



# From Principle to Policy

## The Scenario Approach

Following the development of the Vision & Guiding Principles, four future scenarios were developed to prepare Caltrain for different possible financial futures in light of multiple unknowns, such as upcoming ballot measures and the economic climate. These scenarios were used to answer key policy questions and will set a clear direction for making detailed service, capital, and financial decisions. The four scenarios are: Status Quo, Moderate Growth, Enhanced, and Build-Out.

The **Status Quo Scenario** is the most financially constrained scenario. It follows a “pay-as-you-go” approach and assumes that only current (2004) levels of committed and programmed funds are available. It is assumed that upcoming local sales tax measures would not be reauthorized and no innovative funding sources would be pursued. The objective of the Status Quo Scenario is to keep the railroad operating at current levels of service, optimize existing infrastructure, and limit investment in improvements other than normalized rehabilitation and replacement.

The **Moderate Growth Scenario** is a steady growth scenario and is financially constrained in the first five years. Similar to the Status Quo Scenario it follows a “pay-as-you-go” approach, but requires some additional resources above current levels to fund planned improvements. It is assumed that upcoming local sales tax measures would not be reauthorized and no innovative funding sources would be pursued. The objective of the Moderate Growth Scenario is to optimize the operating and capital programs with limited increases in funding resources, service, and capital improvements.

The **Enhanced Scenario** is the “market-driven” scenario. It is financially constrained in the first five years (same as the Moderate Growth Scenario), and assumes that additional resources become available in the outer years. The main objective of the Enhanced Scenario is to capture latent market demand by providing optimal levels of service, improving station access and regional connectivity, and incorporating universal design elements and customer amenities that are characteristic of a “world class” railroad. Innovative financing techniques would have to be pursued.



The **Build-Out Scenario** is the “ultimate” scenario that integrates Caltrain and the proposed statewide high-speed rail system. The objective of the Build-Out Scenario is to capture a significant market share of trips by providing a travel experience similar to the Enhanced Scenario that is complemented by the additional service and amenities offered by the connection to high-speed rail. It assumes that additional funding resources via high-speed rail bonds and other resources would be available. An aggressive innovative financing program would be required.

More detailed information on each of the scenarios is presented in the chapter titled “The Future Scenarios.”

## Policy Questions

Six policy questions were developed that address how Caltrain will make key decisions regarding future service and capital improvements and financial strategies. Many decisions regarding capital improvements need to be made within the next few years so that the necessary funding can be secured and costly re-dos are avoided. The findings and evaluation of the scenarios, along with input received from the member agencies and the general public were used to answer the following policy questions:

- **Scenario Approach:** *Should one scenario be selected or should the scenarios be viewed as part of a continuum? In a continuum, key funding opportunities and increased demand for service can trigger a shift to another scenario.*
- **Financial Strategy:** *Should Caltrain continue with annual review utilizing the “pay-as-you-go” approach or strive for long-term stability by utilizing innovative finance techniques?*
- **Service Levels:** *Should service levels be determined by projected financial resources or should it be market-driven?*
- **System Rehabilitation:** *Should Caltrain follow a normalized rehabilitation and replacement schedule or follow an accelerated schedule that is combined with other capital improvement projects?*

- **Electrification:** *Should electrification be deferred until funding is available or should design continue?*
- **Capacity Improvements:** *What level of capacity improvements should Caltrain invest in to improve headways and reliability of service in the peak periods?*

Each scenario has a different combination of assumptions regarding funding availability and finance strategies, service levels, and capital improvements. These shape the general policy direction and objective of each scenario. In general, the Status Quo and Moderate Growth scenarios take a more conservative approach in their

policy positions, while the Enhanced and Build-Out Scenarios include market-driven service and capital improvements as well as innovative financing techniques. The scenario policy approaches are presented below in Table 1.

The following conclusions to the six policy questions were drawn based on comprehensive outreach to the public and to the member agencies:

- **Scenario Approach:** *Should one scenario be selected or should the scenarios be viewed as part of a continuum?*

It is clear that the continuum is the most prudent and practical scenario

**TABLE 1: SCENARIO POLICIES**

	<b>STATUS QUO</b>	<b>MODERATE GROWTH</b>	<b>ENHANCED</b>	<b>BUILD-OUT</b>
<b>Financial Strategy</b>	Annual review, Maintain 2004 level of investment	Annual review, Pay-as-you-go	Long-term stability, Innovative Finance Strategies	Long-term stability, Innovative Finance Strategies
<b>Service Levels</b>	Maintain 2004 level of service	Moderate growth	Market-driven	Market-driven
<b>System Rehabilitation</b>	Scheduled/ Normalized	Scheduled/ Normalized	Accelerated	Accelerated
<b>Electrification</b>	Deferred indefinitely	Deferred until funding available	Continue with Design	Continue with Design, must coordinate with HSR construction
<b>Capacity Improvements</b>	Only CTX improvements complete in 2004	North quadrant (San Mateo County) and South (Partial)	North, Central, and South	Entire route

approach given the unpredictable nature of the economic climate and future funding sources. The strategy for Caltrain should be to begin with the **Status Quo** Scenario and advance to the **Moderate Growth, Enhanced, or Build-Out** Scenario when critical milestones are reached. Critical milestones would include securing additional capital and operating funds. Because the first five years of the capital program are financially constrained in all scenarios, there is some flexibility with regard to securing funds to meet the projected shortfalls.

- **Financial Strategy:** *Should Caltrain continue with annual review by utilizing the “pay-as-you-go” approach or strive for long-term stability by utilizing innovative finance techniques?*

Given the uncertainty of the “pay-as-you-go” approach and the complexities it creates when planning and coordinating future improvements, Caltrain should strive for long-term stability through dedicated funding sources and innovative techniques. This strategy is in line with the fifth guiding principle, which is to “develop a solid financial

foundation that ensures long-term sustainability.” Securing dedicated funding sources will enable Caltrain to meet projected funding shortfalls, plan future service and capital improvements, and implement the improvements in a timely manner. It will be critical for shifting from the Status Quo or Moderate Growth to the Enhanced or Build-Out Scenario.

- **Service Levels:** *Should service levels be determined by financial resources or should it be market-driven?*

Service levels must be tied to productivity and public demand, yet balanced with funding availability. Good information on market demand is necessary to determine the service characteristics that are desired by the public and to prioritize service improvements as funding becomes available. Because service improvements sometimes require capital projects, the availability of capital funding can directly affect service levels.

- **System Rehabilitation:** *Should Caltrain follow a normalized rehabilitation and replacement schedule or an accelerated schedule?*

Capital replacement and rehabilitation must not be deferred but should be implemented in the most cost-effective manner. When opportunities arise, rehabilitation should be accelerated to prevent a situation of deferred maintenance, which can greatly increase maintenance costs. It is critical to balance rehabilitation with other improvements in the capital program.

- **Electrification:** *Should electrification be deferred until funding is available or should design continue?*

Design for the electrification project should continue and should be factored into all improvement projects along the right-of-way. Phasing of implementation should

be part of the design development. A funding plan must be created in order to implement the project and avoid further delays.

- **Capacity Improvements:** *What level of capacity improvements should Caltrain invest in to improve headways and reliability of service in the peak periods?*

Capital improvements that expand system capacity, such as adding additional tracks, must be tied to service objectives, and must be balanced with other projects in the capital program. Caltrain should explore the most cost-effective means for improving service before investing in capacity expansion.

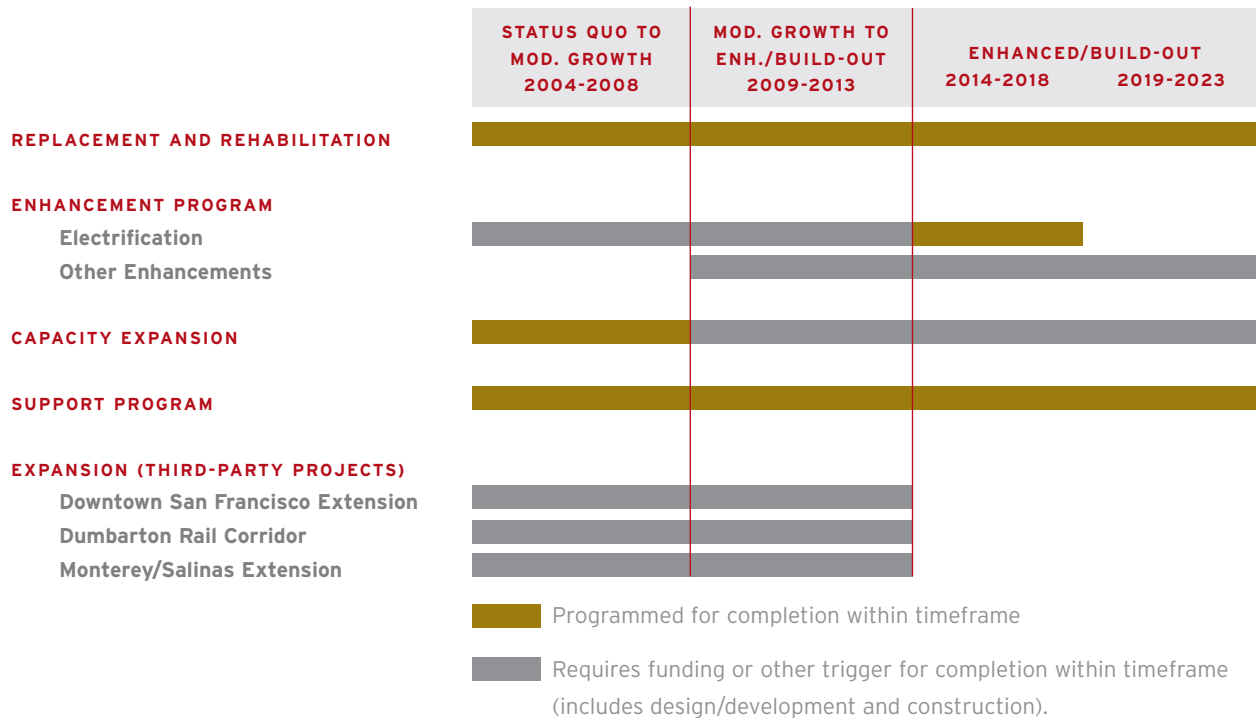
## Snapshot of the Continuum and Future Improvements

Based on the policy approach outlined in the previous section, a conceptual schedule was developed for the capital improvements that can be expected in the next 20 years. The following timeline provides a snapshot of what the capital program will include. The projects or programs that depend on service and financial triggers, such as establishing dedicated funding sources, are distinguished from ongoing programs, such as rehabilitation, which are almost completely funded.

Projections of revenue availability are based on past experience and reasonable estimates of future events. These revenue projections assume that all of the local matching funds identified in the financial plans will be approved annually by Caltrain's three member agencies.

As shown in the header row of the timelines below, Caltrain could begin with the Status Quo Scenario and shift to the Moderate Growth Scenario within the first five years, once funding for identified shortfalls is secured and a funding plan for electrification is developed. By the end of the first five years,

### FUTURE IMPROVEMENTS TIMELINE



it will be determined whether or not high-speed rail will be constructed along the Caltrain corridor. In the second five-year period, Caltrain could shift from the Moderate Growth Scenario to either the Enhanced or Build-Out Scenario, depending on the status of the high-speed rail project. This scenario shift from the Moderate Growth Scenario would require Caltrain to secure operating and capital funds for the Enhancement and Capacity Expansion programs. By the second half of the 20-year period, Caltrain would be in the Enhanced or Build-Out Scenario.

Existing sales tax measures (Measure A) in San Mateo and (Measure A) Santa Clara counties and a new sales tax measure (Proposition K) in San Francisco County provide funds for Caltrain capital projects. Two upcoming ballot measures that would provide funding for enhancements and capacity expansion are the reauthorization of the San Mateo County sales tax (November 2004) and the high-speed rail bond measure (November 2006 or 2008). Revenue from the San Mateo County sales tax would help to meet most of the \$220 million capital shortfall in the Moderate Growth Scenario. Any additional funding sources could be used toward achieving improvements included in the Enhanced Scenario.

If the high-speed rail bond measure passes, Caltrain would be positioned to shift into the Build-Out Scenario by the second five-year period.

The following describes the capital program according to the scenario approach outlined above:

**REPLACEMENT AND REHABILITATION**

- Ongoing throughout 20-year period independent of scenario. May be accelerated in the Enhanced and Build-Out Scenarios. Full funding has been identified for the Replacement and Rehabilitation program in the Status Quo and Moderate Growth Scenarios. Over ninety-five percent of Replacement and Rehabilitation funding sources have been identified for the Enhanced and Build-Out Scenarios.
- Major programs include replacement and overhaul of rolling stock and rehabilitation of track, bridges, tunnels, signals and grade crossings. Replacement of rolling stock must be coordinated with the timing of the electrification project which will require the purchase of new electric locomotives. Platform improvements at key stations to remove the hold-out rule are included.

### ENHANCEMENT PROGRAM

- Electrification project completed within the first ten years. Full funding has been identified for the project in the outer years of the 20-year time period. A funding plan to bring all dedicated funds forward must be developed in order to implement the project within the ten-year time frame.
- Other enhancements, such as improved station access and customer amenities, will require additional funding.

### CAPACITY EXPANSION

- Funding has been identified in the first five years for capacity expansion projects, which include grade separations, track and signal construction, and station improvements. Additional capacity expansion may be necessary to substantially improve service levels and will depend on demand for service and the availability of funds.

### SUPPORT PROGRAM

- The support program consists of project development and capital program development. Full funding has been identified for the next 20 years.

### REGIONAL EXTENSIONS

- Regional extensions include the Downtown extension to a rebuilt Transbay Terminal in San Francisco, the Dumbarton Rail Corridor, and the extension to Monterey and Salinas. These are considered third-party projects whose capital costs are not included in the Capital Plan. While they are all currently partially funded and not included in the Status Quo or Moderate Growth Scenarios, it is assumed that planning and design will continue and that they will be implemented within the next 10 years.