

# Chapter 11

## NEXT STEPS

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### INTRODUCTION

The Preferred Alternative specifies a commuter rail service with limited mid-day service between Cloverdale in the north and San Rafael in the south – a distance of 68 miles. Assuming a start date as early as 2005, if the proposed sales tax initiatives in both counties are approved in November 2000, ridership would be about 3,200 per day<sup>1</sup>. This is a level comparable with several other single-line commuter rail operations in California. While starting with 45-minute headways, the service will shift to 30-minute headways in its seventh year<sup>2</sup>.

The service should generate a farebox recovery ratio of about 25 percent, assuming use of DMU equipment, and about 24 percent assuming conventional equipment, in 2005. Capital costs required to initiate the service will reach almost \$140 million. Besides the sales tax, other funding sources have been identified, include Prop. 116 funds, and potential federal and state earmarks. In addition, the Governor's recent transportation initiative has provided \$37 million for the service, as well as \$60 million for the North Coast Railroad Authority (NCRA).

Still, the Preferred Alternative remains only a plan, unless concrete steps are taken to move the implementation plan into reality. This chapter analyzes what needs to be done to move the Preferred Alternative forward, assuming voter approval of a sales tax initiative in both counties. The Commission recognizes that sales tax revenues would be an essential funding source for the Sonoma – Marin rail service. The next steps appear below in terms of function disciplines – governance (or gearing up administratively for the rail service), preliminary engineering, environmental analysis, station design, transit integration, funds sourcing, and additional operations planning.

### GEAR UP FOR IMPLEMENTING RAIL SERVICE

The SMART Commission was organized as a Joint Powers Agency (JPA) for the purpose of developing this implementation plan for commuter rail service. Assuming voter approval of the sales tax initiatives in the two counties, the Commission would need to gear up for actual implementation of rail service. Numerous tasks need to be done. First and foremost would be the selection of project managers to take the plan forward toward reality. The project manager would be responsible for handling the details of service implementation, many of which are defined in following sections.

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<sup>1</sup> This figure is an extrapolation of the 2,900 daily figure for 2002.

<sup>2</sup> The original Preferred Alternative as set forth in Chapter 7 identified the shift occurring in the eighth year. However, funding Scenario 2 in Chapter 8 calls for the transition one year earlier.

A primary task will be negotiating with right-of-way owners for use of the track segments and facilities. The segment owners are the Golden Gate Bridge, Highway and Transportation District for San Rafael to Ignacio, the Northwestern Pacific Railroad Authority (NWPRA) for Ignacio to Healdsburg, and the NCRA for Healdsburg to Cloverdale.

Additionally, a discussion related to coordinated activity for track improvement and integration of passenger and freight operations should be part of the negotiation with NCRA. It is noted that the shared use of the right-of-way for simultaneous freight and passenger operations has yet to be decided.

## PRELIMINARY ENGINEERING

The engineering analysis performed early in the course of this analysis was for the purpose of estimating costs for upgrading the line and bridges to support a commuter rail operation. Engineers inspected the line and bridges, identified needed improvements, and mostly applied unit costs to arrive at upgrading costs. These were preliminary estimates only, based on observation. Moving forward, the project managers must refine these estimates to arrive at more precise cost figures. This task is typically accomplished through a preliminary engineering process. Specific work steps needed would include:

- Flying the route between Cloverdale and downtown San Rafael to obtain aerial photographs.
- Drawing maps from the aerial photographs that will facilitate locating sidings and layover facility and a maintenance facility.
- Developing design criteria that will facilitate subsequent further engineering design work. Criteria would include specifics on ballast depth for track, vertical clearance for commuter trains, station platform width, track centerline spacing for double track and siding placements, fencing of the right-of-way, etc.
- Developing detailed designs for needed track improvements including sidings, switches, signalization, and bridge upgrades.

Flying the route and map making could be accomplished within a month of project initiation. Development of design criteria and detailed improvements would take about six months to complete. Once this work is done, project managers will have a better understanding of the costs and challenges of rebuilding the railroad. This understanding would be sufficient to allow project managers to progress to the engineering design phase.

## SELECTION OF ROLLING STOCK

The rolling stock discussion in Chapter 6 outlined the equipment options for the rail service. All types – locomotive-hauled train sets, rebuilt Budd cars and diesel multiple units (DMUs) – are compliant with FRA standards regarding crashworthiness. However, they vary significantly on a

cost-per-seat basis. Driving the higher cost for DMUs is the fact that they do not exist at this point. Procurement of these vehicles will entail sizable design costs compared to traditional “off the shelf” locomotive-hauled train set alternatives as well as Budd cars.

In order to seek state and federal funds for the service, project managers must determine which type of equipment to use as soon as possible so that total project costs can be calculated. Manufacturing lead-time would be an important issue because all three types of equipment could require up to two years in lead-time. Assuming a start-date of 2005, project managers should place orders for the equipment no later than late 2002.

## ENVIRONMENTAL ANALYSIS

According to this report’s preliminary environmental assessment, an Environmental Impact Report (EIR) or a Mitigated Negative Declaration (Neg Dec) would be required for this project. A final determination of which environmental clearance process needed would be made by the SMART Commission when the proposed project is more specifically defined, i.e., through preliminary engineering. One clearance process or the other would be necessary given the potentially significant transportation, wetlands, and visual impacts. Other potentially significant impacts were identified in the following areas unless mitigation is incorporated in the project: land use, geology/seismicity, flooding, noise, and cultural resources.

The EIR or Neg Dec technical studies would focus on station areas and segments of the rail that were identified as having potentially significant impacts. The next steps of the environmental process are summarized in Table 11-1 below.

Table 11-1  
Environmental Process  
Next Steps

<b>Formal Application</b>
<ul style="list-style-type: none"> <li>• <b>Environmental Application submitted to Lead Agency</b></li> <li>• <b>SMART Commission’s formal determination that project is subject to CEQA</b></li> </ul>
<b>Initial Study</b>
<ul style="list-style-type: none"> <li>• <b>Environmental Checklist is completed</b></li> <li>• <b>Consultation with Responsible and Trustee Agencies</b></li> <li>• <b>Decision to prepare EIR or Negative Declaration</b> (30 days from acceptance of completed application)</li> </ul>

Environmental Impact Report	Negative Declaration
<ul style="list-style-type: none"> <li>• <b>Notice of Preparation to Responsible and Trustee Agencies</b></li> <li>• <b>Responses to Lead Agency in 30 days</b></li>   <li>• <b>Preliminary Draft EIR prepared</b></li> <li>• <b>Review by Lead Agency</b></li> <li>• <b>Draft EIR submitted for review</b></li> <li>• <b>Notice of Completion filed</b></li> <li>• <b>Public review of DEIR</b></li> <li>• <b>Public Hearing on DEIR</b> (optional within 3- to 45 days)</li> <li>• <b>Written comments received</b></li> <li>• <b>Responses to Comments prepared</b></li>   <li>• <b>Responses sent to commenting agencies</b></li> <li>• <b>FEIR certified by Lead Agency</b></li> <li>• <b>Lead Agency makes project decision</b></li>   <li>• <b>Findings written and adopted</b></li> <li>• <b>Mitigation reporting and monitoring program adopted</b></li> <li>• <b>Notice of Determination filed and posted</b></li> <li>• <b>Responsible Agency makes project decision</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Prepare Technical Studies to Support Neg Dec</b></li> <li>• <b>Mitigation measures identified and agreed to by project sponsor</b></li> <li>• <b>Draft Neg Dec prepared</b></li> <li>• <b>Public Notice and Review (20-30 days)</b></li> <li>• <b>Responses to Neg Dec received</b></li> <li>• <b>Comments considered</b></li> <li>• <b>Neg Dec completed</b></li> <li>• <b>Commenting agencies notified of hearing</b></li>   <li>• <b>Neg Dec adopted</b></li> <li>• <b>Mitigation Reporting and Monitoring Program adopted</b></li> <li>• <b>Lead Agency makes project determination</b></li> <li>• <b>Notice of Determination filed and posted</b></li> <li>• <b>Responsible Agency makes project decision</b></li> </ul>

Should project managers seek federal funds for this project, an Environmental Assessment (EA) /Environmental Impact Statement (EIS) may be required in addition to an EIR or Neg Dec for California Environmental Quality Act (CEQA) compliance.

## STATION DESIGN

This report's research pertaining to stations concentrated on the likely costs of acquiring land, building essential structures such as a platform and shelters, and providing specific amenities like parking, bus turn around areas, lighting, and ticket vending machines (TVMs). In several locations, final station sites have not yet been identified. These include Marin Civic Center, Novato, and Petaluma, among others. Much work remains to be done. Moving forward, project managers should accomplish the following tasks:

- Based on ridership projections, develop program of user needs for stations.

- Evaluate potential rail station sites, assessing opportunities and constraints of potential sites against program requirements for those sites.
- Based on a selection of likely candidate sites, develop concept site master plan layouts for each site.
- Develop prototypical concept sketches for architectural elements such as pedestrian shelters that would be used at all stations.
- Develop a set of design standards covering street furniture, lighting, signage, landscaping, etc.; that could be employed on all stations.
- Develop preliminary cost estimates for improvements at each site.
- Develop specific designs and costs for each station.

## TRANSIT INTEGRATION

The major transit services in the US 101 corridor have expressed a willingness to work with rail for a meaningful integrated transit alternative for rail passengers. Additional work should focus on development of a specific transit integration plan. This plan would detail the physical facilities and equipment required to implement real transit integration. Physical facilities would include sufficient room at stations for bus turn-arounds. Equipment would include ticket vending machines (TVMs) that print tickets with transfers to local buses – a key factor for effective fare integration.

Most importantly, project managers should commence negotiations with Golden Gate Transit, the Marin County Transit District, Petaluma Transit, and Santa Rosa CityBus with regard to the specifics of an integrated transit service. These would include identifying connections between trains and buses, allocation of turn-around space at stations, and a fare integration methodology. It could also include the establishment of a common transit user information “hot line”, e.g., 1-800-BUS-RAIL and a Website, by which transit users could obtain schedule information for both modes. Also, schedule information should be available from MTC’s call-in information system (817-1717) and from the MTC’s Website ([www.transitinfo.org](http://www.transitinfo.org)).

## FUNDS SOURCING

Key to a successful implementation of rail service are contributions from sales tax initiatives imposed in both Sonoma and Marin Counties. These funds will be required to cover capital costs and operating cost shortfalls (the proportion of operating costs not covered by fare revenue). At the same time, there are other funding sources that should be explored. To this end, project managers should:

- Submit an application to the California Transportation Commission in order to claim \$28 million in Prop. 116 funds.

- Work with local legislators to developed a detailed earmarking strategy that establishes an annual funding goal. State and federal earmarking goal for the Preferred Alternative’s Scenario 2 is \$30 million.
- Determine what years the \$37 million provided by the Governor from the state surplus will be available.
- Seek funding for next phase environmental work and preliminary engineering work from either Governor's budget or state/federal earmarks.
- Refine the cash flow analysis shown in Chapter 8 to include contingencies and/or local jurisdiction capital requirements such as access road construction at stations that were not included in the capital cost estimates.

## OPERATIONS PLANNING

The heart of the implementation plan arguably are ridership estimates and service option designs. These two tasks are the primary drivers determining revenue, operating costs and capital costs for a Sonoma – Marin rail service. The estimates outlined in the preceding chapters are realistic, for they are grounded by the experiences of other commuter operators and validated by detail produced by rolling stock manufacturers and numerous professional railroad consultants. But planning cannot stop with this report. Plans should continue to be refined up to the first day when trains actually run, so that the system can be made as efficient and effective as possible. One area that will need further evaluation would be an estimate of new riders drawn to transit as a result of a rail service implementation. Another key planning concern of project managers would be the procurement of an operator for the service.

### Most Riders Will Be New to Transit

According to data provided by Golden Gate Transit, approximately 240 predominantly southbound morning commuters use its buses daily through the Novato Narrows on routes 71, 75, and 80. These three routes are the primary routes for Sonoma – Marin inter-county bus riders. These riders would logically comprise a “target market” for rail service.

A comparison of rail travel times versus commute hour bus service reveals a significant advantage for rail. For example, between Santa Rosa and San Rafael, rail would take between 53 and 55 minutes, depending on the specific train. The buses, however, have commute hour transit times in a range of 95 to 99 minutes, highway delays notwithstanding. At first glance, rail would appear irresistible to time and reliability conscious commuters. However, it should be recognized that the bus routes make many more stops than the rail service would. As a result, in the end, buses may be more convenient than rail for the majority of their riders.

It is reasonable to assume, however, that a still sizable minority of 20 to 40 percent of existing bus riders on these routes might be drawn to a rail alternative. This computes to a range of roughly 50 to 100 riders per day. On the high side, former bus riders would account for approximately 8 percent of the approximately 1,300 morning commuter rail ridership in 2005. Conversely, 92 percent, or about 1,200 morning riders, would be new riders to transit. Using an

average vehicle occupancy for home-to-work trips of 1.1<sup>3</sup>, the latter figure would equate to about 1,100 vehicles drawn off US 101 during the morning commute.

These figures are preliminary, and they need to be refined if project managers aspire to obtain federal funds for construction and operation of the rail service. New ridership is a key calculation required for federal earmarks.

### Procurement of a Rail Service Operator

Hiring of contractors to operate commuter rail services is a common practice in California. For most of these services, Amtrak is the operator.

- The Southern California Regional Rail Authority (SCRRA) contracted Amtrak to run its Metrolink service in Los Angeles.
- The Peninsula Commute Joint Powers Board (PCJPB) contracted Amtrak to run its Caltrain service.
- The North San Diego County Transit District (NCTD) contracted Amtrak to run its Coaster service.

The exception is the San Joaquin Regional Rail Commission, which hired Herzog Transit Services Inc. to run Altamont Commuter Express (ACE) trains between Stockton and Silicon Valley. Herzog also operates Trinity Rail Express for the Dallas Area Rapid Transit (DART). Contracting for operations of the rail service was assumed for costing purposes. Amtrak and Herzog are examples of operators with proven track records, and it appears prudent to make use of such enterprises' special expertise rather than "reinventing the wheel" with SMART forming its own operating company. To this end, project managers should contact each of these sponsoring agencies and obtain insights on the key contract elements needed for a successful service implementation using operations contractors. In this way, the project managers can gain from the experience of the agencies that are currently in the business of moving rail passengers safely and reliably, so as to negotiate the best possible operations contract.

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<sup>3</sup> *Draft San Francisco CountyWide Transportation Plan*, San Francisco County Transportation Authority, April 2000.