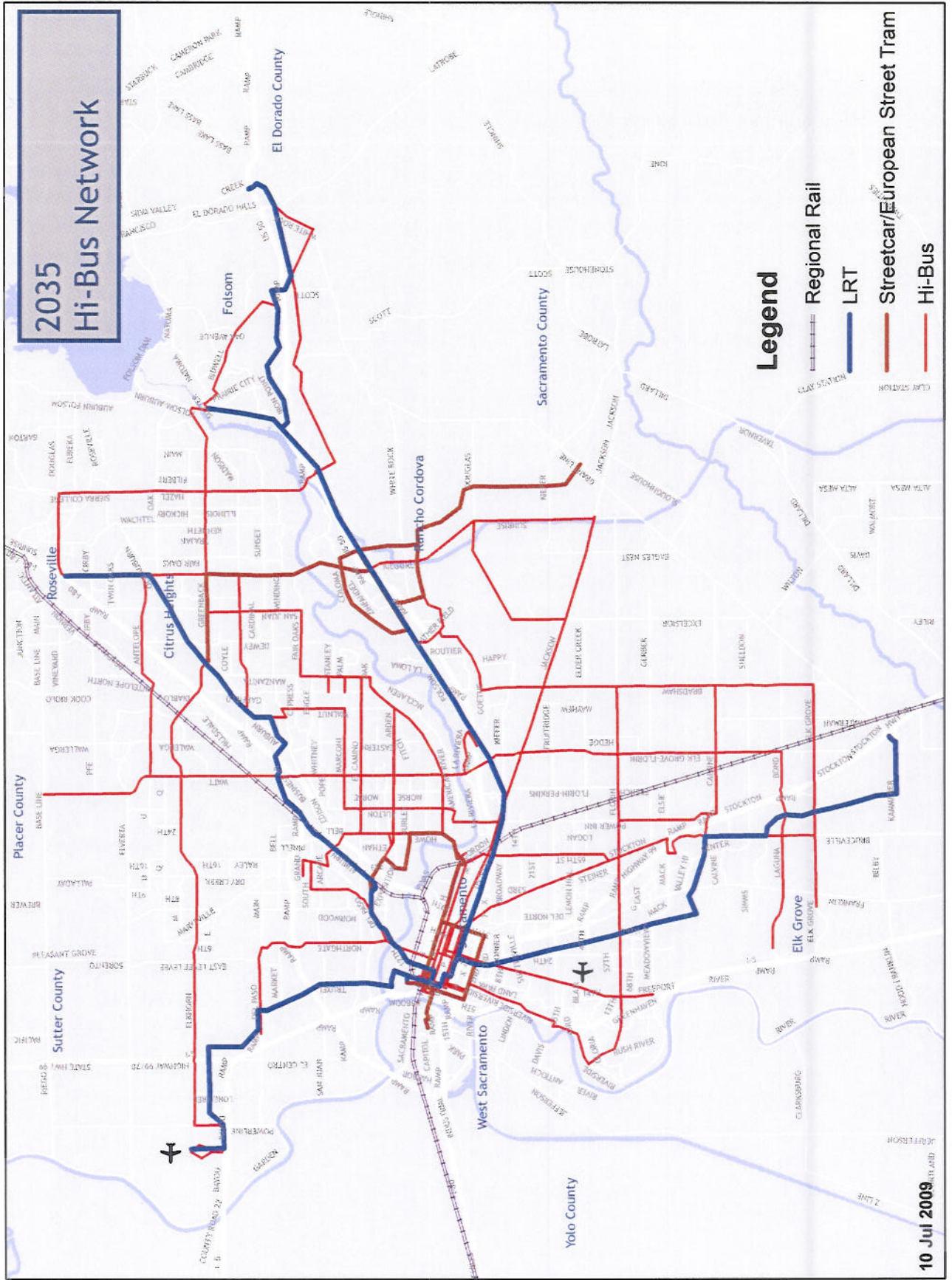
- 7.59 The Hi-Bus network is planned as a network of **high frequency, high speed** bus routes using **high quality** vehicles that will augment the light rail/streetcar network to complete the regional high capacity transit system. The Hi-Bus network is extensive and includes total route length of over 260 miles, which will provide a much larger portion of the population with fast, reliable transit services. This network will be supported and infilled with a further set of local, community based services to help feed the high capacity network and cater to short, local trips.
- 7.60 The Hi-Bus network includes a range of bus-based services including BRT using exclusive lanes, enhanced bus corridors and express bus services. Chapter 8 provides further details on the specific guidelines, standards and elements included as part of the Hi-Bus network.
- 7.61 In developing the high capacity transit network (including Hi-Bus), a number of different tools and sources of information to inform the bus routings and termini. These included:
- Vision statement, objectives and the service philosophy;
 - MTP2035 land use forecasts;
 - MTP2035 origin-destination data;
 - MTP2035 bus network modelled ridership; and
 - Identification of major trip attractors/generators.
- 7.62 While the implementation of specific routes and services will be subject to detailed service planning and review, the indicative network, along with key destinations served are presented in Table 7.12 and then on the map in Figure 7.5.

TABLE 7.12 SUMMARY OF THE HI-BUS NETWORK

Route	Start	End	Key Destinations Served	Length (miles)
Riverside	Florin Road/ JFK HS	Downtown	Westfield Downtown Plaza, State Depts. (SS/CAPO/WR/EDD), Riverview Neighborhood, N Riverside Blvd Neighborhood, John F. Kennedy High School	7½
Freeport	Freeport/ Meadowview	Downtown	Westfield Downtown Plaza, Convention Center, State Depts. (EPA, ARB), Sac City College, Sac Executive Airport, Sac Bee Newspaper	8
Stockton	CRC Transit Center	Downtown	Downtown Plaza, State Depts. (SS/CAPO/WR/EDD/CD), UC Davis Health Center Cosumnes River College, Fruitridge/Florin Malls	12
Norwood	East Town Center LRT	Downtown	Arco Arena, State Depts. (EPA/ARB), Convention Center, Downtown Plaza, Northgate Blvd Neighborhood	8½
Del Paso	Grant Union High School	Downtown	Grant Union High School, Rio Linda Neighborhood, Convention Center, State Depts. (EPA/ARB), Downtown Plaza	7
Fair Oaks	Fair Oaks/ Marconi	Downtown	Downtown Plaza, Convention Center, Mercy General Hospital, Cal State U Sacramento, Pavilions Mall, Sutter General Hospital	13
Jackson Hwy	Jackson Hwy/ Sunrise	Downtown	Downtown Plaza, Convention Center, Cal State U Sacramento, Sutter General Hospital	15
Arden Way	Fair Oaks/ Marconi	Royal Oaks LRT	Royal Oaks LRT, Arden Fair, Arden/Watt Neighborhood, Arden/Fair Oaks Neighborhood, Fair Oaks/Marconi Neighborhood	9
El Camino	Sunrise Mall	Royal Oaks LRT	Royal Oaks LRT, Arden Fair, Country Club Center & Plaza, El Camino Fundamental High School, Sunrise Mall/Marketplace at Birdcage	15½
Florin	Florin Road/ JFK HS	Florin Bradshaw	Florin Town Center, Southgate Plaza, Luther Burbank High School, Florin LRT, John F. Kennedy High School	11½
Elkhorn	Greenback/ Auburn LRT	SMF Airport	Sacramento Int'l Airport, W Elkhorn Blvd New Neighborhood, Elkhorn/Walerga Neighborhood, Elkhorn Plaza, Greenback/Auburn LRT	18
Hazel	Hazel LRT	Roseville LRT	Hazel LRT, Madison Mall, Kaiser Permanente Roseville, Roseville Center, Sierra College Roseville,	11

Route	Start	End	Key Destinations Served	Length (miles)
			Roseville LRT	
Bradshaw	Laguna Cross Roads Center	Zinfandel LRT	Zinfandel LRT, Rancho Cordova Town Center, Vision Service Plan/Capital Village Town Center, Sac County Water Quality Board, Laguna Cross Roads Center, 3 high/middle schools	20½
Antelope	Sunrise Mall	Watt/Elkhorn Blvd	Elkhorn/Watt Neighborhood, Antelope/Daly Neighborhood, Mesa Verde High School, Sunrise Mall/Marketplace at Birdcage	9
Madison	Sunrise Mall	American River College	American River College LRT, Madison/Dewey Neighborhood, Sunrise Mall/Marketplace at Birdcage	6
65th Street	CRC Transit Center	CSUS Transit Center	Cal State U Sacramento, University/65th St LRT, Florin Mall, Cosumnes River College LRT	10
Watt	Starfire LRT	Watt/Elkhorn Blvd	Elkhorn/Watt Neighborhood, Watt/Whitney Neighborhood, Country Club Center & Plaza, Arden/Watt Neighborhood, Starfire LRT	10½
South Watt	CRC Transit Center	Watt/Man Love LRT	Watt/Manlove LRT, Elk Grove Florin/Vintage Park Neighborhood, Laguna Gateway/Cross Roads Center malls, Edward Harris, Jr. Middle School, Cosumnes River College LRT	13½
Howe	Grant Union High School	CSUS Transit Center	CSUS LRT, Cal State U Sacramento, Pavilions Mall, Marconi/Arcade LRT, Grant Union High School	6½
Marconi	American River College	Power Inn LRT	Power Inn LRT, Cal State U Sacramento LRT, Kaiser Foundation Hospital, Town & Country Village, American River College LRT	11
Sunrise	Jackson Hwy / Sunrise	Cordova Town Center LRT	Cordova Town Center LRT, Rancho Cordova Town Center, Sunrise Blvd Industrial Area	8
Easton Valley	Hazel LRT	Silva Valley Parkway LRT	Hazel Light Rail	10½

FIGURE 7.5



Local Bus Services

- 7.63 While the high capacity transit network will cater for a large portion of the trips made on the network - particularly the longer distance trips to major destinations - many of the shorter distance, local trips will be made on community-based services.
- 7.64 The details of the individual services will be the subject of local, community based planning but will serve local shopping centers, medical facilities, schools, recreation centers and other local attractors. In addition to serving these local trips, these services will also play an important role in helping carry passengers to the high capacity transit network.

Impacts on Fleet and Maintenance Facilities

- 7.65 The TransitAction Plan includes large increases in both the network coverage and frequency of services and, in order to provide this level of service, many more vehicles and staff will be needed. Furthermore, additional maintenance staff and facilities will be needed to store and maintain the expanded fleet.
- 7.66 Table 7.13 provides the relative impacts on RT’s fleet size and maintenance facilities required as a result of the TransitAction Plan’s expanded service levels.

TABLE 7.13 IMPACTS ON FLEET AND MAINTENANCE REQUIREMENTS

Variable	Current Requirement	2035 Requirement
Maintenance Facilities		
• Bus	1	3
• Light Rail	1	3
Vehicles		
• Bus	351	947
• Light Rail	97	359

Park and Ride Facilities

- 7.67 At many of RT’s existing Light Rail stations, particularly those outside of the central city, park and ride facilities are provided. In addition to providing parking for car drivers, they are also typically used as transfer centers from bus to light rail.
- 7.68 These lots provide RT’s users with convenient access to the transit network and allow them to avoid road network congestion and save on the cost of parking at their final destination (where cost is

likely to be higher and availability at a premium).

- 7.69 In many cases, the facilities are easily accessible from main roadways in more suburban areas where the bus service is less frequent and less convenient relative to other more urban areas. As such, park and ride facilities are used by RT to complement the bus- and Light Rail services to provide transit options for those individuals that are less inclined to take the bus and either unwilling or unable to pay for parking in the more costly urban centers.

FIGURE 7.5

Park and Ride Pros and Cons

7.70 One of the main purposes of RT's services is to provide choice and help increase the people moving capacity of the transportation network. With this in mind, Park and Ride facilities should be located at strategic points throughout the network to attract and encourage individuals to combine transit into their trip decision. Through the strategic use of Park and Ride (both in its current network and in the network created by the TransitAction Plan), RT is able to increase ridership while releasing road capacity at key points in the network.

7.71 Some of the positive and negative attributes of Park and Ride are briefly described below:

Positives

- Increases accessibility to transit;
- Can encourages shorter auto trips;
- Encourages transit usage;
- Provides opportunities to better allocate scarce transit resources;
- Provides potential to alleviate some congestion;
- Reduces the competition for parking on private streets adjacent to stations;
- Expands the marketability of transit;
- Can complement local services; and
- Can help service special events.

Negatives

- In some instances, it can compete with bus service and may cause more auto trips;
- Costs to build, operate and maintain the lots;
- Security and enforcement; and
- Can sterilize development opportunities.

Cost Considerations

7.72 Given the high construction costs for structured parking it is not surprising that the vast majority of Park and Ride facilities are surface lots. Although the Park and Ride facility will increase transit revenues, including a possible parking fee and the transit fare, it is difficult to overcome capital costs of between \$30,000 and \$40,000 per stall in addition to the cost of property and the costs associated with the operations and maintenance of the parking structure.

Charging

7.73 Most jurisdictions reviewed as part of the peer review do not charge for parking. However the principle of introducing a charge to manage Park and Ride demand is being applied in Vancouver and is part of Portland's policy on Park and Ride facilities. However it is important to recognize that introducing parking charges (or making them too high) can have a number of detrimental effects including making car use more attractive, increasing road congestion and reducing transit ridership. Further issues to be considered on the charge level to apply are downtown car park parking structures and availability of parking as lower charges may encourage more traffic to drive all the way.

Ridership and Operations

7.74 Based on practices in other jurisdictions, it is apparent that Park and Ride can complement the overall transit service by increasing ridership without being too detrimental to the bus service. In order to minimize the negative impacts of Park and Ride on existing transit services, RT should select Park and Ride locations in areas that are either not particularly well-served by the existing bus network or where the

existing bus service is not able to attract a specific segment of the potential riders.

Complementary Services

7.75 In addition to providing a place to park cars and access transit services, park and ride lots and transit centers provide ideal locations for complementary services to attract passengers and 'footfall' to the area. The types of services that should be encouraged include conveniences stores, post offices, dry cleaners, coffee shops, child care facilities, health care centers, and banks. A considerable portion of commuting trips include stops for commercial services and creating more opportunities for linking such trips to transit would make switching modes easier.

Transit/Transfer Centers

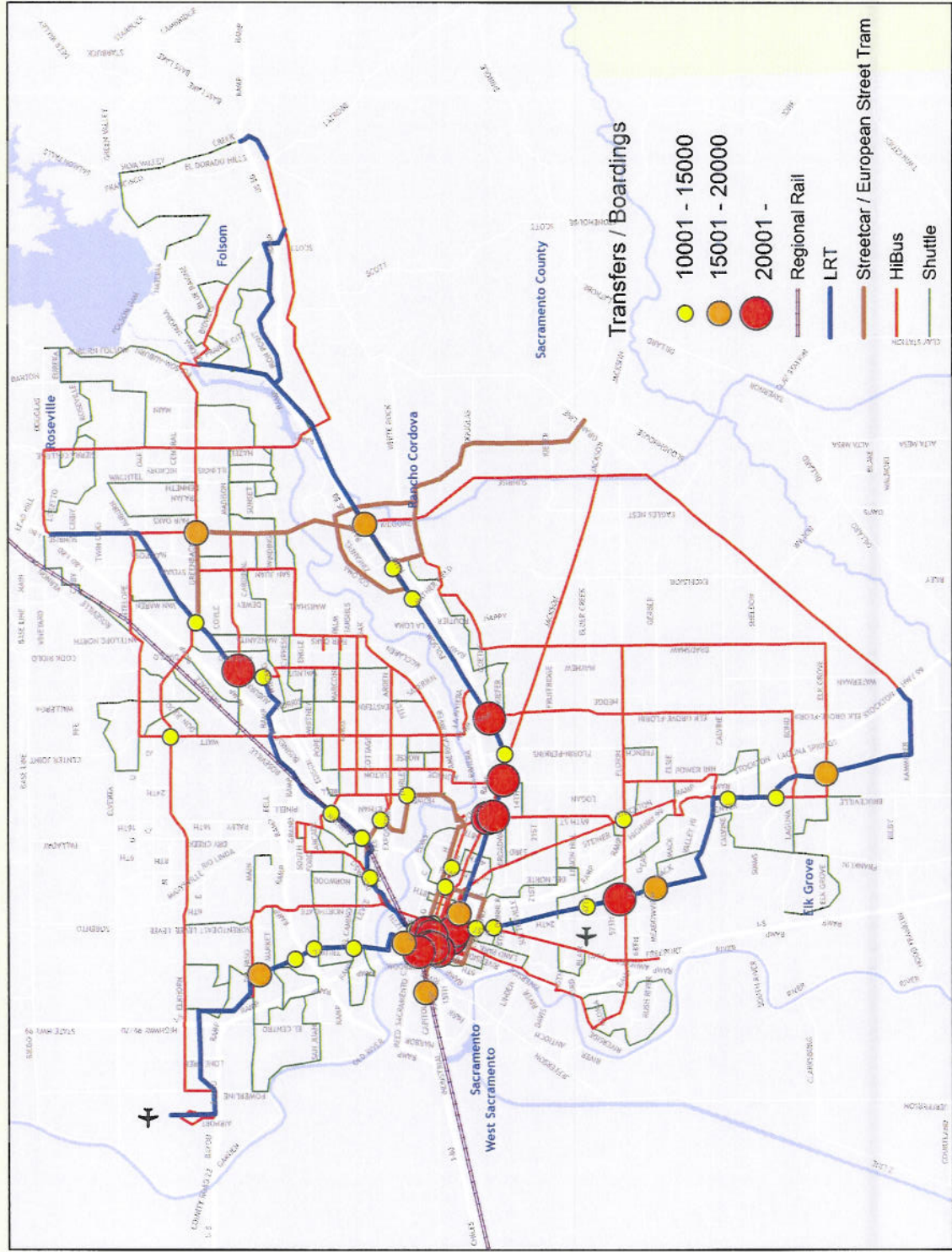
7.76 The development of new high frequency corridors provides the opportunity to create new multi-functional transfer centers to provide easy and convenient interchange between modes and services.

7.77 The Transit-Oriented Development Guidelines developed as part of the Transit Action Plan illustrate land use opportunities at several of the 'new' interchanges created by the implementation of the European Street Tram and Hi-Bus network. Figure 7.6 illustrates these opportunities.

7.78 In addition, the SACMET model used for the ridership forecasting was also able to identify the stops and stations on the network where the highest number of boardings and transfers are predicted to occur - shown in Figure 7.6.

7.79 Depending on the modes serving the transfer points and the scale of transfers occurring, RT may need to purchase further land or look for partners to develop integrated transfer facilities within new developments to provide passengers with convenient interchange facilities.

FIGURE 7.6 BOARDINGS/TRANSFERS BY TRANSIT STOP



ADA Paratransit Plan

As a public operator of transit services, RT is required by the Americans with Disabilities Act (ADA) to provide complementary paratransit services for people who, due to a disability, are unable to use RT's fixed-route bus and rail services for some or all of their trips. Since 1992 RT has met its ADA paratransit obligation through a Collaborative Agreement with Paratransit, Inc. Paratransit, Inc. is an independent non-profit organization that is designated as a Consolidated Transportation Services Agency for the Sacramento region by the SACOG under provisions of the Transportation Development Act .

RT first submitted an ADA Paratransit Plan to the FTA in 1992, as required by the ADA implementing regulations, showing how it would comply with the paratransit requirements of the ADA. The ADA Paratransit Plan was updated annually for five years, as required by the regulations, but has not been updated since 1997. In view of the many changes that have occurred since 1997 and the need to plan for challenges ahead, RT decided to prepare a new ADA Paratransit Plan. While such plans are no longer submitted to or received by FTA, they do provide an official statement of how a transit agency intends to comply with the paratransit requirements of the ADA.

The full ADA Paratransit Plan is attached as Appendix 3.

The plan covers the period from fiscal year 2008-09 through 2017-18. It includes a description of current services, a discussion of issues and trends that affect RT's ability to provide paratransit services, recommended service and policy changes, a demand forecast, and a financial and operating plan with projections of trips provided and costs. The plan concludes with a chapter about non-ADA and supportive services.

ADA paratransit service in the Sacramento region provides door-to-door, shared-ride transportation for individuals whose disabilities prevent them from using RT's bus and light-rail system, and also to people who are 75 years of age or older. Figure 7.7 shows the ADA Paratransit service area boundary for Type I and II services (defined in more detail in Appendix 3.)

Paratransit rides are normally available seven days a week, including holidays, from 6:00 AM to 12:30 AM (half an hour past midnight), although some rides are picked up earlier and later than that.

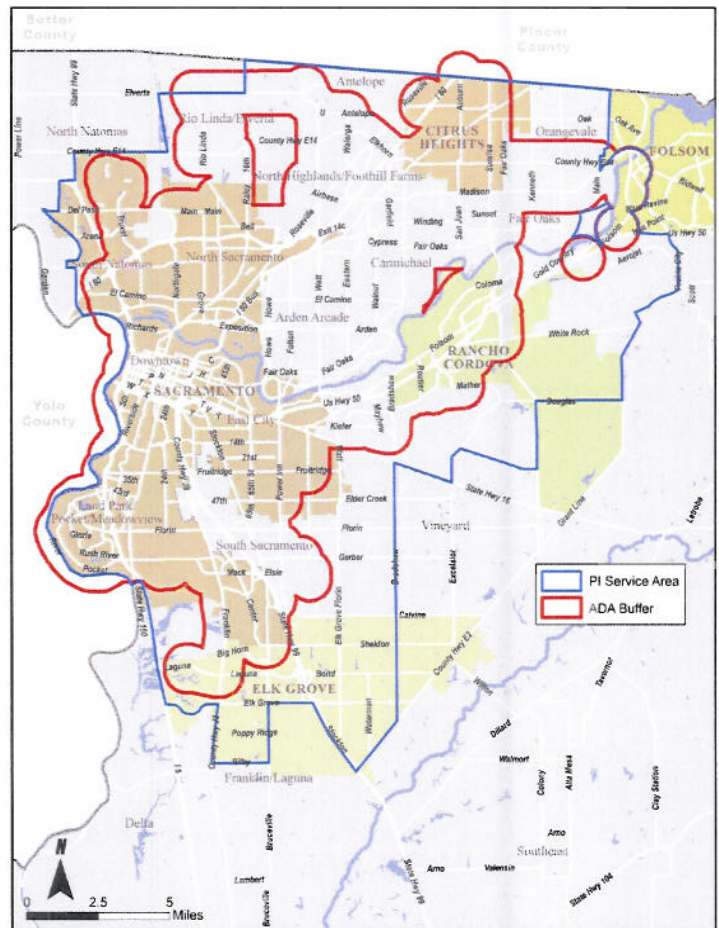


Figure 7.7 ADA Paratransit (Type I) and Type II Service Areas

Community Outreach Phase 2 - Willingness to Pay

7.80 While the scenario evaluation and first phase of outreach supported the Scenario C

transit network and associated components to become the preferred option for the TransitAction Plan, it identified a gap in the available funding to build and operate the network.

7.81 A second phase of outreach was therefore undertaken in the fall/winter of 2008 to get input on the public's 'willingness to pay' for increased transit service, including identifying project priorities and understanding how much people are willing to pay for expansion.

7.82 The work undertaken in developing the TransitAction Plan and evidence from peer cities in the USA has shown that large-scale investments in transit, while they increase ridership and reduce VMT, will not alone be enough to attract significant numbers of new riders. Investment in and commitment to implementing additional initiatives alongside transit investment is needed to provide people with the incentives to switch to transit. The key measures available to Regional Transit are:

- Transit-oriented development; and
- Complementary measures, including:
 - Traffic management;
 - Parking restrictions; and
 - Behavioral change.

7.83 Transit-supportive opportunities and how they could be implemented in Sacramento by RT and its partner agencies Will be a vital part of the discussion leading to implementation of the TransitAction Plan.

Transit-Oriented Development (TOD) Guidelines

7.84 The success of RT and the TransitAction plan is tied to the delivery of transit supportive communities with a roads, sidewalks, bike paths and land use all developed in a way that facilitates convenient access to transit.

7.85 RT has therefore developed a set of Transit-Oriented Development Guidelines for the local jurisdictions to adopt that will help to promote and deliver TOD in Sacramento. The full guidelines are provided in the Appendix to the TransitAction Plan.

7.86 The guide has been developed as a flexible set of recommendations to begin the conversation on a common policy and vision for development around Sacramento's transit investments.

Challenges to Implementation

7.87 As set out in Chapter 3, a number of previous studies and plans have been developed to try to get TOD projects built in Sacramento. There remain however a number challenges facing TOD implementation in Sacramento, including:

- Entitlement processes that are risky to developers;
- Housing and retail product types new to the market;
- Suburban-level parking requirements; and
- Infrastructure capacity issues.

Flexibility and Managing Expectations

7.88 The prospect of a locally unproven development product in a part of town with weak market factors only reinforces the need for the transit agency to study and promote the best development practices. The foundation of the policy, however, should be to create a framework for development that is flexible and allows for evolution over time.

7.89 This marks a clear departure from "standardizing" development expectations for TOD, particularly in the area of land use and density, but also to character and access. Because of unpredictable market forces in many transit corridors, RT expects that its stations will represent a spectrum of

opportunities and its policy should acknowledge this reality. The scope for TOD to develop adjacent to improved high frequency bus corridors has also been recognized, though with limits to the extent of transit-oriented development.

Land Use Framework

- 7.90 The definition of TOD tends to force a single programmed solution onto the different types of communities served by transit. On the contrary, the land development pattern in the Sacramento Region is sophisticated and diverse with a multitude of conditions. The types of projects that might be appropriate in older neighborhoods close to downtown are different from those that might work in new and growing areas in the County.
- 7.91 This section discusses the Sacramento context, the existing and desired community form that will be served by the TransitAction Plan, and the important differences among places and destinations within the Sacramento Region. These definitions clarify the differences between each community and establish a basic framework of development regulations, investment priorities, and design responses for RT's transit delivery policies and each municipality's land development regulations, transportation policies, parks and civic infrastructure programming priorities.

The Existing System

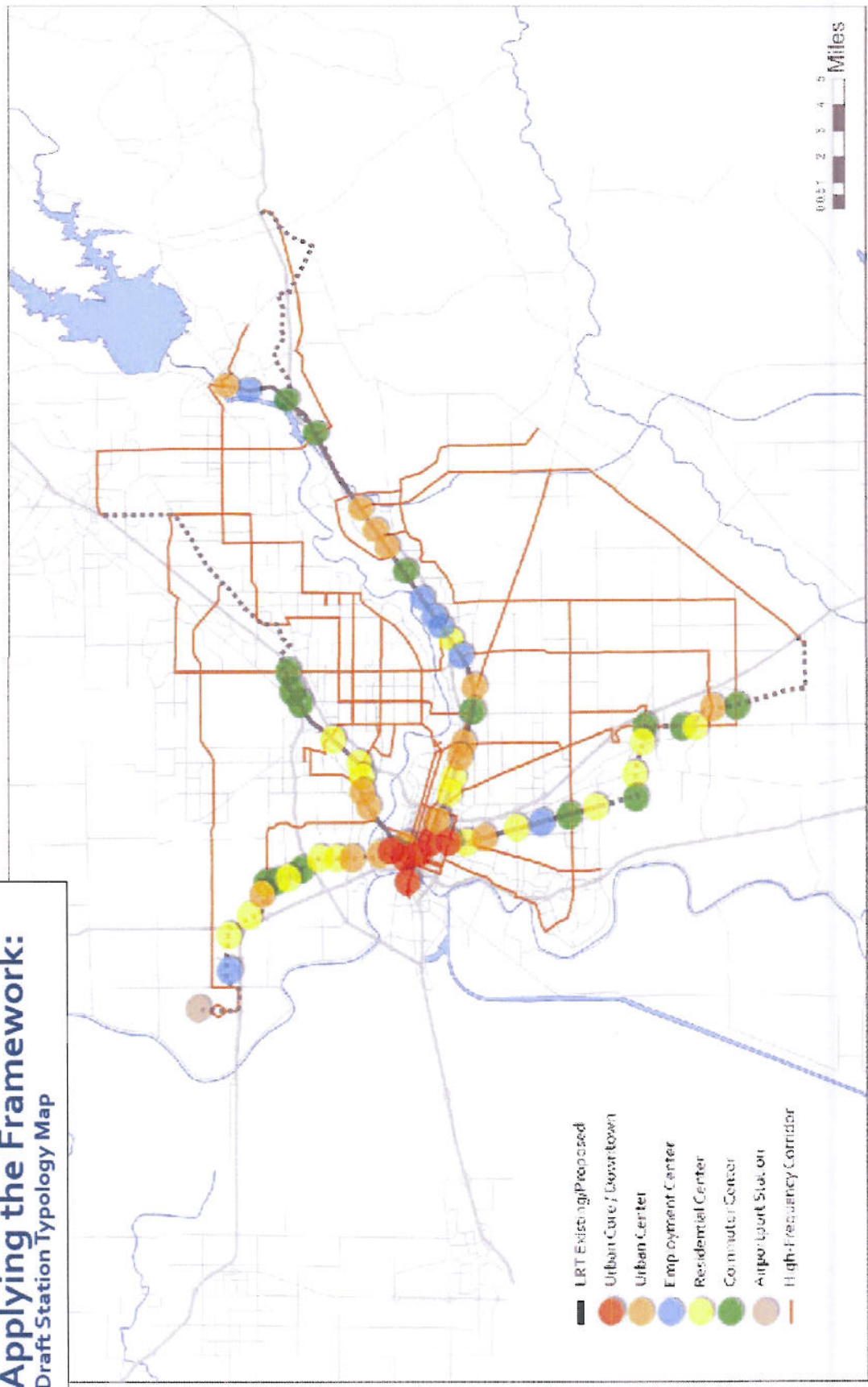
- 7.92 Sacramento's existing light rail network follows a basic framework of station types. Downtown stations are mostly accessed by walking and serve a dense, mixed use environment. Some stations have denser surroundings than others, but nearly all of them are supported by a well connected street network.

- 7.93 Traveling outward from the urban core, stations serve retail crossroads, employment centers, or predominantly residential neighborhoods. These stations may have park-and-ride lots or are simply accessed by walking.
- 7.94 Further into the suburbs and towards the urbanized edge of the region, the majority of stations have large park-and-ride lots. Although some of these stations serve major employers, most function to draw in commuters to travel into and out of the urban core via transit.

- 7.95 As illustrated in Figure 7.8, the land use framework of a transit system is made up of a range of environments and a parallel range of transit functions and appropriate technologies. This range of environments can be used to inform policy and development expectations for TOD.
- 7.96 Since the stations today vary in function and intensity, they should be expected to accommodate TOD in different ways and at different rates. Sacramento's urban core stations already benefit from a complementary land use environment and can be expected to continue to do so. It is the stations outside of the core that will evolve the most to accommodate new growth.

FIGURE 7.8

Applying the Framework:
Draft Station Typology Map



The TOD Framework

Downtown

7.97 This area includes downtown Sacramento and its immediate surroundings, including Midtown, the Railyards and downtown West Sacramento. It is the most accessible part of the region with an interconnected street pattern. Its existing (or planned) densities are already supportive of transit and should be the highest in the region. The area has an existing strong TOD market - even in areas not served by premium transit.

7.98 The Downtown is built-out and all forms of growth are expected to come from infill and redevelopment. The Urban Core's sphere of influence extends a half-mile from the transit stations.

Urban Center

7.99 Urban centers are envisioned as complete communities, reflected in their density and intensity. Today, many of the station areas that could become urban centers are already important places of activity. They include traditional retail crossroads, malls, and existing neighborhood centers.

7.100 As complete communities these station areas express individual character as they evolve. Likewise, some may be transit supportive today while others may not have very strong transit oriented development markets and will emerge over time. The Urban Center sphere of influence reaches a half-mile from the transit station.

Employment Center

7.101 The transit system is a network of origins and destinations. The majority of the stations are origins because the majority of land uses in a region are residential. However, the system generates ridership through destinations, not origins. The most important destination is employment - operationally, as well as financially (tax

base). Some stations along Sacramento's LRT line are dominated by employment centers. This includes many downtown stations but also stations like Butterfield on the Gold Line, which serves the State Franchise Tax Board campus. It is important to set land use expectations that accommodate the land use mix that major employers bring, while working cooperatively with major users to adhere to the pedestrian-centered urban design philosophy that supports transit.

Residential Center

7.102 Many development conditions along the transit system are predominantly residential. These areas may have a mix of uses but their predominant character and activity supports residential neighborhoods. They have limited park and ride. Some of these areas may become as intense as the Urban Core or Urban Centers. However, the TOD market in the Residential Centers varies and will emerge over time. A primary consideration in this station area type is the protection of existing neighborhoods and the transition from higher to lower density. The Residential Center Station's sphere of influence reaches a half-mile from the transit station.

Commuter Center

7.103 Commuter Centers balance density with the role of accommodating commuters accessing transit via park and ride. Some of these stations serve potential development markets by virtue of being near developable land, and they may have significant transit agency land assets. Others may have very limited development potential. Most do not enjoy high street connectivity or pedestrian-oriented environments.

7.104 This station type may allow higher parking ratios and higher replacement levels of park and ride spaces than are consumed for joint development. If development does occur,

FIGURE 7.8

every effort should be made to ensure a connected street network and a pedestrian-oriented environment that allows for future densification.

Enhanced Bus Corridor

7.105 The TransitAction Plan envisions a comprehensive transit system. In addition to rail transit, Hi-Bus corridors will serve areas outside the premium transit lines. Instead of a radius around a station point, these areas are linear along corridors with 10 minute service headways or better. These areas should intensify over time because they are dependable transportation options, but their TOD potential is limited due to the thin linear nature of the development opportunities.

TOD Expectations and Guidelines

7.106 The delivery of TOD is more involved than simply placing the correct land uses and densities around the appropriate transit investments. Truly positioning the Sacramento region to deliver TOD involves incorporating all the elements of community building that influence land use, as well as those that place demands on the transportation infrastructure.

7.107 A comprehensive approach is important because the transit user's experience is influenced by so many factors, and these factors are often the responsibility of different authorities. In a door-to-door trip, a transit user must navigate the streetscape, private development, utilities, transit infrastructure, civic uses and green space. If any of these variables discourages transit use, the viability of TOD will suffer.

Complementary Measures Promoting Transit Use

Traffic Management

7.108 There are a number of measures available to transit and city planners to provide priority to transit vehicles to make them more competitive with other vehicle traffic. These include:

- Signal priority and intersections: enabling transit vehicles to skip traffic congestion by moving buses and light rail through intersections quickly;
- Special turning lanes for Buses;
- Road closures: providing transit priority and creating pedestrian-friendly areas along portions of street to improve transit flow; and
- Traffic calming: engineering measures to discourage vehicle traffic and enable more efficient transit operation.

Parking Management

7.109 Another element which complements the transit network is the management of on- and off-street parking. The availability and cost of parking affects the attractiveness of driving versus transit so measures to manage parking opportunities can promote transit use, including:

- On-street parking restrictions: utilizing time restrictions, location restrictions and managing where commercial, retail and residential servicing and loading can occur;
- Off-street parking: managing the availability and cost of parking lots/garages, especially in the downtown core; and
- Residential parking zones: restricting on-street parking to local residents only during certain times.

Travel Behavior Change

7.110 There are a wide variety of complementary transportation demand management (TDM) measures that can be implemented by RT and its partner agencies to further promote transit usage. Travel behavior change is a technique used to influence mode choice through education, marketing, self-enforcing target setting, minor infrastructure improvements and the administration of programs and events. Specific tools include:

- Travel planning including site-based, workplace, school, residential, destination and personalized travel planning have demonstrated significant mode shifts (10-30%) to transit through pilot programs in the UK, Canada, Ireland, Australia and most recently in the US;
- Marketing - professionally delivered public transit marketing initiatives to attract riders and change in travel away from the car;
- Improved information utilizing as many means as possible to share transit information (schedules, maps, disruptions, etc.);

- Car co-ops and car sharing;
- Car pooling and ridesharing/matching;
- Promoting cycling & walking;
- Parking management (to reduce the supply of free, available parking); and
- Flexible working hours.

Summary

7.111 In order for transit and RT to be truly a mode of choice for the people of Sacramento, a 'toolbox' approach of implementing transit services and investment alongside changes in the physical layout of the road network and with complementary TDM measures will be needed. It is important to note that not all options or measures (or types of transit services) will be appropriate to every corridor or neighborhood.

7.112 These investments all cost money and with scarce resources available, RT will need to work with its partners to prioritize investments based on need and expected return (i.e. riders on the system).

7.113 The expectations and guidelines in the Tables 7.14, 7.15 and 7.16 identify and organize these many considerations into three elements of city building: Land Use and Community Character; Transportation, Mobility and Access; and Civic Amenities including green space.

TABLE 7.14 TOD FRAMEWORK: LAND USE AND COMMUNITY CHARACTER

Applying the Framework:

Land Use and Community Character Guidelines

	Downtown	Urban Center	Employment Center	Residential Center	Commuter Center	Enhanced Bus Corridor
Land Uses	Not Applicable	Restrict industrial, flex office and auto-oriented uses within 1/2 mile of station	Restrict industrial and auto-oriented uses within 1/2 mile of station	Restrict all forms of industrial and auto-related uses within 1/2 mile of station	Restrict all forms of industrial and auto-related uses within 1/2 mile of station	Restrict most forms of industrial uses within 1/4 mile of corridor
Land Use Ratios¹	No percentage constraints	50% Employment (Max) 50% Residential (Max) 50% Retail (Max)	90% Employment (Max) 30% Residential (Max) 20% Retail (Max)	30% Employment (Max) 90% Residential (Max) 20% Retail (Max)	30% Employment (Max) 90% Residential (Max) 50% Retail (Max)	40% Employment (Max) 100% Residential (Max) 20% Retail (Max)
Residential Density	1/2 Mile: 36 DU/Acre (Min)	1/4 Mile: 20 DU/Acre (Min) 1/2 Mile: 15 DU/Acre (Min)	1/4 Mile: 15 DU/Acre (Min) 1/2 Mile: 10 DU/Acre (Min)	1/4 Mile: 15 DU/Acre (Min) 1/2 Mile: 10 DU/Acre (Min)	1/2 Mile: 10 DU/Acre (Min)	1/4 Mile: 10 DU/Acre (Min)
Commercial Density	1/4 Mile: 2 FAR (Min)	1/4 Mile: 1.5 FAR (Min) 1/2 Mile: 1 FAR (Min)	1/4 Mile: 1.5 FAR (Min) 1/2 Mile: 1 FAR (Min)	1/2 Mile: 5 FAR (Min)	1/4 Mile: 5 FAR (Min)	1/4 Mile: 2.5 FAR (Min)
Parking	Residential: 75/Unit (Max) Office: 1/1,000 SF (Max) Retail: 2/1,000 SF (Max)	Residential: 75/Unit (Max) Office: 1/1,000 SF (Max) Retail: 2/1,000 SF (Max)	Residential: 1/Unit (Max) Office: 2/1,000 SF (Max) Retail: 3/1,000 SF (Max)	Residential: 1/Unit (Max) Office: 2/1,000 SF (Max) Retail: 3/1,000 SF (Max)	Residential: 1.5/Unit (Max) Office: 3/1,000 SF (Max) Retail: 3.5/1,000 SF (Max)	Residential: 1.5/Unit (Max) Office: 3/1,000 SF (Max) Retail: 3.5/1,000 SF (Max)
Block Dimensions²	400' Block Length (Max) 1600' Block Perimeter (Max)	600' Block Length (Max) 1800' Block Perimeter (Max)	600' Block Length (Max) 1800' Block Perimeter (Max)	600' Block Length (Max) 1800' Block Perimeter (Max)	600' Block Length (Max) 1800' Block Perimeter (Max)	600' Block Length (Max) 1800' Block Perimeter (Max)
Building Floor Plates	Residential: 40,000 SF (Max) Commercial: NR	Residential: 50,000 SF (Max) Commercial: 50,000 SF (Max)	Residential: 30,000 SF (Max) Commercial: 90,000 SF (Max)	Residential: 15,000 SF (Max) Commercial: 90,000 SF (Max)	Residential: 15,000 SF (Max) Commercial: 90,000 SF (Max)	Residential: 15,000 SF (Max) Commercial: 100,000 SF (Max)
Building Heights	Not Applicable	12 Floors (Max) May be lower based on community context	12 Floors (Max) May be lower based on community context	6 Floors (Max) May be lower based on community context	6 Floors (Max) May be lower based on community context	4 Floors (Max)
"A" Street Recommendations	Not Applicable. See City of Sacramento's Central City Design Guidelines	Buildings placed to minimum street setback 90% (Min) building frontage 75% (Min) facade transparency No parking between sidewalk and front of building	Buildings placed to minimum street setback 66% (Min) building frontage 75% (Min) facade transparency No parking between sidewalk and front of building	Buildings placed to minimum street setback 66% (Min) building frontage 75% (Min) facade transparency No parking between sidewalk and front of building	Encourage building to minimum street setback 50% (Min) building frontage 75% (Min) facade transparency Encourage landscape or knee wall to screen surface parking	Not Applicable
"B" Street Recommendations	Not Applicable. See City of Sacramento's Central City Design Guidelines	Encourage building to minimum street setback 50% (Min) building frontage Encourage landscape or knee wall to screen surface parking	Encourage building to minimum street setback 25% (Min) building frontage Encourage landscape or knee wall to screen surface parking	Encourage building to minimum street setback 25% (Min) building frontage Encourage landscape or knee wall to screen surface parking	Encourage building to minimum street setback No minimum building frontage Encourage landscape or knee wall to screen surface parking	Not Applicable

1) Does not apply to parcels under 1 acre in area

2) Paseos, or unrestricted through-block pedestrian connections, strongly encouraged for blocks greater than 400' in length

Glossary of Terms:
DU - Dwelling Unit
FAR - Floor Area Ratio - is the total building square footage (building area) divided by the site size square footage (site area).

TABLE 7.15 TOD FRAMEWORK: TRANSPORTATION, MOBILITY AND ACCESS

Applying the Framework: Mobility and Access Guidelines

	Downtown	Urban Center	Employment Center	Residential Center	Commuter Center	Enhanced Bus Corridor
Transit Technologies	Commuter Rail, Light Rail, Tram, Streetcar, BRT, HI-Bus, Fixed Route Bus	Commuter Rail, Light Rail, Streetcar, BRT, HI-Bus, Fixed Route Bus	Commuter Rail, Light Rail, Streetcar, BRT, HI-Bus, Fixed Route Bus	Light Rail, Streetcar, BRT, HI-Bus, Fixed Route Bus, Neighborhood Circulator, Shuttle	Commuter Rail, Light Rail, BRT, HI-Bus, Fixed Route Bus, Neighborhood Circulator, Shuttle	HI-Bus, Fixed Route Bus, Neighborhood Circulator, Shuttle
Transit Center Placement/Design	Discouraged. If required, facilities should be incorporated into street design.	Discouraged. If required, facilities should be incorporated into street design.	Discouraged	Not appropriate	Designed to accommodate joint development	Not appropriate
Park & Ride Placement/Design	Not appropriate	Not appropriate	Designed to accommodate joint development	Designed to accommodate joint development	Designed to accommodate joint development	Not Applicable
ROW and Train Operation	Exclusive, shared, or mixed	Exclusive, shared, or mixed	Exclusive, shared, or mixed	Exclusive, shared, or mixed	Exclusive or shared. Mixed discouraged.	Not Applicable
Grade Crossings	Signalized grade crossings encouraged. Grade separated discouraged.	Signalized grade crossings encouraged. Grade separated discouraged.	Signalized grade crossings encouraged. Grade separated discouraged.	Signalized grade crossings encouraged. Grade separated discouraged.	Gated or grade separated allowed	Gated or grade separated encouraged.
Minimum LOS Standards	1/2 Mile: No minimum vehicle based LOS	1/2 Mile: No minimum vehicle based LOS	1/2 Mile: No minimum vehicle based LOS	1/2 Mile: No minimum vehicle based LOS	1/2 Mile: LOS E V/C ratio .80	1/2 Mile: LOS E V/C ratio .80
Connectivity Index	Ratio of intersections to segments should equal 1.25 (Min)	Ratio of intersections to segments should equal 1.25 (Min)	Ratio of intersections to segments should equal 1.25 (Min)	Ratio of intersections to segments should equal 1.25 (Min)	Ratio of intersections to segments should equal 1.5 (Min)	Ratio of intersections to segments should equal 1.5 (Min)
Street Design Guidelines	Not Applicable. See City of Sacramento's Central City Design Guidelines	Only skinnyflow speed street guidelines apply	Only skinnyflow speed street guidelines apply	Only skinnyflow speed street guidelines apply	Context appropriate. Not all streets will be pedestrian oriented.	Context appropriate. Not all streets will be pedestrian oriented.
On-Street Parking	Not Applicable. See City of Sacramento's Central City Design Guidelines	Required	Required	Required	Required	Context appropriate (negotiated)
Sidewalks¹	12' (Min)	12' (Min) Mixed-Use Streets 5' (Min) Residential-Only Streets	12' (Min) Mixed-Use Streets 5' (Min) Residential-Only Streets	12' (Min) Mixed-Use Streets 5' (Min) Residential-Only Streets	12' (Min) Mixed-Use Streets 5' (Min) Residential-Only Streets	5' (Min)
Bicycle Facilities	Required. Encourage secure storage, changing stations at destination station types.	Required. Encourage secure storage, changing stations at destination station types.	Required. Encourage secure storage, changing stations at destination station types.	Required	Context appropriate (negotiated)	Context appropriate (negotiated)
Crossings²	15' (Min) with enhanced striping	18 Mile: 15' (Min) with enhanced striping 1/2 Mile: 10'	18 Mile: 15' (Min) 1/2 Mile: 10'	18 Mile: 12' (Min) 1/2 Mile: 10'	10' (Min)	10' (Min)

1) Sidewalk width should increase with density and proximity to station
2) Mid-block crossings strongly advised on street segments over 400' in length

Glossary of Terms:
skinnyflow speed street - Are streets that employ a set of design strategies which aim to slow down or reduce traffic, thereby improving safety for pedestrians and bicyclists as well as improving the environment for residents.

TABLE 7.16 TOD FRAMEWORK: AMENITIES AND CIVIC INFRASTRUCTURE

Applying the Framework:

Open Space and Civic Amenities Guidelines

	Downtown	Urban Center	Employment Center	Residential Center	Commuter Center	Enhanced Bus Corridor
Park Types	Urban Plaza, Pocket Park	Urban Plaza, Pocket Park, Neighborhood Park, Community and Regional Park discouraged.	Urban Plaza, Pocket Park, Neighborhood Park, Community and Regional Park discouraged.	Urban Plaza, Pocket Park, Neighborhood Park, Community and Regional Park discouraged.	Urban Plaza, Pocket Park, Neighborhood Park, Community and Regional Park discouraged.	Urban Plaza, Pocket Park, Neighborhood Park, Community Park, Regional Park
Open Space Provision	Provide appropriate park type within 1/8 mile of any residence	Provide appropriate park type within 1/8 mile of any residence	Provide appropriate park type within 1/8 mile of any residence	Provide appropriate park type within 1/8 mile of any residence	Provide appropriate park type within 1/4 mile of any residence	<i>Not Applicable</i>
Schools	College, High School, Middle School, Elementary School, Urban format encouraged.	College, High School, Middle School	College, High School, Middle School	High School, Middle School, Elementary School	College, High School, Middle School	High School, Middle School, Elementary School
Libraries	Encouraged. Prioritize access to parks and schools.	Encouraged. Prioritize access to parks and schools.	Encouraged. Prioritize access to parks and schools.	Encouraged. Prioritize access to parks and schools.	Encouraged. Prioritize access to parks and schools.	Discouraged
Community Venues	Arena/Stadium, Museum, Performing Arts, Regional-scale venues encouraged.	Arena/Stadium, Museum, Performing Arts, Regional-scale venues encouraged.	Arena/Stadium, Museum, Performing Arts	Museum, Performing Arts, Local-scale venues encouraged.	Discouraged	Discouraged
Government Offices	Encourage visible and accessible locations. Encourage context-sensitive security solutions.*	Encourage visible and accessible locations. Encourage context-sensitive security solutions.*	Encouraged.	Discouraged	Encouraged.	Discouraged
Assisted Living	Encouraged in high-density format	Encouraged. Prioritize access to parks, convenience retail, and medical facilities.	Discouraged	Encouraged. Prioritize access to parks, convenience retail, and medical facilities.	Discouraged	Discouraged

* For government offices and other sensitive uses that require enhanced security or access restrictions in the Urban Core and Urban Centers, it is strongly recommended that such measures be designed to minimize the impact on an accessible, transparent pedestrian environment and public realm.