



CHAPTER 3 SERVICE AND SYSTEM EVALUATION

The purpose of this section is to present an evaluation of how SamTrans' services are performing relative to current standards, discuss the need for the refinement of those standards, and establish the foundation for short- and near-term service changes outlined in Chapter 4. Data is presented for FY2004 to FY2006. FY2007 data is not included because data is not yet available. More detailed performance information can be found in the Route Level Analysis in Appendix 1.

3.1 PERFORMANCE EVALUATION BY MODE

Systemwide performance has been evaluated against selected service performance measures set forth in the previous chapter. Fixed-route Bus Operations are differentiated from the Paratransit and Shuttle services offered by SamTrans. Where data is available, a retrospective portrayal of performance (since 2004) is presented in order to exhibit trends. Changes in patronage, operating costs and operating revenue also are discussed in this section.

3.1.1 FIXED-ROUTE OPERATIONS

Table 5 shows performance trends for SamTrans' fixed-route bus service over the past three years:

- **Stabilization of Ridership** – While the total number of passengers was on a downward trend during the recent economic downturn, similar to ridership losses experienced by other transit operators in the Bay Area, ridership has started to stabilize as the economy has

improved. The most recent ridership reports show a year-over-year increase of 1 percent from FY2006 to FY2007.

- **Rising Operating Costs** – Operating costs increased in FY2005 and FY2006 primarily due to increases in labor and benefits and fuel costs.
- **Increase in Fare Revenues** – The primary reason for the overall increase in fare revenue is due to a fare increase, which became effective September 1, 2005. It is noteworthy that this fare increase had a relatively nominal impact on ridership.



The increase in operating costs has led to an increase in both operating cost per hour and subsidy per passenger, even with the recent increase in the farebox recovery ratio. Changes in patronage have historically been linked to the economic health of the area. Recent stabilization in passenger numbers and early signs of ridership increase have provided the basis for projecting modest growth through the life of the plan.

Table 5: Performance Trends: Fixed-route Bus Operations

Performance Indicators	FY2004	FY2005	FY2006	2-year Net Change
Operating Cost <i>Annual Change</i>	\$76,605,500	\$79,634,367 4.0%	\$86,248,551 8.3%	13%
Fare Revenue <i>Annual Change</i>	\$14,159,457	\$13,424,490 -5.2%	\$15,750,345 17.3%	11%
Revenue Hours <i>Annual Change</i>	664,535	669,078 0.7%	669,978 0.1%	1%
Revenue Miles <i>Annual Change</i>	7,381,286	7,303,006 -1.1%	7,293,648 -0.1%	-1%
Passengers <i>Annual Change</i>	14,759,369	14,189,548 -3.9%	14,181,781 -0.1%	-4%
Operating Cost per Hour <i>Annual Change</i>	\$115.28	\$119.02 3.2%	\$128.73 8.2%	12%
Subsidy per Passenger <i>Annual Change</i>	\$4.23	\$4.67 10.3%	\$4.97 6.4%	17%
Passenger per Hour <i>Annual Change</i>	22.21	21.21 -4.5%	21.17 -0.2%	-5%
Passenger per Mile <i>Annual Change</i>	2	1.94 -2.9%	1.94 0.0%	-3%
Farebox Recovery <i>Annual Change</i>	18.5%	16.9% -8.6%	18.3% 8.3%	-1%

Table 6 includes additional performance indicators related to customer complaints, accidents, on-time performance and road calls. The trends show that:

- SamTrans provides excellent customer service and has consistently exceeded its performance measure for complaints per 1,000 riders.
- Due to the extremely low number of accidents and road calls that occur in a year for both SamTrans and Contracted Urban Bus (CUB) operated service, year-to-year variations appear as relatively large percentage changes.
- SamTrans on-time performance exceeds the 85 percent industry standard.
- Because SamTrans places a high priority on ensuring safe and reliable service, miles between road calls continues to improve.
- Differences between District and CUB data can be attributed to the type and amount of service operated and reporting standards. CUB service has a greater share of express freeway service and District operated service has a greater proportion of community service on local streets. Freeway miles have less wear-and-tear on vehicles and have fewer conflicts than local miles.



Table 6: Additional Performance Indicators: Fixed-route Bus Operations

Additional Performance Indicators	FY2004	FY2005	FY2006	2-year Net Change
Maximum complaints/1,000 riders <i>Annual Change</i>	0.15	0.18 20.0%	0.14 -20.2%	0%
Minimum Miles between Prev. Accidents - District <i>Annual Change</i>	83,625	91,097 8.9%	107,057 17.5%	28%
Minimum Miles between Prev. Accidents - CUB <i>Annual Change</i>	244,304	418,277* 71.2%	149,331 -64.3%	-39%
On-time Performance <i>Annual Change</i>	89%	91% 2.2%	89% -2.2%	0%
Minimum Miles btwn. Road Calls - District <i>Annual Change</i>	17,274	18,955 9.7%	17,348 -8.5%	1%
Minimum Miles btwn. Road Calls - CUB <i>Annual Change</i>	17,978	50,103 178.7%	71,682 43.1%	222%

Note: Differences between District and CUB data can be attributed to the different type and amount of service operated and reporting standards.

3.1.2 PARATRANSIT OPERATIONS

As described in Chapter 1, Redi-Wheels and Redi-Coast are SamTrans' ADA compliant, demand-responsive paratransit services for persons with disabilities who cannot independently use regular SamTrans bus service. Redi-Wheels and RediCoast operate during the same hours and serve the same areas as SamTrans fixed-route bus service for their respective parts of the county.

Table 7 indicates the following trends in SamTrans' Paratransit operations performance over the past few years:

- Increase in Operating Costs – Although operating costs increase with ridership growth, as paratransit services are expanded based upon demand, the most recent increases are primarily due to an escalation in costs for contracted service.
- Increase in Fare Revenue – The net growth in fare revenue can primarily be attributed to the fare increase that became effective on September 1, 2005 in addition to ongoing growth in ridership.

- Moderate Increase in Ridership – The number of passengers has increased modestly at a relatively stable rate since the institution of the latest eligibility certification process, which began in FY2004.
- Increasing Productivity – The number of passengers per hour is on an upward trend and while operating costs also have increased substantially, the increase in subsidy per passenger has been relatively moderate. This can be attributed in part to an increase in fares to cover the increase in operating costs and a corresponding decrease in revenue hours due to an increase in productivity with routing and scheduling improvements. It also is noteworthy to point out that the rate of increase in the subsidy per passenger was below the rate in the Bay Area consumer price index in FY2006.
- Level of complaints – Redi-Wheels and RediCoast are responsive to the needs of their customers and have a low level of complaints; they also have maintained a high on-time performance level.

Table 7: Performance Trends: Paratransit Operations

Performance Indicators	FY2004	FY2005	FY2006	2-year Net Change
Operating Cost <i>Annual Change</i>	\$10,536,168	\$11,157,492 5.9%	\$11,728,022 5.1%	11%
Fare Revenue <i>Annual Change</i>	\$407,447	\$ 463,850 13.8%	\$570,076 22.9%	40%
Revenue Hours <i>Annual Change</i>	215,654	208,344 -3.4%	198,227 -4.9%	-8%
Revenue Miles <i>Annual Change</i>	2,701,550	2,629,503 -2.7%	2,716,877 3.3%	1%
Passengers <i>Annual Change</i>	309,911	320,388 3.4%	326,302 1.8%	5%
Operating Cost per Hour <i>Annual Change</i>	\$48.86	\$53.55 9.6%	\$59.16 10.5%	21%
Subsidy per Passenger <i>Annual Change</i>	\$32.68	\$33.38 2.1%	\$34.20 2.5%	5%
Passenger per Hour <i>Annual Change</i>	1.44	1.54 7.0%	1.65 7.0%	15%
Passenger per Mile <i>Annual Change</i>	0.11	0.12 9.1%	0.12 0%	9%
Farebox Recovery <i>Annual Change</i>	3.9%	4.2% 7.7%	4.9% 16.7%	26%
<i>Complaints/1,000 riders Annual Change</i>	2.1	1.6 -23.8%	.8 -50%	-73.8%
<i>On-time Performance Annual Change</i>	91%	89% -2.2%	90% 1.1%	-1%

3.1.3 SHUTTLE OPERATIONS

Table 8 shows performance trends for SamTrans' BART shuttle service. The data represent the employer shuttles contracted by the District in the county. All are partially funded by employers and the Bay Area Air Quality Management District. All of the shuttles provide a connection between BART and major employment centers and some also extend to Caltrain. The following are trends in SamTrans' Shuttle operations performance over the past few years:

- Table Operating Costs - The budget for the SamTrans BART shuttles has remained relatively fixed since contracted costs have remained stable. Contracted service is cheaper than SamTrans operated service because of benefits costs.



- Increase in Ridership – Ridership growth spiked in FY2006 primarily due to the opening of new bio-tech facilities and an increase in new employees. Productivity continues to increase with routing and scheduling adjustments.
- Decrease in Subsidy per Passenger – The SamTrans subsidy per passenger has decreased due to significant growth in ridership, stable operating costs and an increase in the availability of external funding resources to help underwrite the program including employer contributions and grant subsidies.

funds, fluctuates and is linked with motor vehicle registration fees. In FY2006, SamTrans was able to utilize surplus subsidy resulting in a cost savings to the District. The trend of increasing grant subsidy is anticipated to be moderate and the percentage of SamTrans contribution looking forward should remain relatively stable. Subsidy per passenger for the shuttle program includes all revenue except employer subsidy. Grant funding and employer contribution have historically accounted for the majority of operating revenues. As the shuttle service is free to passengers, fare revenue data is not shown.

The SamTrans BART shuttle program has been highly successful and productivity has continued to increase with routing and scheduling adjustments. It is important to note that grant subsidy, from Transportation Fund for Clean Air (TFCA)

Table 8: Performance Trends: Shuttle Operations

Performance Indicators	FY2004	FY2005	FY2006	2-year Net Change
Operating Cost <i>Annual Change</i>	\$1,769,014	\$1,758,806 -0.6%	\$1,760,358 0.1%	0%
Grant Subsidy <i>Annual Change</i>	\$471,544	\$495,000 5.0%	\$605,000 22.2%	28%
Employer Contribution <i>Annual Change</i>	\$909,720	\$929,516 2.2%	\$935,509 0.6%	3%
Revenue Hours <i>Annual Change</i>	20,992	21,074 0.4%	21,972 4.3%	5%
Revenue Miles <i>Annual Change</i>	361,994	344,826 -4.7%	341,222 -1.0%	-6%
Passengers <i>Annual Change</i>	356,072	344,387 -3.3%	462,013 34.2%	30%
Operating Cost per Hour <i>Annual Change</i>	\$84.27	\$83.46 -1.0%	\$80.12 -4.0%	-5%
Subsidy per Passenger* <i>Annual Change</i>	\$2.41	\$2.41 0%	\$1.79 -25.7%	-26%
Passenger per Hour <i>Annual Change</i>	16.96	16.34 -3.7%	21.03 28.7%	24%
Passenger per Mile <i>Annual Change</i>	0.98	1.00 2.0%	1.35 35.0%	38%

*Does not include employer subsidy.

East Palo Alto Community-Based Transportation Plan

Beginning in 2002, SamTrans has participated in the initial pilot MTC Community-based Transportation Planning Program in East Palo Alto. The result of this effort is the East Palo Alto Community-Based Transportation Plan, prepared by SamTrans for the City/County Association of Governments (C/CAG) and approved by the East Palo Alto City Council on October 4, 2005. An outreach process was designed to solicit in-depth input from community members and the agencies that serve them. The Stakeholder Committee then evaluated the range of suggested improvements, prioritized the results, and recommended short-, medium-, and long-term strategies.

The City of East Palo Alto also received a federal Job Access Reverse Commute (JARC) grant for \$700,000. These funds provided an opportunity to jump-start the implementation of this Community Based Transportation Plan. Recent implementation measures that have been initiated include the following:

1. An expansion of East Palo Alto's Community Shuttle Program consisting of a longer route, late-night service and an increase in the number of morning shuttles from one to two, which will operate on a staggered schedule. The East Palo Alto Shuttle Program Publicity strategy is expected to increase ridership substantially. The funding sources for these projects are Low-income Flexible Transportation (LIFT) funds, Community Development Block Grants, and the City of East Palo Alto. The advertising outreach will take place in December 2007.
2. Execution of a contract between San Mateo County El Concilio, a private non-profit community based organization and SamTrans on May 1, 2007 to manage the Bus Pass Subsidy Program. The City of East Palo Alto facilitated the transaction. El Concilio will sell adult subsidized bus passes on behalf of the City of East Palo Alto and will be paid a 3 percent commission at the end of the selling cycle each month.



3.5.2 ROUTE 17

The District is the recipient of Lifeline Transportation Program (LTP) funding by the MTC. The goal of the LTP is to improve mobility for lower-income populations. At the time of the funding award, transportation issues were at a critical level due to the closure of Devil's Slide on Highway 1. SamTrans subsequently took the lead creating an ad-hoc Coastside Transportation Committee to best address community concerns regarding unmet transportation needs and to provide service to improve mobility for lower-income residents. This committee included representatives from SamTrans, San Mateo County, the City of Half Moon Bay, the Cabrillo Unified School District and Coastside-Hope. SamTrans contracted with the Alliance to conduct a Needs Assessment. The target population was identified as low-income, elderly and disabled persons. The Needs Assessment included interviews with community stakeholders and surveys to the general public to identify transportation gaps. As a result, the committee agreed that the most viable way to improve mobility that targeted lower-income populations while also addressing other transportation needs was to expand Route 17 service, including expanded service hours, weekend service, and a route extension to Montara.

Expanded Route 17 service went into effect on July 2007 and initial ridership reports for the first quarter of FY2007 showed a surge in ridership of more than 50 percent compared to the first quarter of FY2006. Due to this increased ridership, SamTrans is exploring funding opportunities to replace ve-

hicle fleet assigned to this route as soon as possible with larger vehicles to accommodate new demand.

3.5.3 SENIOR MOBILITY ACTION PLAN AND INITIATIVE

The 2006 San Mateo County Senior Mobility Action Plan is the work of a broad coalition of concerned entities in San Mateo County, led by SamTrans. It was funded by a Caltrans Statewide Planning grant and its purpose was to develop mobility solutions for seniors transitioning from driving to transit usage and other alternative transportation modes. The plan is a joint effort to keep older people safe and connected to their communities as issues related to aging make mobility increasingly difficult.

The objectives of the plan are to:

1. Raise awareness of the issue in the county.
2. Increase understanding of the range of effective methods that are available to help maintain senior mobility.
3. Identify realistic programs and projects that can be undertaken by all types of organizations and jurisdictions.

With the support of SamTrans, the Senior Mobility Action Plan Steering Committee identified seven mobility strategies:

1. **Community Transit Services:** Local shuttles using small vehicles to serve short trips within communities.
2. **Community-based Transportation Services:** A community transportation network organization with public and private funding that would provide services to seniors who cannot drive or use transit.
3. **Encouraging Use of Transit:** Efforts to communicate to seniors that transit is safe, modern, and provides independence.
4. **Safe driving:** Driver training and helping people adapt to changes brought on by aging, including retiring gracefully from driving when necessary and adapting cars for older drivers.

5. **Taxicabs:** A pilot project demonstrating accessible cabs, service improvement, and a possible fare subsidy; in the long run apply lessons from the pilot countywide.
6. **Information and Referral:** Information about all modes of travel, available by telephone, the Internet, widely disseminated literature, and through agency staff that work with older people.
7. **Walking:** Improvements to sidewalks, pedestrian crossings, and driver awareness, focusing on neighborhoods with high concentration of seniors and walkable destinations.



SamTrans continues to provide support and leadership for the Senior Mobility Plan process. Staff will work with the Steering Committee to determine how best to organize for continuing implementation and planning. A well-received Senior Mobility Guide will be reprinted and added to the county library system Website. A San Mateo County Guide to Community Transit will be developed in partnership with the City/County Association of Governments and the Peninsula Congestion Relief Alliance. City of Belmont will model a Walkability Survey Guide to help cities assess pedestrian needs and secure capital grant funding. The Senior Mobility Action Plan showed the need for an organization with a county-wide mission and presence that addresses senior mobility.

3.6 TRANSIT CONNECTIVITY IMPLEMENTATION PLAN

MTC adopted a Transit Connectivity Plan in April 2006, which details a comprehensive strategy for easing passengers' movement from one transit system to another. The plan highlights connectivity improvements at 24 regional transit hubs around the Bay Area. Currently, SamTrans is supporting MTC's efforts to implement wayfinding signage and transit information at regionally significant transit hubs.

3.7 TITLE VI REPORT SUMMARY

SamTrans was granted an extension on the submittal of its next Title VI report through January 2008 by the FTA due to changes in report requirements. The last update of SamTrans Title VI was submitted to FTA on October 29, 2004. There were no comments by the FTA and the District received a recertification.

The following are the major findings in the 2004 Title VI review:

- General Reporting Requirements - At the time of submission there was one discrimination complaint filed with the Department of Fair Employment and Housing against the District and one active lawsuit. Regarding fixed-facility impacts analysis, SamTrans did not have any federally funded projects under construction during the term.
- Demographic and Service Profiles Maps, Overlays and Population Distribution Charts- All required demographic and service profile maps, overlays and charts were submitted to FTA and are on file.
- Service Standards and Policies - SamTrans has developed five required transit service indicators and also uses Average Passengers per Trip as an indicator when monitoring compliance with Title VI. By recertifying the District, FTA found SamTrans does not discriminate in the delivery of public transit services to minority and non-minority populations.

- Assessment of Compliance, Other Areas & Requirement for Transit Providers- These sections are addressed in document and no compliance issues remain.
- Level and Quality of Service Compliance - Required analysis was conducted and no disparities exist.

3.8 FTA TRIENNIAL REVIEW SUMMARY

The Federal Transit Administration (FTA) Triennial Review of SamTrans was conducted during FY2007. The Review concentrated primarily on procedures and practices employed by SamTrans during the three years previous to the Review. Based on the review, SamTrans was found to be deficient in three of the 23 Triennial Review areas, specifically: Satisfactory Continuing Control, Maintenance and Half Fare. All deficiencies have been addressed in a response letter to the FTA dated October 4, 2007 and to the satisfaction of the FTA.

The deficiencies and the responses and/or proposed corrective actions by SamTrans are shown in Table 9.



Table 9: 2007 Triennial Review Summary

Triennial Review Area	Deficiency	Corrective Action	Response Days	Date
Satisfactory Continuing Control	03- Inadequate equipment records	SamTrans is to provide the FTA Region IX Office with a current listing of federally funded assets. The asset listing should contain the grant number for each asset, accurately reflect current assets as well as accurate useful life if assets.	60 days	12/31/2007
	99- Inventory results could not be verified	SamTrans is to provide the regional office with a revised process that describes what data source SamTrans will utilize to conduct its inventory of assets.	60 days	12/31/2007
	08- Excessive fixed route bus spare ratio	SamTrans is to provide the regional office with a revised bus replacement program schedule depicting when SamTrans' spare ratio will meet the 20% requirement.	60 days	12/31/2007
	09- Lacking contingency plan/plan out of date	SamTrans is to provide the regional office with its bus contingency plan.	90 days	1/31/2008
Maintenance	01- No vehicle maintenance plan	SamTrans is to provide the FTA Region IX Office with its bus fleet maintenance plan.	90 days	1/31/2008
	06-Facility/equipment maintenance plan lacking or inadequate	SamTrans is to provide the FTA Region IX Office with a draft facility maintenance plan for its federally funded facilities and equipment.	240 days	6/30/2008
Half Fare	06- Information incomplete regarding Medicare cardholders	SamTrans is to provide the FTA Region IX Office with a schedule as to when it will update its Website and all printed material that describes its fare structure.	90 days	1/31/2008

