VTA TRANSIT SUSTAINABILITY POLICY

Adopted February 2007
(March 2010 Update)

COMMUNITY BUS **LOCAL** BUS **EXPRESS** BUS **BUS RAPID** TRANSIT **LIGHT RAIL** TRANSIT **STATION** AREAS

SANTA CLARA
Valley Transportation Authority
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POLICY STATEMENT

It shall be the policy of the Santa Clara Valley Transportation Authority (VTA) to develop an efficient transit system that is responsive to market needs, seeks the highest and best use of funds, obtains maximum benefit for each dollar spent, increases transit usage per capita, and enhances Santa Clara Valley's environment and quality of life. Accordingly, all potential transit projects and services will undergo a study prior to funding approvals to understand the full range of alternatives available for providing service, the costs and benefits, and the effects proposed services will have on system ridership and operations.

The Transit Sustainability Policy (TSP) is a ridership-based policy that provides a framework for the efficient and effective expenditure of transit funds, and for realizing the highest return on investment in terms of public good and ridership productivity. It is intended to assist the Board of Directors with its decision-making process by making available the most complete information possible regarding options, cost, benefits, and trade-offs of various transit projects and service proposals prior to a selection of mode and funding decisions.

The TSP was developed to help deliver successful, cost-effective projects and services, not to screen out particular services, projects or modes. It provides a common process for improving transit service that can be applied to any project or service regardless of mode or location. Moreover, the TSP provides a methodology for developing partnerships with local governments and for engaging them in the planning, design, delivery and long-term success of the transit system. Lastly, the TSP is designed to work toward achieving the Board-adopted goal of a system-wide farebox recovery ratio of 20-25%, as well as the TSP goals and core principles discussed in Section 1.

PURPOSE AND NEED

VTA is charged with exploring the full range of public transit options available for Santa Clara County to meet the transportation needs of its residents and workers. It has a fiduciary and professional responsibility to use its revenues and funding effectively and efficiently. Due to the economic trends of the past several years, and the resulting financial impacts, current service levels are comparable to the level operated two decades ago. In the coming years, VTA faces significant challenges with maintaining current service levels and simultaneously having the ability to develop ridership, expand the core system, and implement new services.

Over the next 30 years, Santa Clara County will continue to lead the Bay Area in both population and job growth. According to the Association of Bay Area Governments' (ABAG) Projections 2007, the overall population in Santa Clara County is expected to grow by over 600,000 (25%), adding over 210,000 new households between 2005 and 2035. Santa Clara County will also lead the Bay Area in job growth, adding nearly 500,000 jobs – or 27% of total job growth in the entire nine-county Bay Area region during this time.

This significant growth underscores the need for VTA to have the resources to maintain and expand service into the future, and to meet the

needs of a growing and increasingly diverse population. The TSP is intended to guide this long-term effort and help develop a system that is capable of steady improvements in operating efficiencies and growing ridership.

TSP Origin and Development

During 2003 and 2004, the VTA Board of Directors and staff worked in partnership with a Business Review Team and an Ad Hoc Financial Stability Committee to develop a long-term Financial Stability Strategy. The VTA Board of Directors adopted this strategy in early 2004 to provide direction for future decisions. This strategy was included as part of the long-range goals and objectives for the countywide transportation plan, Valley Transportation Plan (VTP) 2030, adopted by the VTA Board of Directors in early 2005. In support of this strategic direction, VTP 2030 included a recommendation to develop a policy framework for guiding transit system development, which resulted in the TSP.

The development of the TSP was supported by extensive studies and analysis, including:

- An analysis of transit technologies, modes, and optimal operating environments for each mode.
- A peer review of transit systems throughout North America, with an emphasis on systems with similar demographic and land use characteristics.
- Case studies of select transit lines and station areas in Santa Clara County.
- An analysis of existing conditions in conjunction with the 2006/07 VTA Comprehensive Operations Analysis (COA).

TSP Implementation Framework

The TSP implementation framework is comprised of three primary sections: 1) Goals and Core Principles; 2) Service Design Guidelines (SDG); and 3) Service and Project Evaluation and Recommendation Process. Sections 2 and 3 are intended to provide the structure for implementing the Goals and Core Principles.

SECTION 1: TSP GOALS AND CORE PRINCIPLES

The TSP Goals and Core Principles were developed in tandem with the 2006/07 Comprehensive Operations Analysis (COA), and serve as the Goals and Core Principles for both efforts. At its October 2006 meeting the VTA Board of Directors adopted these TSP/COA Goals and Core Principles.

Goals

1. Improve System Ridership, Productivity, and Efficiency
2. Improve Farebox Recovery
3. Improve Transit's Role as a Viable Alternative mode
4. Use Transit Investments and Resources More Effectively

The Core Principles are designed to support and facilitate the implementation of the TSP Goals.

Core Principles

1. Develop a Financially Sustainable Transit System
2. Match Capital Investment With Quantifiable Service Needs, and Local Participation and Commitments

3 Improve Customer Focus
4 Target Markets Where Transit Can Compete
5 Improve System Integration and Efficiency

Details of each Core Principle are presented below:

1 *Develop a Financially Sustainable Transit System*

- Operate service when and where there is sufficient mass of demand to meet ridership and revenue expectations.
- Design services that maximize customer benefits and increase ridership within existing resources.
- Introduce new services only if fiscally viable.
- Balance service productivity and service coverage.
- Establish performance goals and standards for productivity and effectiveness, and evaluate and adjust service and standards regularly for optimum effectiveness.

2 *Match Capital Investment With Quantifiable Service Needs, and Local Participation and Commitments*

- Implement capital projects based on ridership and transit supportive growth and development commitments from local governments.
- Focus capital expansion resources on the most cost-effective and efficient alternative.
- Phase capital projects and services to match the appropriate transit mode and technology with market demand and operating environment.
- Develop capital projects in conjunction with local governments that integrate with and enhance neighborhoods, creating a positive identity for transit.
- Influence and advance transit and pedestrian supportive development patterns along major transit corridors.
- Work with local jurisdictions to ensure that transit station areas and major corridors have supporting land uses, policies, and urban design in accordance with the Community Design and Transportation (CDT) Manual of Best Practices for Integrating Transportation and Land Use.

3 *Improve Customer Focus*

- Define a core transit network that serves a variety of trip purposes, and a market-based network of services that serve specific customer needs.
- Develop appropriate service strategies to meet the needs of target markets.
- Design services that meet the travel needs and priorities of customers.
- Develop services that are easy for customers to understand and use.
- Develop creative marketing programs targeting both existing and choice riders.
- Develop informational programs utilizing real time information, high-technology, and all forms of media.
- Involve communities in transit service and capital project development.

4 *Target Markets Where Transit Can Compete*

- Increase transit mode share by focusing resources to target markets where transit can compete effectively.
- Provide faster and more frequent service in key travel corridors.

- Create a balanced transit system that offers direct service, minimal travel delays, and easy access to surrounding land uses.
- Develop a network of routes that more closely follow origin-destination travel patterns, and provide more direct service to major destinations.
- Optimize feeder and last mile services.
- Provide predictable, reliable service.
- Create markets for transit around station areas by working with local jurisdictions to implement the concepts, practices and recommendations presented in the CDT Manual.

5 *Improve System Integration and Efficiency*

- Optimize the transit network for both local VTA service area needs and for connecting with regional rail and bus services.
- Maximize utilization of existing transit facilities and infrastructure (e.g., light rail system and transit centers) as well as future infrastructure in planning and development stages.
- Integrate service-operating plans in capital project and budget development.
- Provide reliable, frequent connections at key hubs.
- Eliminate service duplication in areas where demand does not justify the resources.

SECTION 2: SERVICE DESIGN GUIDELINES

The Service Design Guidelines (SDG) were developed for use in conjunction with the TSP evaluation and recommendation process to evaluate, design, implement and monitor transit services in the region. They provide a link between local commitments to transit service, construction and operational feasibility, and overall operational efficiency.

In accordance with the TSP, all transit projects are subject to an evaluation of the effects the proposed capital project or service improvement will have on transit ridership and operating efficiency. The results will determine if the project meets the ridership criteria established for the proposed mode, if the proposed mode is the most feasible and appropriate for the market and operational environment, and if the proposed mode is the most cost-effective option. The evaluation may also result in a recommendation to develop a Project Phasing Plan along with an Improvement Plan. The Phasing Plan would implement a particular service level or mode with the intent increasing service or changing the mode as conditions develop to support the service.

The Service Design Guidelines are comprised of two parts: 1) Service Performance Standards, and 2) Design Guidelines.

Service Performance Standards (Table 1)

Service Performance Standards are the primary criteria for the TSP evaluation and recommendation process and are applied to service changes, new lines and capital projects. These standards apply to both existing and new services. In the case of existing services, the standards are used to identify underperforming lines and make recommendations for improvement. In the case of new service, the standards are used in the development of recommendations for service refinements, modal alterations, or implementation.

The following is a summary of the service performance standards.

- ***Primary Standard.*** The Primary standard is Average Boarding Per Revenue Hour. As shown in Table 1, this standard applies to Community Bus, Local Bus, BRT and Light Rail (LRT). For evaluation purposes the standard is calculated for all time-periods, and for weekdays, Saturdays and Sundays. This standard is recalculated quarterly as part of the Service Management Plan (SMP), and may move up or down.

- ***Secondary Standards.*** The Secondary standards are:
  - o Average Daily Boardings Per Station for BRT, LRT, Commuter Rail and Heavy Rail, and
  - o The Average Boardings Per Mile applied to BRT and LRT modes.

- ***Express Bus Standard*** (not presented in Table 1). The Express bus standard is 60% of the seated vehicle loading capacity. This singular standard is needed due to the special characteristics of Express Bus lines where seat turnover is low.

- ***Minimum Standard.*** The categorical Minimum standard for any bus transit service is 15 Boardings Per Revenue Hour. Bus lines that consistently operate below this threshold, and that are unresponsive to marketing, restructuring, and operational refinements shall be discontinued.

  There is no minimum standard for existing rail lines. Since the capital investments in these lines have already been made, it is the policy of VTA to increase ridership on these lines by working with cities to improve surrounding land uses and develop supporting polices and to apply standards whereby consistently underperforming stations may be skipped or closed.

Service Review

It shall be the policy of VTA to review all services for possible refinements at least annually.

Table 1. Weekday Service Performance Standards (based on FY 2007 Fourth Quarter data)*

Transit Mode	Average Boardings Per Revenue Hour	Boardings Per Station	Average Boardings Per Mile
Community Bus	20		
Local Bus	33		
Bus Rapid Transit 1	45	150	200
Bus Rapid Transit 2	55	350	350-475
Light Rail (Existing Service)		559	
Light Rail (New Service)	87	1,268	1,489
Commuter Rail		2,200	
Heavy Rail		17,300	

*Light Rail performance standards updated March 2010; bus performance standards superseded by VTA Transit Service Guidelines (2018)

Service Design Guidelines

Many factors are involved in the effective design and delivery of transit service such as the composition of surrounding land uses, street systems, system connectivity, operating environment (shared street, transit preferential streets, partial or full separation), and supporting infrastructure. How these factors interact is critical to the utility and success of transit services, and can mean the difference between a line being productive or unproductive. For example, the ability to operate in a transit preferential street environment can mean the difference between VTA's ability to operate Local Bus or BRT services.

The SDG provide a roadmap of the actions and conditions necessary to effectively operate various modes of transit service from Community Bus through Heavy Rail (BART) systems. Accordingly, the Service Design Guidelines shall be used in the determination and evaluation of modes and level of service. The mode-specific SDG are provided in Appendix A. A summary of each mode-specific SDG is provided below.

Community Bus

Community Bus service may be deployed to better meet the needs of individual communities and neighborhoods. Community Buses improve general circulation within a fixed local area and provide better access to higher-capacity transit systems or transit centers. The Community Bus Minimum standard shall apply with provisions made for partnership and local and private funding. The Community Bus SDG shall be applied in combination with the guidelines, practices and actions outlined in the CDT Manual.

Local Bus

The process for developing service improvements for Local Bus lines will follow the Board-adopted Service Management Plan for feeder, secondary grid and primary grid lines. The Local Bus SDG shall be applied in combination with the guidelines, practices and actions outlined in the CDT Manual.

Bus Rapid Transit (BRT)

BRT projects and services will be evaluated on a corridor basis. Initially, the BRT standard will be a product of the BRT (522) and Local Bus (22) lines currently operating along the El Camino Corridor. Standards are provided for BRT 1 and BRT 2. For BRT definitions see the BRT SGD in Appendix A. The BRT SDG shall be applied in combination with the guidelines, practices and actions outlined in the CDT Manual.

Light Rail Transit

LRT Guidelines focus on maintaining and improving the utility and operations of the existing systems. This approach emphasizes design and density recommendations outlined in the CDT Manual of Best Practices for Integrating Transportation and Land Use. The LRT standards are based on Boardings Per Station and average Boarding Per Mile and may be increased over time. The LRT SDG shall be applied in combination with the guidelines, practices and actions outlined in the CDT Manual.

Light Rail Station (Caltrain and ACE)

The Light Rail Station Guidelines focus on Boardings Per Station and the design and density recommendations outlined in the CDT Manual. Improved ridership is sought through station-oriented design and increased development density near station areas and the application of the guidelines, practices and actions outlined in the CDT Manual.

Commuter Rail Station (Caltrain and ACE)

The Commuter Rail Guidelines focus on Boardings Per Station and the design and density recommendations outlined in the CDT Manual. Improved ridership is sought through station-oriented design, increased development density near station areas and the application of the guidelines, practices and actions outlined in the CDT Manual.

Heavy Rail Station (BART)

The Heavy Rail Guidelines focus on Boardings Per Station and the design and density recommendations outlined in the CDT Manual. Improved ridership is sought through station-oriented design and increased development density near station areas, and the application of the guidelines, practices and actions outlined in the CDT Manual.

SECTION 3: EVALUATION AND RECOMMENDATION PROCESS

All potential new transit improvements (e.g., service improvements, new lines, or stations) will undergo a comprehensive evaluation prior to final planning, design, development, and implementation following the TSP process described below.

The TSP process involves four steps to move a project or service from concept to implementation. The flowchart provided as Figure 1 graphically displays how projects move through the process from Step 1 through Step 4.

STEP 1 – Project Proposal or Study Area Definition

Proposed projects, services, and study areas may come from several sources including:

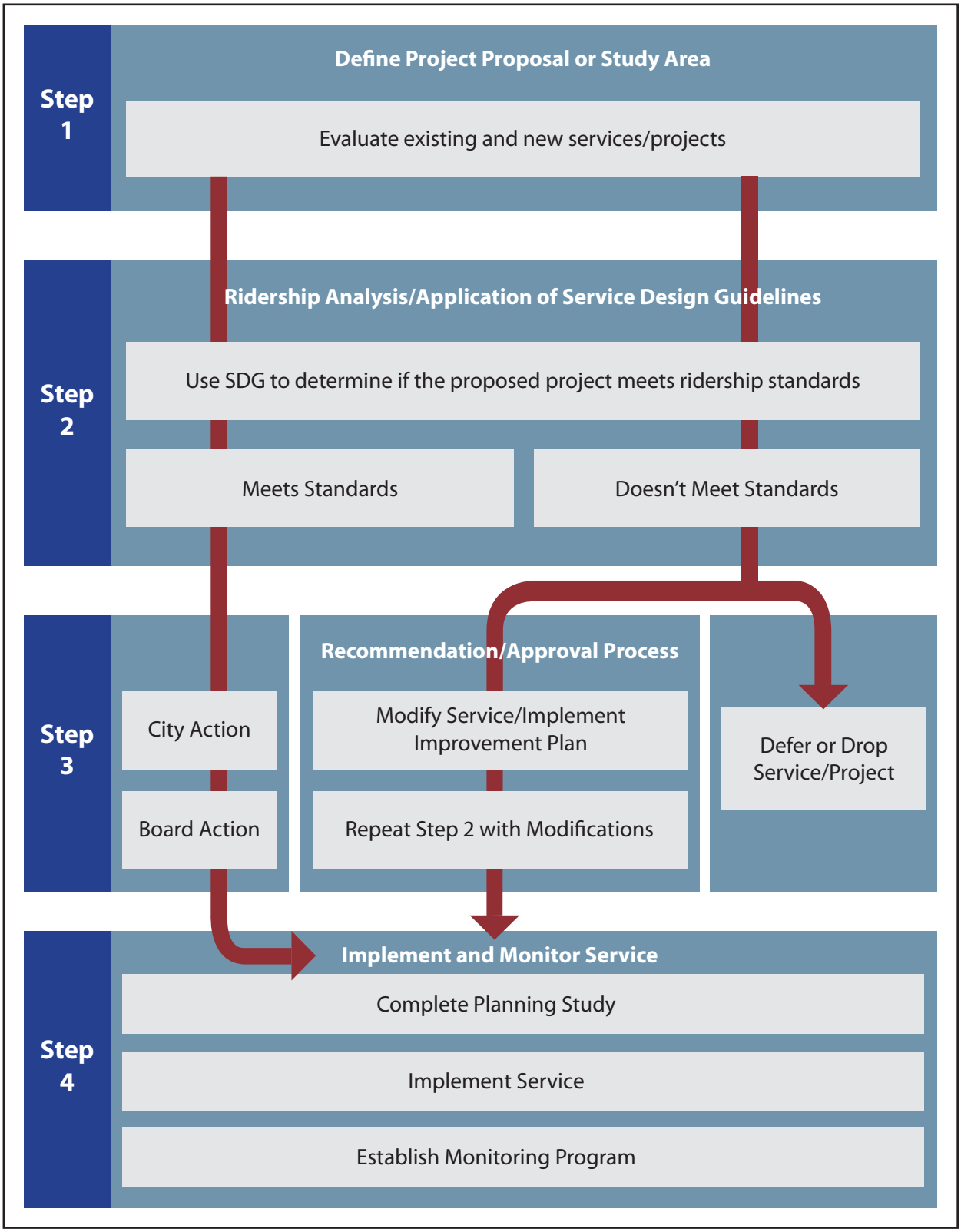
- Comprehensive Operations Analysis (COA)
- Ballot Measure
- Annual Service Evaluation and Planning Process
- New Corridor or Service Planning Studies
- VTA Board Direction

For projects with completed planning or environmental studies, staff will determine if project definitions are suitable for TSP evaluation purposes or if additional data is needed. This includes an evaluation of the land use, access, demographic, socioeconomic and transit operations assumptions provided in the studies. If updated or additional information is required, staff will work with the appropriate agencies to secure the needed information.

STEP 2 – Ridership Analysis / Application of Service Design Guidelines

The Ridership and Operations Analysis will be conducted using a set of mode-specific Service Design Guidelines (SDG) discussed in Section 2. The TSP Policy Goals and Principles discussed in Section 1 will also inform this effort. The SDG provide performance standards for evaluating projects and services, and determining if the proposed mode type (e.g., Community

Figure 1: Process for Moving Project Proposal or Study Area to Implementation



Note: → indicates decision path

Bus, Local Bus, Express Bus, Bus Rapid Transit (BRT), Light Rail Transit), service level, or rail station is warranted based on ridership demand, the expected transit operating environment, and the resources available.

The Service Design Guidelines provide VTA and local jurisdictions with implementation guidelines outlining the elements necessary for VTA to achieve its farebox recovery goal, and to ensure efficient and effective line and systems operation. Lastly, the SDG provide ridership productivity criteria for adding or closing Light Rail, Commuter Rail, or Heavy Rail (BART) stations.

The results of Step 2 form the basis for the recommendations developed in Step 3.

STEP 3 – Recommendations

The Ridership and Operations Analysis may result in one of four staff recommendations for consideration by the VTA Board of Directors as summarized below:

- Move the project or service into the implementation phase.
- Modify the initial project definition - e.g., revise the transit mode to one that meets the SDG and move the project or service into implementation.
- Develop an Improvement Plan to increase ridership levels or improve the operating environment of the preferred mode. This may include a phased implementation plan to develop transit ridership over time and match modes and service levels with the operating and land use environment. The Improvement Plan is discussed in more detail below.
- Defer or drop the project or service from further consideration.

TSP Improvement Plans

To obtain the maximum public benefit and return on investment, projects requiring significant capital investments warrant supporting levels of commitment from the relevant local jurisdictions. The TSP Propcess allows for the development of Improvement Plans for projects or services that the VTA Board of Directors and local jurisdictions want to implement but that do not meet the SDG. The Improvement Plan is envisioned as a partnership between local jurisdictions and VTA. The mode-specific Service Design Guidelines (SDG) provided in Appendix A are integral to the development of the Improvement Plan. The SDG will be used along with the CDT Manual, to identify and define specific actions necessary to design, support and effectively operate a particular transit mode.

The Improvement Plan process is a joint city/VTA effort designed to increase transit ridership. In most cases VTA will provide resources for developing the plans. It calls for agencies to show clear commitment toward reaching the conditions necessary to implement a particular service level or mode such as Community Bus, Local Bus, Bus Rapid Transit, Light Rail Transit, or a Light Rail, Commuter Rail or BART station. These commitments must clearly demonstrate jurisdictional willingness to seek and allow supporting land uses, transit-preferential street design and operating environments, and/or other regulatory support such as parking policies that will allow the project to achieve the ridership standard within a specific timeframe. The type of local commitment and timeframes will be identified through planning studies and will vary from project to project. Furthermore, the TSP Process will require formal adoption of the Improvement Plan and implementation actions prior to the

VTA Board's decision to provide capital and/or operating funds.

The Improvement Plan involves the following process:

1. In partnership with local jurisdictions, VTA staff will develop a Memorandum of Understanding (MOU) outlining coordinated timelines for the Improvement Plan and any necessary Environmental Clearance or planning and design work.

2. A city-led planning process using the Service Design Guidelines and the CDT Manual to develop ridership levels and the conditions necessary to support the particular service level or mode.

3. Local jurisdictions formally adopt the elements of the Improvement Plan as a Specific Plan, or in their General Plans, Zoning Maps, or other formal implementing document.

4. VTA staff recommends whether to move the project/service forward to implementation (Step 4 below).

5. VTA Board action.

Key Decision Points in Approval Process

The TSP Process includes specific decision points where local jurisdictions take formal actions prior to or along with the VTA Board of Directors. These decision points are:

- In response to a staff recommendation.
- Upon completion of an Improvement Plan.
- Prior to a recommendation to the VTA Board for implementation.

STEP 4 – Implementation and Monitoring of Projects and Services

With City and VTA Board approvals, the following steps will be taken to implement service:

A. Complete planning studies.
B. Design and Engineer project (capital projects only; coordinated with Step A and C).
C. Develop Service and Systems Operating Plan.
D. Develop Capital and Operating funding plan (coordinated with Steps A, B and C).

After implementation, the TSP provides for a Monitoring Program as part of the Annual Service Planning Process, and will include the following steps:

- Compare service productivity against SDG standards.
- Assess and implement opportunities for service refinement and resource reallocation.
- Recommend service modification, including possible service reductions, expansions or removal. This may include skip-stop or skip-station service plans (coordinated with Steps B and C).
- Implement service changes.

New Service Provision

All new service will be provided provisionally, subject to at minimum an annual review. All new services implemented within the prior 24 months must be reviewed and re-adopted by the Board. New services not re-adopted after 24 months of operation shall be restructured or cut. Lines not meeting expectations will be targeted for refinements, reductions, improvement plans, or deletion. Lines that do not have an approved Improvement Plan and do not meet the new service standard within the timeframe presented in Table 2 below will be discontinued. Resources from discontinued lines will be reallocated to service that meets or exceeds the standard.

Policy Revisions

The TSP is intended to be responsive to changing conditions that may influence its effectiveness in achieving its goals and core principles. As conditions change, elements of the TSP may require review and revisions. This review may result in no changes; or in changes to the service standards, guidelines, or other TSP elements.

Table 2. Timeframes for Expected Ridership

Time from Implementation	Expected Ridership (percent of classifiaction Stadard)
6 months	70
12 months	80
18 months	90
24 months	100