



## 9.0 Support Strategies

### 9.1 Land Use Strategy

By 2050, the Bay Area will add 40 percent more residents, San Joaquin County's population will more than triple, and Sacramento County will grow 132 percent. It is imperative that our regions continue to plan and focus our growth and development in core areas; produce quality, higher density housing (particularly affordable housing) for our residents; and make tighter connections between our land-uses and transportation infrastructure.

Our commitment to implementing smarter growth policies has not wavered since the establishment of the Regional Smart Growth Vision in 2002. Revitalization of central cities and older suburbs, greater support and use of public transit, promotion of bicycling and walking, and preservation of open space and agricultural lands remain top priorities for the region. In this vein, the Regional Rail Plan calls for a comprehensive land-use strategy that optimizes on opportunities to better plan and provide for supportive land-uses at rail stations, at key connectivity points, and along rail corridors.

#### **Opportunities to Link Land-Use and Rail Investments**

Transportation and land-use function as one integrated system. Yet, too often, planning for the two are disconnected. Better planning will help to meet some of the region's most pressing needs to create walkable communities with homes for people of all incomes, reduce our greenhouse gas emissions, provide congestion relief, and reduce the need to develop on our remaining open spaces.

Well-planned neighborhoods around transit stations can create financial savings for individuals and the region. Taxpayers also save when transit agencies generate more money from the fare-box and require lower subsidies. Cities benefit from increased sales tax revenue from the stores that are typically part of mixed-use developments.

Over the past six years, regional agencies have acknowledged the potential to refocus growth into existing areas, primarily around transit, and are developing policies and programs to help make that happen. This potential certainly exists. The Bay Area is fortunate to have a strong existing network of rail, ferries, and major bus corridors. There are at least 305 existing stations and more almost every year. Between 2000 and 2004, furthermore, Bay Area voters supported \$12 billion in new transit investments that are catalyzing the next generation of rail expansions.

There are, however, considerable barriers to transit-oriented development such as the complex financing and land assembly process, existing zoning that precludes the required mix of uses and density, and the challenge of interagency coordination often required. Additionally, planning staffs are often stretched thin, and may not have the expertise, political support, or financial resources to work with developers to plan, finance and build transit-oriented developments.

The half-mile around the transit station is often seen as the most critical. This is the area within which people can walk to the station or from the station to their destinations. MTC's analysis of its 2000 Bay Area Transportation Survey found that in the Bay Area people who live and work within a half-mile of a rail station



are four times more likely to use transit on a daily basis than people who neither work nor live near transit. People who both live in or work within half a mile of a rail stop use transit for 42 percent of their work trips, 10 times more than the region according to MTC's September 2006 study: Characteristics of Rail and Ferry Station Area Residents.

### **Existing Land-Use Policies**

Bay Area agencies have developed several innovative policies and programs that offer a solid foundation for the Regional Rail Plan.

- MTC's Transit Oriented Development (TOD) Policy applies to transit extension projects funded by regional discretionary money. Each transit extension project funded in Resolution 3434 must plan for a minimum number of housing units around the station area and/or along the corridor.
- BART's System Expansion Policy relies on agreements between BART and local jurisdictions regarding the achievement of ridership thresholds.
- The California High-Speed Rail Authority has adopted land use principles that include high density, a mix of land uses, grid street pattern and pedestrian-oriented design, and parking limits. At this time, they are preparing more detailed station area development policies and plans.
- MTC has also pioneered a range of programs, including its award-winning Transportation for Livable Communities (TLC) Program, Housing Incentive Program (HIP), Safe Routes to

Transit, and Station Area Planning Grants, to assist with planning and implementation of transit-oriented development, many of which have been emulated around the country.

- Four regional agencies - MTC, Association of Bay Area Governments (ABAG), the Bay Area Air Quality Management District (BAAQMD), and the Bay Conservation and Development Commission (BCDC) - are working on the "Focusing our Vision," or FOCUS effort, in concert with county congestion management agencies, transit providers and local governments throughout the Bay Area, to continue implementation of the 2002 Regional Smart Growth Vision.

FOCUS seeks to strengthen existing city centers, locate more housing near existing and future rail stations and quality bus lines, encourage more compact and walkable suburbs, and protect regional open space. Current efforts involve working with local governments to identify priority development area (PDAs) that are accommodating growth through mixed use and infill development near transit and job centers, with an emphasis on housing.

The initial 2007 call for applications resulted in submittals by 50 Bay Area communities for over 100 priority development areas. In aggregate, these areas represent the majority of the region's communities with existing rail or planned rail stations via Resolution 3434. The number of applications suggests that many Bay Area communities are ready to focus growth in transit-served neighborhoods and secure the resources and tools to do so.



## Regional Rail Plan Considerations

The Bay Area has been an innovator with land-use policies for transit investments. Still, there is a need to not only expand existing approaches, but also encourage use of as many new strategies as possible to ensure that the region's economy, environment, and people all benefit from our land-use and transportation decisions. Importantly, rail project implementation must be fully integrated with supportive land-uses in order to establish the ridership markets that will be needed to justify these hefty investments. Further integrating this plan with regional efforts such as FOCUS is key to realizing the greatest benefits for the Bay Area.

While land-use authority remains the prerogative of local governments, agencies involved in the Regional Rail Plan should integrate land-use into decision-making regarding where, when, and how to expand and improve our rail system. The following are the key considerations to enhance existing programs:

### 1. Monitor, Update and Expand Rail Station TOD Policies

Ridership studies continue to validate the immense importance of the half-mile radius surrounding stations, both as origins for people who live nearby, and as destinations for jobs, education, recreation or services. To ensure a strong transportation and land-use links:

- Conduct ongoing evaluation of MTC's existing land-use policy using the latest information about land use determinants on ridership, and strengthen the policy where appropriate.

- Any new rail expansion projects considered in this plan using public funds should be subject to existing or updated MTC, BART and CHSRA policies.
  - Encourage more local governments to nominate their community for designation of FOCUS priority development areas (i.e., planning for more housing growth around current and planned station areas) so that they may leverage state/regional resources to maintain the necessary infrastructure and support transit use.
  - Support FOCUS priority development areas by expanding the capacity and improving the quality and efficiency of the region's existing rail system.
  - Through FOCUS and other forums develop a collaborative approach between regional agencies, transit operators, and local governments to help identify the transit supportive land uses to be built within a half-mile of transit stations and foster changes to local zoning ordinances to implement these uses.
- ### 2. Adopt Ridership Development Plans for the Broader Commute Shed
- Individual transit agencies should adopt the collaborative nature of BART's ridership development process, which looks beyond the half-mile radius to the larger "commute shed." There should be a special emphasis on ensuring transit supportive land uses on major corridors that are adjacent to or feed into the transit station. These plans should be funded as part of the projects.



### 3. Seek State Bond Monies for Infill and Transit-Oriented Development:

Proposition 1C and Proposition 84 were approved by voters in November 2006. Included within these propositions are accounts that can be used to support infill and transit-oriented development that the region is seeking to support through FOCUS. Since there is no assurance on that our region will have a say in how these monies are allocated, legislative advocacy will be required to ensure that the Bay Area's interests are represented in trailer bills for both propositions.

### 4. Expand the Resources Available to Help Cities

Bay Area communities that are proactively pursuing transit-oriented developments often need technical assistance or funding to perform market analyses, prepare economic strategies, or broaden community outreach and involvement in the local planning processes.

While the Bay Area has been a leader through programs such as TLC, there are additional unmet needs. Additional funding to expand existing programs and to initiate new ones should come from county, regional, and state sources. FOCUS provides an opportunity for a new partnership between communities with priority development areas and county, regional and state agencies through the direction of resources to those communities seeking to create vibrant transit-served neighborhoods.

Notably, Bay Area communities have indicated needing support to develop parking policies around transit stations. Through its parking case studies, MTC recently released a parking toolbox that offers best practices and strategies to

support transit-oriented development. Although there is no one-size fits all approach for parking policies, communities with future rail investments should evaluate current their parking policies or develop new ones based on MTC's parking toolbox and other best practices.

### 5. Create a One-Stop Shop for Technical Assistance

Given the complexity and cost of creating comprehensive land use plans, one outcome of FOCUS might be the development of a one-stop shop, hosted by one of the regional agencies, that provides technical assistance to help cities, transit agencies and other stakeholders prepare station area plans and implement transit-oriented development. Technical assistance may include infill analysis and strategies; development code assistance; photo-simulations and visualizations; web-based visual preference surveys; and economic development strategies. The one-stop shop could prove valuable in the short-term given increasing interest in developing station area plans.

### 6. Encourage Local Municipalities to Adopt Supportive Station Area Policies

Delivery of rail services takes place over an extended period of time. This plan identifies future stations and connectivity points which would be served by rail. With this information in hand, Bay Area communities should develop station area policies that take advantage of these future rail investments. Having such policies in place would help to foster transit supportive land-uses and prohibit other uses that would undercut and underutilize the transit investment. Further, it would help to identify economic strategies and financing schemes that capture the economic benefits from housing and commercial development in station areas.



## 9.2 Governance Strategy

### Overview

Governance refers to the entity(ies) which assumes responsibility for planning, design, funding, construction, and/or maintenance and operations of passenger rail. As new elements of the regional passenger rail system develop over the next few decades, there could be increasing conflicts between the needs of passenger rail and freight trains. Generally speaking, the freight railroads would want to divest themselves of all dispatching responsibilities where passenger trains exceed 79 miles per hour. As rail expansion opportunities are pursued, such entity(ies) could provide a venue for negotiations between public and private interests for operating and dispatching rights, acquisition of access, and/or outright purchase of rights-of-way or portions of right-of-way from private freight rail lines and other rights-of-way required from private entities for rail/highway grade separations.

At the present time, there are a multiple transit operators in the Bay Area and Northern California. Not only are there numerous local transit operators, some of which also provide light rail service within local jurisdictions, but there are also multiple providers of regional rail and rail transit services with overlapping geographies.

New services identified in MTC Resolution 3434 will result in development of additional rail corridors involving additional jurisdictions and added complexity due to additional geographic overlaps. For these reasons, and as required by the enabling legislation authorizing and funding conditions for this Regional Rail Plan, the governance strategy was considered with respect

to modifications which would support implementation of the Regional Rail Plan.

This analysis did not delve into the topic in great detail; neither did it include in-depth nor independent management or peer reviews of the issues. What was accomplished was a literature review of alternative governance models from a national perspective, resulting in the identification of some alternatives with potential applicability to delivery of regional rail services in Northern California. Two workshops with general managers and elected representatives from Bay Area rail providers were also held to consider the issues and models as well as potential risks and benefits.

### Existing Bay Area Regional Rail Operators

The Bay Area has four providers of regional passenger rail services. Each are described briefly below:

#### Caltrain

Regional rail commuter service is provided between Gilroy and San Francisco by the Peninsula Corridor Joint Powers Board (JPB), with representation from three members: City and County of San Francisco, San Mateo Transit District, and Santa Clara Valley Transit Authority. There is a nine-member board with three appointed representatives from each of the members. Formed in 1987, the JPB took over the responsibility for the service from the State of California (Caltrans Division of Rail) in 1992. The JPB owns 46 miles of right of way from San Francisco to Tamien and has trackage rights south to Gilroy, and contracts with Amtrak for operating personnel. Day-to-day management and staff support is provided by the San Mateo County Transit District (Samtrans).



## BART

The San Francisco Bay Area Regional Transit District was created by the Legislature in 1957, when it was expected that five Bay Area counties would be joining the effort to build the first new regional rail system. Eventually, the counties of Marin and San Mateo opted out of the district, leaving San Francisco, Alameda, and Contra Costa Counties (service is currently operated in San Mateo County under a purchase of service agreement between BART and Samtrans.) The agency is guided by nine elected board members representing that same number of districts in the three-county service area.

## Altamont Commuter Express (ACE)

This service was created in 1997 through a Joint Powers Agreement between the San Joaquin Regional Rail Commission (SJRRRC), Alameda County Congestion Management Agency and the Santa Clara Valley Transit Authority. Policy and day-to-day management are provided by the SJRRRC. The board has eight regular members and two additional special voting members from BART and Alameda County. There are also ex officio members representing Caltrans District 10, San Joaquin Regional Transit District, and San Joaquin Council of Governments.

## Capitol Corridor

Originally managed by Caltrans and still considered part of California Amtrak, this 170 mile system provides rail service to eight northern California counties (Placer, Sacramento, Yolo, Solano, Contra Costa, Alameda, San Francisco, and Santa Clara). The governing structure is a joint powers agreement between six local transit agencies that serve the counties

above. There is a 16-member board, with two representatives from each of the 8 counties. BART provides the policy and day-to-day management. Board appointments are made through the member transit districts. The current governance structure was put into place in 2003.

## Governance Models

A literature review was conducted to identify various governance structures and enabling and/or means used to form them from various large metropolitan areas around the United States with some consideration for European models. From this research, four distinctively different models were identified that would have potential applicability to Northern California (see Table 9.2-1):

- **Decentralized** — Characterized by multiple service providers with separate governance structures, as represented by the status quo in Northern California
- **Regional Federation** — A loose form of association under an umbrella organization responsible for implementation of joint initiatives. Services are delivered within the region of the federation by separate operating entities each having separate staffs and reporting to separate boards.

The Regional Transit Authority (RTA) in Chicago exemplifies a federation style governance model. RTA is responsible for planning and budgeting of regional services in the Chicago area. Beneath the RTA are three service providers each with separate boards responsible for construction, maintenance and operations: the Chicago Transit Authority (CTA) which provides bus and rail services within the City of Chicago; Pace, which operates all of the suburban bus



services consolidated under one entity, and Metra, which is the regional rail provider.

Within California, The San Diego Association of Governments (SANDAG) provides a slightly different approach to the federation model with SANDAG serving as lead agency for funding, planning, design and construction with separate operating companies as subsidiaries to provide maintenance and operations. The SANDAG consolidation was enabled by passage of state law SB 1703 in 2003.

- **Regional Rail Authority** — This model illustrates the functional consolidation of all regional passenger rail services. All passenger rail services are unified under a single governance structure responsible for all aspects of rail ranging from planning and design to maintenance and operations. Regional rail authorities may or may not have direct funding authority granted to them. A regional rail authority can either be formed as a new district or provided by association as a joint powers authority. One example of this is the Southern California Regional Rail Authority (SCRRA), which performs planning, design, construction, management and operations for the Metrolink system. For the purpose of this discussion, the term “Regional Rail Authority” is meant to pertain to a single operator for the regional passenger rail mode rather than a particular vehicle of formation. For example, the SCRRA JPA includes the counties of Los Angeles, Ventura, Orange, Riverside and San Bernardino.

- **Consolidated Regional Rail** — Fully consolidated operations are provided in a number of East Coast cities including Boston, New York, Philadelphia and Washington DC (metro rail and bus only). Consolidated authorities may have broad power ranging from funding through maintenance and operations over multiple modes with large geographic areas.

For example, the New York Metropolitan Transit Authority is responsible for a comprehensive network of transit, commuter rail, and bridge and tunnel facilities in the greater metropolitan area. The MTA functions with a board of seventeen members nominated by the governor, with some recommended by the New York City mayor and county executives of suburban counties.

There are also six additional rotating non-voting members who represent organized labor and the citizens’ advisory committee. All board members must be confirmed by the New York State Senate. The service area covers Manhattan, Long Island, southeastern New York State, and the state of Connecticut, with an estimated population of 14.5 million. Subsidiaries include:

- New York City Transit – provides subway and bus service to Manhattan, Brooklyn, Queens, the Bronx and the Staten Island Railway
- Long Island Rail Road – commuter rail service from three hubs in New York City to eastern Long Island
- Long Island Bus – formed in 1973 through combination of ten private bus carriers and provides service to 96 communities, 47 LIRR stations, and five subway stations in Nassau, western Suffolk and eastern Queens counties



— Metro-North Railroad – consolidation of several private commuter railroads with service out of Grand Central Terminal northward to suburban New York and Connecticut

— Bridges and Tunnels – system of five bridges and two tunnels in New York City serving more than a million people daily; surplus toll revenues help subsidize mass transit

Table 9.2-1 Governance Models

	<b>Decentralized</b>	<b>Regional Rail Federation</b>	<b>Regional Rail Authority</b>	<b>Consolidated Regional Rail</b>
<b>Summary Description</b>	<ul style="list-style-type: none"> <li>Multiple providers with separate boards</li> <li>JPA's for inter-jurisdictional operations</li> <li>Some coordination of services and joint initiatives on ad hoc basis supported by MOU's</li> </ul>	<ul style="list-style-type: none"> <li>One regional authority for funding and planning</li> <li>Separate operating entities with own boards for design and construction as well as maintenance and operations</li> </ul>	<ul style="list-style-type: none"> <li>Single provider with one board for "mega-region"</li> <li>Responsible for planning, design, construction as well as maintenance and operations</li> </ul>	<ul style="list-style-type: none"> <li>One "mega-regional" board of control with funding, planning, engineering and construction as well as maintenance and operations consolidated</li> </ul>
<b>Examples</b>	Bay Area Status Quo	Chicago RTA SANDAG	SCRRA (Metrolink) Sound Transit (Seattle)	New York, Boston, Philadelphia, Washington DC
<b>Pros</b>	<ul style="list-style-type: none"> <li>No changes to existing entities required</li> </ul>	<ul style="list-style-type: none"> <li>Easier to establish than regional rail authority or full consolidation</li> <li>Could provide an incremental path for change</li> </ul>	<ul style="list-style-type: none"> <li>Provides high level of benefit with minimal organizational coordination once established</li> </ul>	<ul style="list-style-type: none"> <li>Grants maximum control and power to effect across-the-board initiatives</li> </ul>
<b>Cons</b>	<ul style="list-style-type: none"> <li>Does not provide any provisions for attaining desired outcomes except through ad hoc actions</li> </ul>	<ul style="list-style-type: none"> <li>Significant internal dialogue required to effectuate major across-the-board efforts</li> </ul>	<ul style="list-style-type: none"> <li>Potential for friction between regional rail network and local modes</li> </ul>	<ul style="list-style-type: none"> <li>Perception that local interests may not be served</li> </ul>





## Benefits/Risks

The following potential benefits and risks were identified with respect to moving toward a more centralized form of regional rail governance:

### Potential Benefits

- Schedule Coordination
- Centralized Operations
- Uniform Fare Structure and Collection
- Railroad Negotiations
- Procurement Economies of Scale
- Improved Customer Service
- Streamlined Administration

### Potential Risks

- Reduced Local Accountability and/or Autonomy, perceived or real
- Potential for Higher Labor Costs
- Potential for Work Stoppages

## Workshops

Two workshops were held with general managers and board members representing Bay Area providers of regional passenger rail. At the workshops, the various issues, models, risks and benefits were discussed, along with identification of potential venues which would result in more unified delivery of services.

In looking at the most important benefits and risks from the list above, participants placed highest weight on “Improved Customer Service” as the most important benefit, closely

followed by “Schedule Coordination”. Of the risks, the highest rated concern was “Potential for Higher Labor Costs.” There was a consistent viewpoint that the customer is the most important element to consider when managing and delivering rail services regardless of the governance structure in place. However, it was noted that consolidation per se may not necessarily result in improved customer service - in other words, a poorly run but highly consolidated entity may not deliver as good performance to the customer on the street as a less consolidated network of well managed providers. Although the participants’ concern was primarily with delivery of rail services (as opposed to tackling the issues of local bus transit consolidation) it was noted that regional services of any nature such as regional bus lines should be considered in the event a new regional entity were to be formed.

## Next Steps

Consensus emerging out of the partner workshops is that:

- A single or consolidated authority carries higher degree potential risks
- Existing regional coordination efforts are consistent with the evolution of a federation model
- Additional steps toward a federation model include, but not necessarily limited to, strategies listed in Table 9.2-2

Table 9.2-2 identifies various initiatives including present coordinated efforts and potential nearer and longer-term joint governance initiatives that could be considered. These questions ultimately are policy issues for resolution by MTC and affected rail operators.



Table 9.2-2 Joint Governance Initiatives

	<b>Current Efforts (Status Quo Governance)</b>	<b>Federation Approach (Near Term Continuum Efforts)</b>	<b>Transition (Mid/Long Term Federation)</b>
<b>Fare Collection/ Structure</b>	<ul style="list-style-type: none"> <li>• Universal ticketing (TransLink®)</li> <li>• Integrated Fares (RM2-funded study underway)</li> </ul>	<ul style="list-style-type: none"> <li>• Existing regional rail operator appointed lead agency to deploy and administer TransLink®</li> </ul>	<ul style="list-style-type: none"> <li>• Regional rail federation develops uniform fare guidelines; operators implement through MOU's</li> </ul>
<b>Schedule Coordination &amp; Wayfinding</b>	<ul style="list-style-type: none"> <li>• SB 1474 — periodic review of coordination issues</li> <li>• Consolidated traveler information (511.org)</li> <li>• Integrated Wayfinding Signing (Transit Connectivity Plan)</li> </ul>	<ul style="list-style-type: none"> <li>• Standing schedule coordination committee established to review schedules on-going basis</li> <li>• Transit consortium sponsors initiative to expand dissemination of traveler information</li> <li>• Transit consortium sponsors initiative to develop uniform wayfinding standards</li> <li>• Transit consortium to oversee implementation and operation of a consolidated regional call center.</li> </ul>	<ul style="list-style-type: none"> <li>• Regional scheduling committee provided with authority to mandate specified schedule coordination</li> <li>• Standards developed to define traveler information availability regionally</li> <li>• Uniform wayfinding standards implemented</li> </ul>
<b>Centralized Operations/ Train Dispatching</b>	<ul style="list-style-type: none"> <li>• Mostly being handled by railroads — Caltrain the exception</li> </ul>	<ul style="list-style-type: none"> <li>• New center established to dispatch East Bay services operating over Altamont in the event the Oakland Subdivision is purchased</li> </ul>	<ul style="list-style-type: none"> <li>• Capitol Corridor develops joint dispatching with UPRR responsible for management of shared corridor</li> <li>• Caltrain/High-Speed Rail dispatch center established to manage separate passenger-only segments</li> </ul>



Table 9.2-2 Joint Governance Initiatives (continued)

	<b>Current Efforts (Status Quo Governance)</b>	<b>Federation Approach (Near Term Continuum Efforts)</b>	<b>Transition (Mid/Long Term Federation)</b>
<b>Railroad Right-of-Way Negotiations</b>	<ul style="list-style-type: none"> <li>Currently being handled independently among agencies</li> </ul>	<ul style="list-style-type: none"> <li>Execute MOUs between key operators to designate one entity to negotiate right-of-way purchases on behalf of all regional rail entities</li> </ul>	<ul style="list-style-type: none"> <li>Regional rail consortium with appointed lead agency to negotiate right-of-way purchases; could prioritize Bay Area right-of-way preservation needs</li> </ul>
<b>Regional Procurement</b>	<ul style="list-style-type: none"> <li>Some joint purchase of large dollar-value procurements (e.g., rail cars)</li> <li>Design and construction activities mostly independent</li> </ul>	<ul style="list-style-type: none"> <li>Formalize joint procurements; standards identified and adopted for vehicles, systems and guideway components</li> </ul>	<ul style="list-style-type: none"> <li>Federation or Authority sponsors initiatives to define standards for joint procurements and for acquisitions pursuant to same</li> </ul>
<b>New Services</b>	<ul style="list-style-type: none"> <li>Resolution 3434 rail project implementation</li> </ul>	<ul style="list-style-type: none"> <li>New rail service(s) to be managed and operated by existing operator; no new rail operators within region</li> </ul>	<ul style="list-style-type: none"> <li>Potential to consolidate operations of services in overlapping jurisdictions</li> </ul>



## Findings and Recommendations

1. MTC and Bay Area rail operators have engaged in a series of initiatives to improve the customer experience of rail transit as an integrated system — e.g., trip planning, customer information and fare collection — these initiatives should be fully deployed and the customer experience further integrated through coordinated joint efforts involving the operators under the direction of MTC.
2. The Bay Area is increasingly engaged both from the perspective of economic, demographic and travel factors with adjoining Northern California areas especially with respect to the Northern San Joaquin Valley to the East but also including counties to the South and North.
3. From the Regional Rail planning process it has become apparent that there is no single existing entity in greater Northern California which spans the geographic scale of the emerging “megaregion”.
4. A greater integration of project development, planning and initiatives aimed at further integrating and enhancing the customer experience could be gained by formalizing relationships between planning, funding, construction as well as maintenance and operations of rail services through a “federation” of Northern California entities.
5. In the longer term, a new federation could, with new funding and a mandate to implement regional rail solutions. These would include efforts such as addressing right-of-way needs, access to private freight lines, and dispatch of public sector or joint corridors.
6. Regional Rail governance strategy is a near-term priority — The Commission and affected rail operators should develop an Action Plan to implement the key governance initiatives outlined in the Regional Rail Plan.
7. As such in the near term no new rail operators should be “chartered” or established which would provide new services that are interconnected with the regional network.
8. It is recognized that obtaining right-of-way and/or securing access to freight lines for development and operation of regional rail passenger services is a critical priority. Accordingly, the Action Plan should identify a single entity to: 1) identify and inventory future Bay Area rail rights-of-way needs and identify potential funding options; 2) develop near-term inventory of proposed rail improvements that would allow additional rail passenger slots to be acquired; and 3) negotiate railroad rights-of-way and access to private freight lines on behalf of all regional rail entities. (Residual Regional Measure 2 funding allotted to the preparation of this plan should be made available to support the development of the Action Plan.)



### 9.3 Funding Strategy

The Regional Rail Plan is a blueprint for future rail expansion in the Bay Area. Its intentions are twofold:

- 1) to create a long-term Bay Area vision and advocacy document for a world-class regional rail system; and
- 2) to inform the next generation of rail improvements beyond current MTC policy and funding commitments.

All elements of the plan — from right-of-way preservation to core capacity enhancements to system expansion — are considered in a financially unconstrained environment in order to identify the most important near-, mid- and long-term regional rail improvements without being burdened by a financial straight-jacket.

Funding rail expansion projects is no small task — particularly since the price tag for rail projects tends to be in the multi-millions to billions of dollars. The estimated total capital investment for this plan is about \$43 billion in 2006 dollars. Capital costs were determined for each corridor based on infrastructure, vehicle and right-of-way requirements, and order of magnitude operational costs are currently under development. Capital costs for Alternative 1, which emphasizes investment in a significantly expanded BART system as the regional provider, is estimated at \$40 billion. Alternative 2, which places the focus on the development on new electrified passenger lines regionally which are separated from freight, has a \$37 billion capital cost. Overall, finding public and private revenues to fund capital construction is a sizeable challenge, which the region has tackled successfully in the past. However, the much bigger challenge is

securing additional revenues to pay for operating costs. This is why complementary land-use strategies are so important to maximize ridership and minimize the need for additional operating subsidies.

Forging regional consensus behind a program of projects for purposes of advocating for and pursuing federal, state and regional funding has proven to be a critical first step in delivering high-priority rail expansions. Adopted in 1988, MTC's Resolution 1876 was the first consensus agreement in the region to champion high-priority rail expansions, including the BART extension to the San Francisco International Airport, new BART service to Dublin and Bay Point in the East Bay, and the Tasman light-rail extension in Silicon Valley. Resolution 1876 leveraged almost \$2 billion in state, regional, and local funds to obtain commitments for \$930 million in fiercely competitive federal New Starts funds for the Bay Area.

As part of the 2001 Regional Transportation Plan (RTP), MTC developed and ultimately adopted the successor consensus agreement for regional transit expansion — Resolution 3434. Resolution 3434 is a roughly \$13.5 billion program of rail, regional express bus, and ferry enhancements and expansions. The financial plan for Resolution 3434 is comprised of an array of federal, state and local sources and matched funds to projects based on project competitiveness and eligibility. MTC is currently developing a Resolution 3434 Strategic Plan, scheduled for release in 2008, to provide a financial framework for successful program and project delivery.



Funding for Regional Rail Plan investments beyond current Resolution 3434 commitments will likely come from multiple sources, as follows:

- **Federal:** Federal transportation funds from various programs benefit rail service and station development. Recently completed and current projects in the Bay Area that have received substantial federal funding include San Francisco's 3rd Street Light-Rail Extension and Santa Clara County's BART Extension to San Jose. Federal funding categories include New Starts, Small Starts/Very Small Starts, and other Federal Transit Administration funding categories. Most of these funding sources are dependent on annual appropriations from the federal government, though some programs are multi-year.
- **State:** State bonds have been a key funding source for rail and transit projects. Past bonds include the 1990 Passenger Rail and Clean Air Bond Act (Proposition 108), which generated \$1 billion in funding, and the Clean Air and Transportation Improvement Act (Proposition 116), which provided close to \$2 billion in one-time source of funding for rail and transit projects. Funding from both bonds are largely spent or dedicated to specific projects.  
  
More recently, in 2006, California voters passed Proposition 1B, which provided roughly \$20 billion for transportation purposes statewide; that amount includes \$2 billion for freight-related infrastructure improvements (including rail freight) and another \$1.3 billion for Bay Area transit improvements.

Speed Rail Bond that will provide a substantial down payment towards the implementation of state-of-the-art high-speed rail system connecting the Bay Area to southern California. Other matching state and federal funding sources, as well as the CHSRA's broad contracting powers to secure private sector funds, will be pursued to fully implement the envisioned high-speed rail system.

- **Regional:** Regional funding has been an important contributor to the funding and delivery of numerous transportation projects in the Bay Area. In 1988, Bay Area voters approved Regional Measure 1 (RM1), which authorized a standard auto toll of \$1 for all seven state-owned Bay Area toll bridges. The additional revenues generated by the toll increase were identified for use for certain highway and bridge improvements, public transit rail extensions, and other projects that reduce congestion in the bridge corridors. In 2004, voters passed Regional Measure 2 (RM2), raising the bridge toll by \$1.00. This extra dollar is to fund various transportation projects within the region that have been determined to reduce congestion or to make improvements to travel in the toll bridge corridors, including rail improvements and expansions.

Regional Measures 1 and 2 toll bridge funds are fully committed to projects and programs identified in their respective expenditure plans. Any potential surplus of toll revenues generated would be directed toward the regional bridge seismic program. Per the Streets and Highways Section 3091(h), the MTC/Bay Area Toll Authority shall, by January 1, 2020, submit a 20-year toll bridge expenditure plan for RM2 to the Legislature for adoption. Further, this expenditure plan



shall have, as its highest priority, replacement of transit vehicles. When the expenditure plan is developed, there may be potential opportunities to advocate for toll bridge funding for rail expansion projects identified in this Regional Rail Plan. Additionally, as the Regional Rail Plan includes numerous high-cost water crossings, tolls could be raised to provide funding capacity to address these needs.

- **Local:** Local transportation sales tax measures have been the bulwark of the Bay Area’s transportation funding over the past two decades. To date, seven of the nine Bay Area counties have successfully enacted voter-approved transportation sales tax initiatives. Notably, Resolution 3434 identifies over \$5 billion in local sales tax funding for rail expansion and improvement projects. Current regional rail projects like the East Contra Costa and Alameda/Santa Clara counties BART extensions and the Caltrain Downtown Extension are being funded in part through local sales tax measures. Future local sales tax funds, developer fees and private capital may be available for rail projects.
- **Public/Private Partnerships:** Private investment, mainly from the rail freight operators (Union Pacific and Burlington Northern Santa Fe, will be an important funding source to implement the railroad-based improvements recommended in this plan. The rail freight operators own most of the rail rights-of-way in the region and allow rail passenger use for a fee. The private railroads have and will continue to be funding partners to improve freight and passenger rail service to implement improvements that are mutually beneficial to both. As an example, the \$2 billion in Proposition 1B

funding for freight infrastructure improvements requires up to a 50 percent match; the private railroads have indicated their interest in participating financially with local entities to secure some of this funding for local rail freight improvements.

Public Private Partnerships (P3) are another way to leverage public monies. A good example of a P3 is the Oakland Airport Connector project. Since public funding for this project was not sufficient to cover capital costs of constructing the project, BART, in an effort to move this project forward will be seeking private investors, using a design-build-operate, best value contract award approach.

- **Creative Financing:** New revenue streams may be available in the future. Two examples of potentially emerging opportunities include:
  - **Congestion Pricing** – Pricing of access to crowded major highway facilities could be used to implement rail improvements. This strategy could off-set some of the social equity issues associated with congestion pricing in that proceeds from a pricing strategy could be used to support basic transportation needs for those not able to afford priced highway options.
  - **Carbon Credits** – As initiatives are developed to fight global warming, participation in development of rail lines, especially those which would be electrified, or conversions to more energy-efficient lightweight equipment could be funded by private investors interested in receiving credits for reduction of pollutants and greenhouse gases.



Upon its adoption in September 2007, this Regional Rail Plan will be an important input into MTC's long-range regional transportation planning effort. Transportation 2035, which is currently under development and slated for adoption in early 2009, will represent the transportation policy and action statement of MTC for how to approach the region's transportation needs over the next 25 years. It will propose a set of transportation investments that can be implemented with available funding as part of the financially constrained element of the plan as well as identify programs/projects in the vision element if new funding becomes available. Transportation 2035 may afford opportunities for including other regional rail expansion projects in its longer-term vision element.

#### 9.4 Corridor Preservation Strategy

To develop regional rail improvements, lands along the proposed regional rail improvement corridor/routes should be preserved for future rail corridor expansion and development. Other land development should be prevented in such a way that the future rail line or improvements are not compromised. (Compatible transportation facilities such as bicycle paths, may be included in a future rail corridor provided such facilities do not impair the ability to develop the right-of-way for rail passenger service.) If outright purchase of the corridor is not available or feasible at this time, advanced planning for preservation of the corridor can be a cost-effective, environmentally responsible, and efficient activity that can reduce the overall future cost of the project(s) to the taxpayers.

Examples of corridors of interest identified in the plan include:

- North Bay branch lines connecting between proposed SMART service and Capitol Corridor at Cordelia (Northwest Pacific west of Schelleville; UPRR east of Schelleville)
- Oakland Subdivision (Oakland - Niles for Dumbarton Service and Niles - Lathrop/Stockton for ACE)
- Lands paralleling UPRR main lines in Central Valley (identified as an alternative by ACE and California High Speed Rail Authority)

Goals include:

- Preserve land for important continuous rail facilities needed to support future rail services demand.
- Minimize taxpayer cost over the long-term by avoiding costly right-of-way acquisition of future developed property.
- Support an integrated approach to land use and transportation planning.
- Provide options for corridor acquisition or preservation that can easily integrate the future design, operation, and maintenance needs of a regional rail system.
- Seek consensus on a preferred rail system plan by all affected communities and agencies through supporting adoption of consistent local comprehensive plans, zoning, and subdivision regulations.





## Current Ownership

There are generally two types of “corridors” that help define differences in acquisition or preservation strategies. These are:

- Land or corridors in private ownership — Preserving lands or rail corridors in private ownership presents real business and negotiation challenges. Whereas the publicly-owned lands will often require an open and deliberative public involvement process, arrangements with some private land holders can be made fairly rapidly and in a straightforward manner. Private property holders are more likely to consider a relatively straightforward business-oriented cost-benefit analysis approach. Only one set of public review and approval processes are needed on behalf of the Regional Rail entity.
- Land or corridors in public ownership — Protecting or preserving lands in public ownership within which the future rail corridor improvements would be located requires a deliberative public process. Implementation of the Regional Rail improvements will require public decision on distinct segments and related protection or preservation actions, often involving agreements between and with multiple jurisdictions. These jurisdictions generally must engage in their own public discussions and process regarding the protection, sale, or transfer of lands to a Regional Rail entity.

## The Corridor Preservation Process

Regional Rail corridor improvements will be located in varying terrain and across publicly- and privately-owned lands and facilities with different intensities of existing land use. Different combinations of these variables, in concert with dynamic real estate markets, can make the preservation of land areas along the corridor challenging. While some areas may be simply acquired, other sections along the corridor may need multiple strategies to ensure preservation.

Consideration must be given to both interim protection and long-term preservation actions. Strategies are not all equally effective in preservation efforts, nor do they represent equal costs or risk. Short term measures can help to hold land out of development until purchase can be made or title is otherwise transferred. These generally require minimum cash outlay, although they should be considered a prelude to ultimate acquisition. Longer-term preservation measures definitively ensure that the rail rights-of-way are or will be available when needed. These are best used when planning and environmental reviews have reached the stage for delineating right-of-way lines with some precision, and/or when key parcels are under threat of imminent development.

Some potential short term strategies include:

- Conservation or other special easements (also known as Official Maps of Reservation) — Acquisition of some interest in land less than fee simple or other right in order to preserve the property in a static condition.



- **Option to purchase at a later date** — Grants an entity the right to purchase the rental property during the term of the lease.
- **General Plan Corridor designations** — Functional classification for a “Regional Transportation Corridor” where Regional Rail is anticipated.
- **Corridor Protection Zoning Overlay District** — Impose special development regulations on areas which have been already designated in the General Plan as future “Regional Transportation Corridors”.
- **Density transfer within a single property** — Cluster development to protect the needed right-of-way.
- **Right-of-way platting** — Subdivision map reserves areas for public use, including easements.

Potential long term preservation strategies include:

- **Fee Simple acquisition** — Property or easements are purchased outright for just compensation.
- **Land Banking** — Acquisition of land in advance of expanding urbanization.
- **Public/Private Partnerships** — Property exchange, lease back, or special financing (tax exemptions, bonds) in return for land donations.
- **Transferable Development Rights** — Landowners are allocated development credits which can be sold. In return, the landowner agrees to a permanent conservation easement.
- **Development Easement Acquisition** — Establish a specific limited use right, such as the right to place rail lines across the property.

### **Key Implementation Steps**

The key to implementation is to have a governing entity with sufficient geographic scope and authority to move ahead with specific right-of-way acquisition or preservation actions (refer to Section 9.2, Governance). Some of the considerations for the activities of a governing unit established to address right-of-way preservation and acquisition include:

1. Develop a database for each corridor for intra-agency use, including information on land ownership, General Plan, Specific Plan, and zoning designations, present development activities, and private development plan approvals.
2. Determine the specific preservation actions necessary at different times (due to development pressure) and locations along each corridor.
3. Develop an overall corridor preservation plan for the region.
4. Establish a process to review preservation opportunities when active rail corridors are proposed for abandonment.
5. Develop funding program that includes annual allocations to implement the acquisition program identified in the preservation plan, plus a process where funding can be quickly obtained when unexpected opportunities arise to purchase properties or rights.



## 10.0 IMPLEMENTATION

Implementation of the Regional Rail Plan will require a comprehensive approach. Attached to this Executive Summary is a possible phasing for the plan. The following key considerations pertain to plan implementation:

- **Phasing** — The Regional Rail Plan report identifies a possible phased implementation plan which addresses near term (Year 2015) medium term (Year 2015–2030) and long term (post Year 2030 to Year 2050 and beyond) timeframes
- **Funding** — Assembly of nearly \$50-billion present-day dollars for development of the Northern California regional rail network, including Resolution 3434 commitments and BART reinvestment, will require significant new sources of funds; funding is a top priority concern
- **Governance / Rights-of-Way Arrangements** — The Regional Rail planning process considered governance and right-of-way issues which need to be addressed to fund, obtain rights-of-way, build, maintain and operate the regional rail network. Opportunities for joint programs or for new initiatives, which could be undertaken in the near term under a federation of existing operators, were identified and may be pursued further as part of potential new legislation. In the longer term, a regional rail federation could provide an umbrella under which negotiations with freight rail operators for acquisition of rights-of-way and operating rights could proceed.
- **Land Use Policies** — Existing policies developed separately by BART, MTC and other entities governing station area developments could be unified and broadened to pertain to the Northern California “mega-region” to assure that the highest densities are developed along rail corridors and around stations/major connectivity points, thereby establishing the ridership markets and providing convenient access to the regional rail network.
- **Integration with Other Planning Efforts** — This Regional Rail Plan only focused on a single transportation mode - rail. Therefore, this plan will ultimately need to be integrated with other regional planning efforts such as the Regional High-Occupancy Toll (HOT) Network Study, regional express bus plans, Water Transit Authority’s Ferry Operations & Implementation Plan, MTC’s Freeway Performance Initiative, and other regional and local planning efforts. The synergy between this Regional Rail Plan and other regional and local plans would underscore the importance of looking at and planning regional transportation from a multi-model perspective. To this end, local jurisdictions should include identification of necessary rail rights-of-way in General Plans.



## 11.0 NEXT STEPS

Projects advanced under the Regional Rail Plan would be implemented in accordance with existing project planning, funding and project development procedures.

The following specific follow-on efforts are recommended:

- **Governance** — Regional rail governance strategy is a near-term priority. The Commission and the affected rail operators should develop an Action Plan to implement the key governance initiatives outlined in the Regional Rail Plan. No new rail operators should be “chartered” or established which would provide new services that are interconnected with the regional network.
- **Rights-of-Way** — It is recognized that obtaining right-of-way and/or securing access to freight lines for development and operation of regional rail passenger services is a critical priority. Accordingly, the Action Plan should identify a single entity to: 1) identify and inventory future Bay Area rail rights-of-way needs and identify potential funding options; 2) develop near-term inventory of proposed rail improvements that would allow additional rail passenger slots to be acquired; and 3) negotiate railroad rights-of-way and access to private freight lines on behalf of all regional rail entities. (Residual Regional Measure 2 funding allotted to the preparation of this plan should be made available to support the development of the Action Plan.)
- **Evaluation Measures** — MTC adopted rail system expansion and improvement criteria during the development of its Resolution 3434 transit expansion program, and is currently developing a Resolution 3434 Strategic Plan to provide a framework for successful program and project delivery. This Regional Rail Plan helps inform the next generation of rail expansion beyond Resolution 3434.
- **Travel Market and Ridership Analysis** — Detailed ridership studies to evaluate corridor service options.
- **Land Use Analysis** — Sensitivity testing should be performed for Regional Rail projects to reflect on-going refinements to land use visioning, particularly more focused land use patterns.
- **Service Model** - Additional analysis and testing should be used to identify specific operating plans including routings and frequencies.
- **Cost Analysis** — Cost estimates prepared for the Regional Rail plan are planning-level, order-of-magnitude cost and will be refined to reflect the level of detail of the project description as projects are further developed.
- **Environmental Clearance & Community Impacts** — As rail projects and services are developed, full environmental review and public involvement will be provided to refine project specifics and identify mitigation measures.



- **BART Operations** — BART will be leading its own effort to address passenger needs including development of criteria for infill stations, how to best implement its 30-year capital plan and strategic vision, constructing higher frequency line segments, skip-stop services and other improvements considered in this plan.
- **High-Speed Rail** — The CHSRA has released a Draft Environmental Impact Report/Environment Impact Statement (EIR/EIS) for the Bay Area to Central Valley portion of a statewide high-speed rail system which provides information on high-speed rail options, costs, benefits and potential impacts. The CHSRA will be accepting comments through October 2007 on the draft environmental document to inform the decision making process regarding preferred high-speed rail alignments and station locations within the Bay Area to Central Valley study area. The Regional Rail process will provide input to the CHSRA as it prepares its final environmental document and decides on the preferred routing for high-speed rail between the Bay Area and Central Valley.



## ACKNOWLEDGEMENTS

### MTC COMMISSIONERS

Bill Dodd, Chair

*Napa County and Cities*

Scott Haggerty, Vice Chair

*Alameda County*

Tom Ammiano

*City and County of San Francisco*

Tom Azumbrado

*U.S. Department of Housing and Urban Development*

Tom Bates

*Cities of Alameda County*

Bob Blanchard

*Sonoma County and Cities*

Dean J. Chu

*Cities of Santa Clara County*

Dave Cortese

*Association of Bay Area Governments*

Dorene M. Giacomini

*U.S. Department of Transportation*

Federal D. Glover

*Contra Costa County*

Anne W. Halsted

*San Francisco Bay Conservation and  
Development Commission*

Steve Kinsey

*Marin County and Cities*

Sue Lempert

*Cities of San Mateo County*

Jon Rubin

*San Francisco Mayor's Appointee*

Bijan Sartipi

*State Business, Transportation and Housing Agency*

James P. Spering

*Solano County and Cities*

Adrienne J. Tissier

*San Mateo County*

Amy Worth

*Cities of Contra Costa County*

Ken Yeager

*Santa Clara County*

### MTC EXECUTIVE STAFF

Steve Heminger

*Executive Director*

Ann Flemer

*Deputy Executive Director, Operations*

Andrew B. Fremier

*Deputy Executive Director, Bay Area Toll Authority*

Therese W. McMillan

*Deputy Executive Director, Policy*



## PROJECT MANAGEMENT TEAM

Howard Goode, *Caltrain*

Doug Kimsey, *MTC*

Dan Leavitt, *California High-Speed Rail Authority*

Ashley Nguyen, *MTC*

Marianne Payne, *BART*

## CONSULTANT TEAM

Brent Ogden, *DMJM Harris | AECOM*

Karl Schaarschmidt, *Earth Tech*

Maritza Acosta, *Earth Tech*

Tom Matoff, *LTK Engineering*

Moore Iacofano Goltsman, Inc.

## PROJECT STAFF

Catalina Alvarado, *MTC*

Katie Balk, *BART*

Benjamin Espinosa, *MTC*

Shimon Israel, *MTC*

Chuck Purvis, *MTC*

Malcolm Quint, *BART*

Thomas Tumola, *BART*

## REGIONAL RAIL STEERING COMMITTEE

Juan Acosta, *Burlington Northern Santa Fe Railway*

Maria Ayerdi, *Transbay Joint Powers Authority*

Michael Beritzhoff, *Port of Oakland*

Kevin Connolly, *Santa Clara Valley Transportation Authority*

Martin Engelmann, *Contra Costa Transportation Authority*

Jean Finney, *Caltrans District 4*

Steve Gregory, *Port of Oakland*

Lillian Hames, *Sonoma Marin Area Rail Transit District*

Jim Leddy, *Napa County Transportation Planning Agency*

Wingate Lew, *Caltrans District 4*

Robert Macaulay, *Solano Transportation Authority*

Ian McAvoy, *Caltrain*

Stacey Mortenson, *San Joaquin Regional Rail Commission*

Jose Luis Moscovich, *San Francisco County Transportation Authority*

Rich Napier, *San Mateo City/Council Association of Governments*

Robin Owen, *Caltrans Division of Rail*

Eric Schatmeier, *Transportation Authority of Marin*

Eugene Skoropowski, *Capitol Corridor*

Janet Spillman, *Sonoma County Transportation Authority*

Beth Walukas, *Alameda County Congestion Management Agency*

Jerry Wilmoth, *Union Pacific Railroad*



## ACKNOWLEDGEMENTS (continued)

### ADVISORY GROUP

Robert Cervero, *UC Berkeley*

Elizabeth Deakin, *UC Berkeley*

Ken Kirkey, *ABAG*

Jim Wunderman, *Bay Area Council*

Laura Stuchinsky, *Silicon Valley Leadership Group*

### REGIONAL PARTNERS

Luis Mendez, *Santa Cruz County Regional  
Transportation Commission*

Karina Pushnik, *Santa Cruz County Regional  
Transportation Commission*

Tanisha Taylor, *San Joaquin Council of Governments*

Christina Watson, *Transportation Agency for Monterey County*

Olin Woods, *Sacramento Council of Governments*

### REPORT AUTHORS

Brent Ogden, *DMJM Harris | AECOM*

Ashley Nguyen, *MTC*

Greg Gleichman, *DMJM Harris | AECOM*

Ryan Park, *DMJM Harris | AECOM*

### PUBLICATION

#### GRAPHIC DESIGN

*Michele Stone*

#### GRAPHIC PRODUCTION AND MAPS

*Peter Beeler*

*David Cooper*

#### PHOTOGRAPHY

*MTC Archives (unless otherwise noted)*

#### PRINTING

*Alonzo Printing, Inc.*

*Hayward, California*