

# Opportunities for Improving Ridership



**A Report by the Federal Transit Administration**

**Ridership Team**

April 2006

**Table of Contents**

**Introduction**.....3

**Profile and Data Analysis**.....4

**Observations and Recommendations by Functional Area**.....17

    Service Coverage and Routes  
        Recommendations #1-34.....17

    Fares and Fare Media  
        Recommendations #35-41.....29

    Operations and Maintenance  
        Recommendations #42-46.....33

    Marketing, Communications, & Advertising  
        Recommendations #47-67.....35

    Partnerships  
        Recommendations #68-83.....42

**Appendix A: SamTrans Response**.....52

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# Introduction

As part of its FY 2005 and FY 2006 Strategic Business Plans, the Federal Transit Administration (FTA) set a goal of working with its partners in the transit industry to increase public transportation ridership by at least 1% nationwide over the previous year. In order to support this critical and challenging goal, the FTA Office of Budget and Policy elected to conduct pilot ridership site visits at two transit agencies per year. Transit agencies were selected on the basis of decreasing ridership for the previous two years, and based upon being among the nation's top 150 transit agencies. The site visits were intended to identify opportunities where improvements in transit ridership could be made and to provide technical assistance to the two transit agencies.

In FY 2005, the first site visit was conducted July 25-28, 2005 at CT Transit located in Hartford, Connecticut; the second was at Clark County Transit (C-TRAN) located in Vancouver, Washington from August 15 -18, 2005.

In FY 2006, the first site visit was conducted March 27-30, 2006 at the San Mateo County Transit District (SamTrans) in San Carlos, CA; the second will be at the Suburban Mobility Authority for Regional Transit (SMART) located in Suburban Detroit, Michigan from May 22-25, 2006.

The Ridership Team members met with SamTrans employees with expertise in each focus area, reviewed operational data, actively observed bus operations, and spoke with bus operators and passengers. Each team member reviewed one of five functional areas in which ridership initiatives could be undertaken: 1) service coverage and routes, 2) fare structures, 3) operations and service quality, 4) marketing, and 5) partnerships.

SamTrans has agreed to review recommendations contained in this report and select those they can implement. For those selected, SamTrans will develop detailed implementation plans and measurement protocols to track the recommendation's impact on ridership over time. Over a period of six months to one year, FTA will continue to monitor the impacts on ridership and advise SamTrans as needed.

The team developed eighty-three recommendations covering the five functional areas, and these are summarized below.

## ***Service Coverage and Routes***

The team made recommendations concerning scheduling practices, route structures and headways, transfers, day passes, transfer points, system information signs, and shuttle services.

### ***Fare Structure***

The team made recommendations concerning acquisition and implementation of automated fare collection equipment, the TransLink program, farebox vaulting policies, organizational placement of farebox inventory, control, and maintenance; fare elasticity; sales of discounted tokens, and day and weekly passes.

### ***Operations and Maintenance***

The team made recommendations concerning the fleet spare ratio, use of part-time operators, use of maintenance personnel, magnitude of extraboard, and worker compensation claims.

### ***Marketing***

The team made recommendations concerning market and consumer research, direct mail campaigns, internal messages, website modifications, pass and token promotions, day passes, marketing to seniors, and special services.

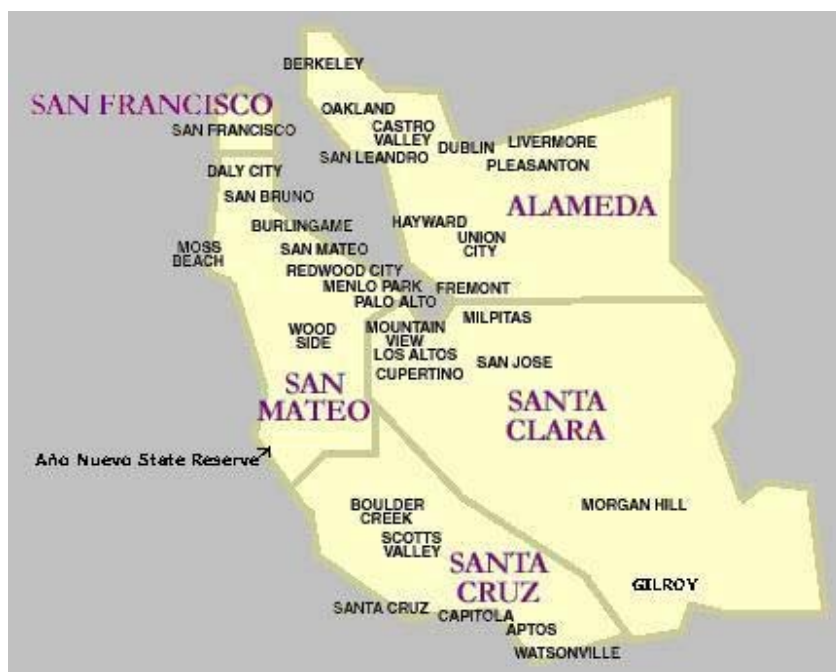
### ***Partnerships***

The team made recommendations concerning employer and community shuttles; the Commuter Check program; guaranteed ride home program; service to large employers including schools, hospitals, and universities; tourism; and special services.

## Profile and Data Analysis

### Profile

SamTrans is the primary provider of transit service in San Mateo County, California, with service extending into nearby San Francisco and Palo Alto. SamTrans operates a fleet of 363 buses (2004), as well as a demand-response service known as “Redi-Wheels” for individuals with qualifying disabilities who are unable to use ordinary SamTrans services. San Mateo County is also served by the Caltrain system, which provides commuter rail service on a single line along the San Francisco Bay corridor between San Francisco and San Jose, with limited service beyond to Gilroy, California at the southern end of Santa Clara County. Finally, SamTrans also administers the San Mateo County Transportation Authority, an entity that since 1988 has overseen the disposition of a county-wide half-cent sales tax on both transit and highway projects. The below map provides the regional context of San Mateo County, showing the full extent of the Caltrain service area down to Gilroy, as well as the concentration of San Mateo County’s population in the Peninsula Corridor:



San Mateo County is also served by the San Francisco Municipal Railway (MUNI) bus system and the Bay Area Rapid Transit (BART) heavy rail system at Daly City on the northern end of the county. The BART heavy rail system also has one line which extends to San Francisco International Airport and the Millbrae Intermodal Terminal (just south of the airport), servicing a total of six stations in the county, including Daly City. This extension of the BART system was funded in large part by SamTrans. Caltrain services a total of 11 stations in San Mateo County, all on a single line along the Peninsula Corridor. At the southern end of the service area, SamTrans connects with the Santa Clara Valley Transportation Authority (VTA) and several Palo Alto-area shuttle services.

Almost all of SamTrans' bus routes operate in the suburban population centers of the Peninsula Corridor between San Francisco and Palo Alto, with particular emphasis on serving the Caltrain and BART stations in the County. SamTrans has a few routes connecting Pacifica to Half Moon Bay. It does not have any regular routes serving the rural southwestern portion of the County or the undeveloped west-central portion of the County, which is dominated by Montara Mountain.

SamTrans began operation on July 1, 1976, with the consolidation of 11 different city bus systems in San Mateo County. Within one year, it began running its "mainline service" from Palo Alto to San Francisco, as well as its "Redi-Wheels" paratransit program.

During the 1980s SamTrans entered into a co-funding agreement with BART to extend the heavy rail system to the SFO and just beyond to the Millbrae Intermodal Terminal. In 1988, the introduction of a half-cent county-wide sales tax gave SamTrans a role in both transit and highway planning through the San Mateo County Transportation Authority, which it administers. Three years later, SamTrans participated in the regional consortium that purchased the Caltrain right of way, and became the administering partner of the Caltrain system. Thus, SamTrans established itself as the intermodal transportation coordinator for San Mateo County.

SamTrans has made several improvements to its system during the last several years. In 1999 SamTrans completely overhauled its bus route system, with service added to meet the greatest demand. SamTrans also introduced color-coding of bus routes for easy identification by riders. In 2001, SamTrans added a free, local shuttle system that now operates, in partnership with Caltrain, a total of 40 vehicles. SamTrans' first overnight buses were added in 2001 as well. In 2002, SamTrans began upgrading its bus fleet with the addition of 55 ultra-low-emission articulated buses (approximately 14% of the total fleet) and introduced global positioning satellite technology (GPS) and automated next-stop announcements in every bus. The most significant change to the system occurred in 2003 with the introduction of new "Baby Bullet" trains on the Caltrain system, and the opening of the BART-SFO extension which replaced some existing high ridership express bus routes. These rail enhancements resulted in anticipated decreases in ridership in 2003 and 2004. Ridership had been declining from 2001 to 2002 and also continued to decline in 2005.

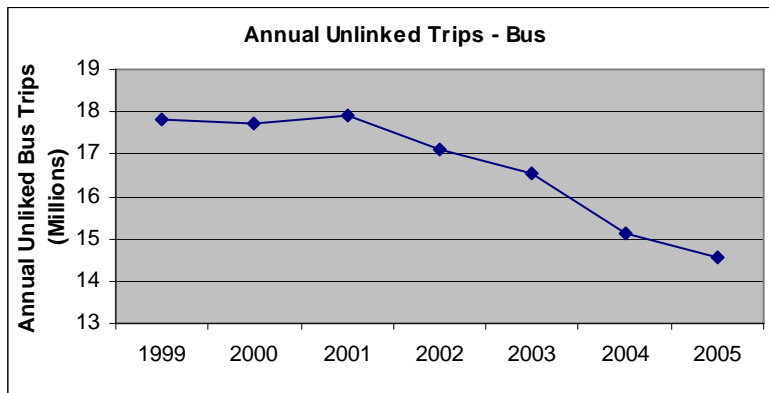
Currently, SamTrans operates 55 bus routes, including 9 express routes, with its fleet of 363 buses. Additionally, SamTrans operates 9 park-and-ride lots, as well as 12 free shuttle/circulator routes connecting BART and Caltrain stops with major employment and shopping centers. SamTrans also operates three special services, two of which are sports-related: an express service for San Francisco 49ers football games and an annual express service for spectators and participants in the "Bay-to-Breakers" run. The third is a seasonal weekends-and-holidays service combining transportation, admission, and a guided walk at the Año Nuevo State Reserve during elephant seal breeding season.

Although intermodal considerations played a role in this report, the following analysis and recommendations primarily concern ridership on SamTrans' bus and shuttle system. Ridership on SamTrans' "Redi-Wheels" paratransit was not part of this review.

**Data Analysis**

*Trends and Highlights in Internal Data*

The following graph shows the trend in unlinked passenger bus trips for SamTrans since 1999. During the period 1999 through 2005, ridership peaked in 2001 at about 18 million unlinked bus trips. Ridership may have dropped in 2002 due to the economic recession, which peaked in 2001-2002 and has continued to impact employment, but has continued to decline steadily to less than 15 million unlinked bus trips, or about 17 percent since 2001. Prior to 2001, ridership had been flat despite the reorganization of bus routes in 1999.



Source: National Transit Database, SamTrans

Estimates from the U.S. Census American Community Survey (ACS), also show at least a modest decrease in ridership among commuters during this time. The following table shows the distribution of employees residing in San Mateo County, based upon mode of travel to work in 2000 and 2003. 2004 data is not presented due to a definitional change in the 2004 survey. As seen below, the percentage of workers using public transit or taxi cabs to commute to work actually increased slightly from 7.3% in 2000 to 7.6% in 2003. The overall decline in employment in San Mateo County, however, means that there was still a net loss of workers using public transportation.

	2000	2003
Drove Alone	74%	73%
Carpooled	12%	10%
Public Transport (incl. taxi)	7.3%	7.6%
Walked	1.6%	2.8%
Other	1.7%	1.6%
Worked at Home	3.1%	5.2%
Total Employment	358,484	328,074

Source: U.S. Census American Community Survey 2004 and US Census 2000 Supplemental Survey

The modest decrease in ridership among commuters residing in San Mateo County suggests that other factors are contributing to the overall decline in ridership on SamTrans. For example, there may be decreased ridership from people who reside outside the county, or among those who ride SamTrans for purposes other than commuting. Additionally, two of the largest employers in San Mateo County are San Francisco Airport and United Airlines. The opening of the new BART extension may have caused those workers from outside the County who once boarded SamTrans at Daly City to take BART all the way to their final destination.

The American Community Survey also suggests some opportunities for transit ridership growth based upon changes in the number of vehicles per household. The following table presents estimates of the number of vehicles per household in San Mateo County in 2000 and 2004:

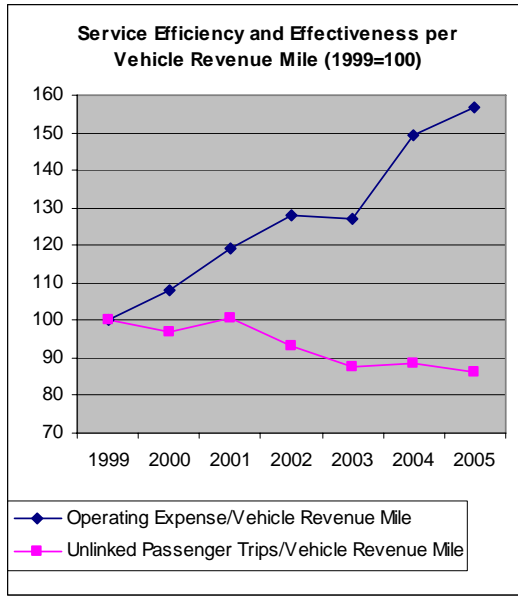
	Households in 2000		Households in 2004	
	Number	Percent	Number	Percent
0 Vehicles	11,125	4.5%	13,415	5.2%
1 Vehicle	79,714	32%	83,511	33%
2 Vehicles	99,863	40%	99,785	39%
3+ Vehicles	58,527	23%	58,462	23%

*Source: US Census American Community Survey 2004 and US Census 2000 Supplemental Survey*

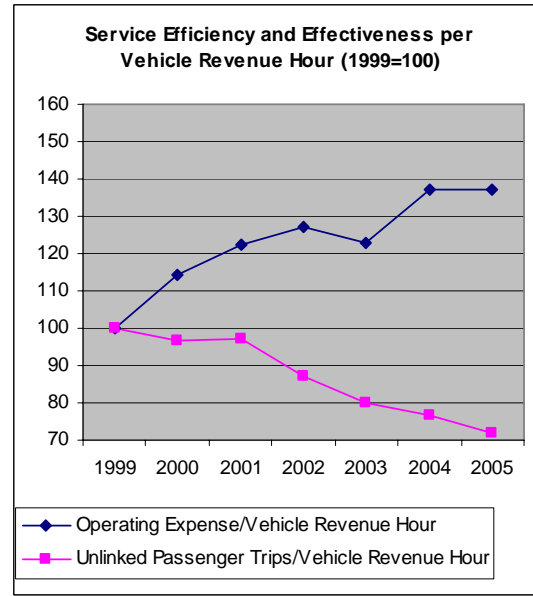
The percentage of households with access to a vehicle increased from 4.5% to 5.2% during this same time period when ridership was decreasing. There were decreases in both the percentage of household and the absolute number of households with two or more vehicles.

The next two graphs compare the trends in SamTrans' Operating Efficiency with SamTrans' Operating Effectiveness on both a Vehicle Revenue Mile and a Vehicle Revenue Hour basis.





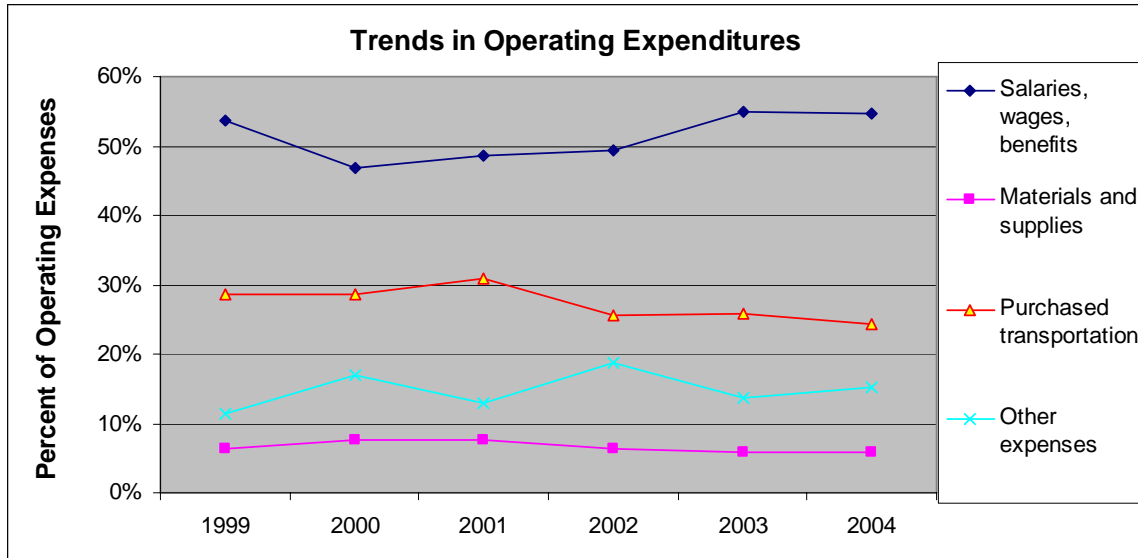
Source: National Transit Database, SamTrans



Source: National Transit Database, SamTrans

SamTrans is experiencing rising costs for service, combined with declining ridership. On a per vehicle revenue mile basis, operating expenses per vehicle revenue mile have increased by nearly 60% since 1999, while unlinked passenger trips per revenue mile have fallen by over 10%. The same trend is apparent on a per vehicle revenue hour basis. Operating expenses per vehicle revenue hour have increased by almost 40%, while passenger trips per vehicle revenue hour have fallen by more than 20%. The difference in magnitude among the two measures is driven largely by an increase in vehicle revenue hours. From 1999 to 2004, Sam Trans' vehicle revenue miles actually decreased by 5%, while its vehicle revenue hours increased by 12%. Some of this is due to the replacement of express bus service from Daly City to San Francisco Airport by the new BART extension. Increased highway congestion also may have accounted for a decline in service quality that is coinciding with the decline in ridership. According to the U.S. Census Bureau, however, the average commute time in San Mateo County actually declined from 25.7 minutes in 2000 to 24.3 minutes in 2004, so increasing congestion in the County seems unlikely.

Transit service is dominated by fixed and semi-fixed costs, rather than marginal per-passenger costs, so there is not always a direct link between ridership and cost. Nevertheless, rapidly escalating operating expenses combined with declining ridership can present fiscal challenges for a transit agency beyond the challenges of ordinary annual inflation in operating costs. The following graph shows the trends in the components of SamTrans' operating expenditures since 1999.

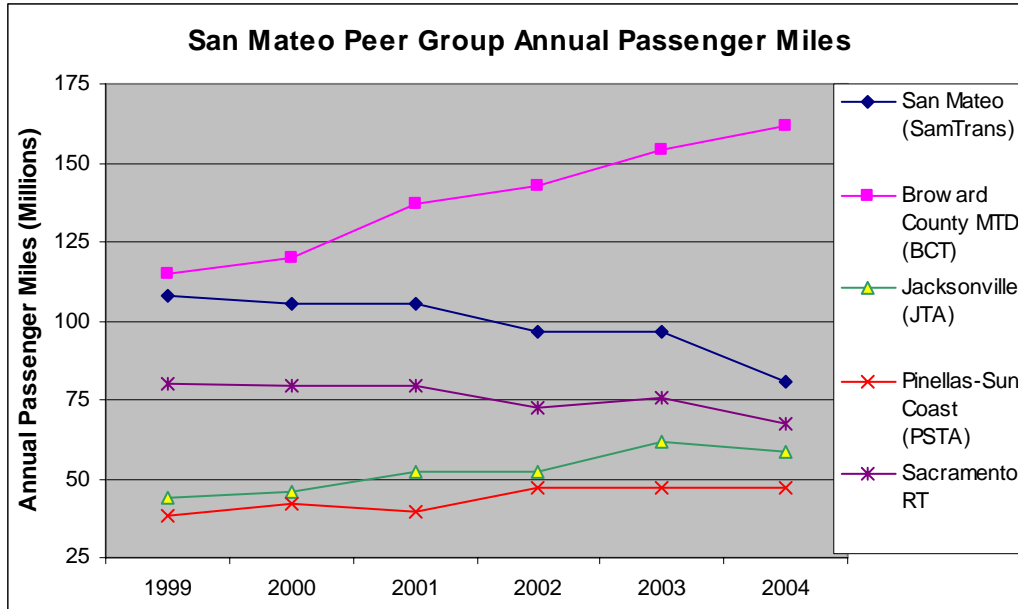


Source: National Transit Database

SamTrans has experienced steadily rising operating costs, including a total rise of 59% from 1999 to 2004. Overall, however, there is no apparent source for this increase in operating expenses, as the various components have each maintained a relatively stable share of overall expenditures since 1999.

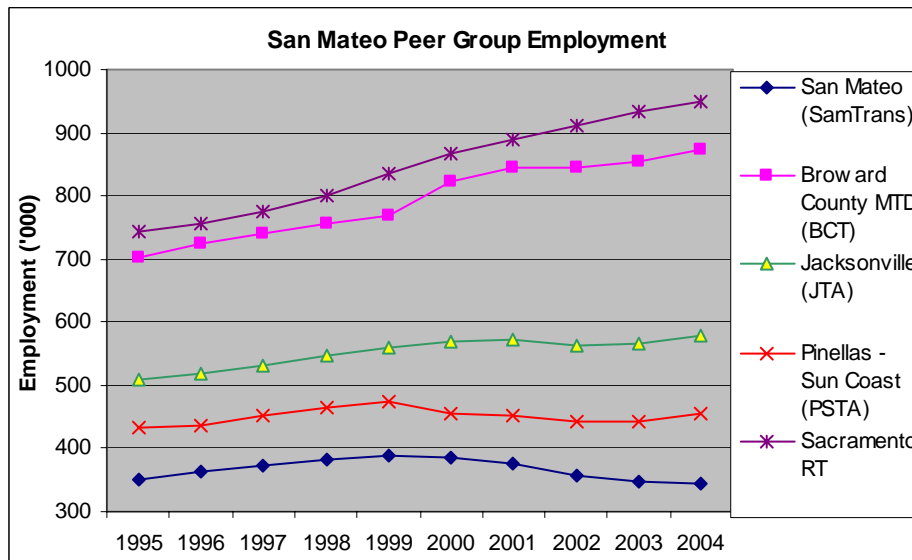
#### *Trends and Highlights in Peer Group Data*

A peer group of four similar transit agencies to SamTrans was assembled using NTD data stored in the Florida Transportation Information System (FTIS), based upon similarities in service area land area, population, population density, ridership, operating expenses, average speed, vehicle utilization, and vehicles operated in maximum service. Based on this data, the following “peer systems” were selected for SamTrans: Broward County Mass Transit Division (BCT) in Broward County, Florida; Jacksonville Transit Authority (JTA), in Jacksonville, Florida; Pinellas County – SunCoast Transit (PSTA) in Pinellas County (City of Tampa), Florida; and Sacramento Regional Transit in Sacramento, California. Peer group comparisons were then produced using data from the NTD, the U.S. Bureau of Labor Statistics (BLS) Local Area Unemployment Statistics Survey, and the U.S. Census American Community Survey. For BLS and ACS Statistics, the Metropolitan Statistical Area (MSA) was used for Jacksonville and Sacramento, whereas the County was used for the other three agencies. BLS and ACS data are each based on residence in the County or MSA.



Source: National Transit Database

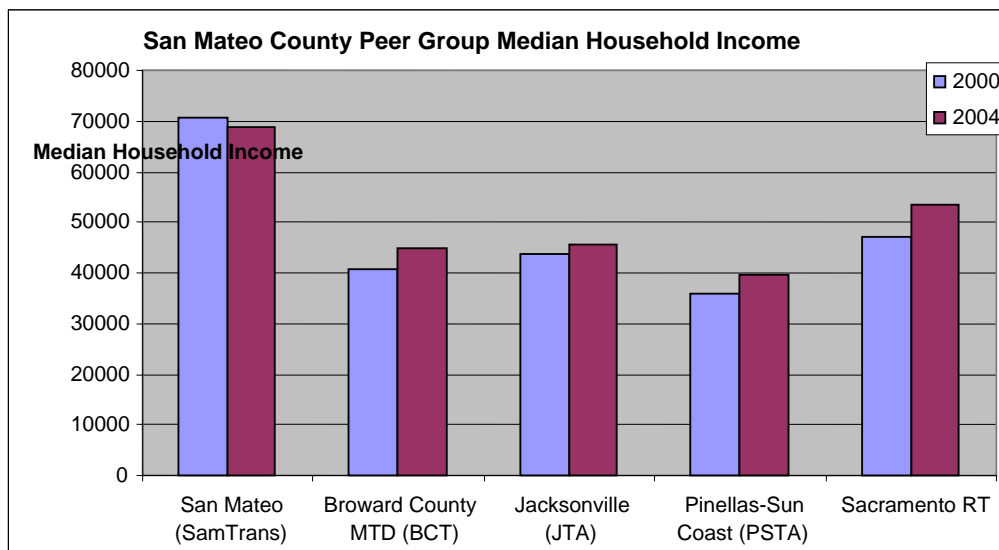
SamTrans' ridership from 1999 to 2004 has underperformed the ridership of its peer group, with a nearly steady decline in ridership since 1999. BCT experienced strong growth in ridership of 41 percent, while Pinellas-Sun Coast and Jacksonville both experienced more modest growth of 23 percent and 34 percent, respectively. Finally, although Sacramento also experienced a similar ridership trend to SamTrans, its overall decrease was only 16 percent, compared to a 25 percent decrease for SamTrans.



Source: BLS Local Area Unemployment Statistics Survey

Total employment in an area is one measure of the total market size available to a transit agency. Total employment in San Mateo County is well below that of the peer group, but

its overall ridership is second only to BCT in the peer group. Overall, ridership for SamTrans is high relative to its total employment. Employment in San Mateo County peaked in 1999-2000, along with much of the rest of the economy, but has dropped since then. The San Francisco Bay Area was hit particularly hard by the end of the information technology boom and the subsequent recession, and SamTrans' service area suffered a greater loss in employment than its peers. Also affecting the SamTrans area was the effect of the attacks of September 11 on the airline industry, including the subsequent bankruptcy of United Airlines. United Airlines and SFO Airport are the county's largest and 10<sup>th</sup> largest employers, respectively. Nevertheless, employment levels in San Mateo County stabilized in 2003 and 2004 while the decrease in ridership was continuing. This suggests the existence of opportunities to enhance ridership, despite the challenging employment situation.



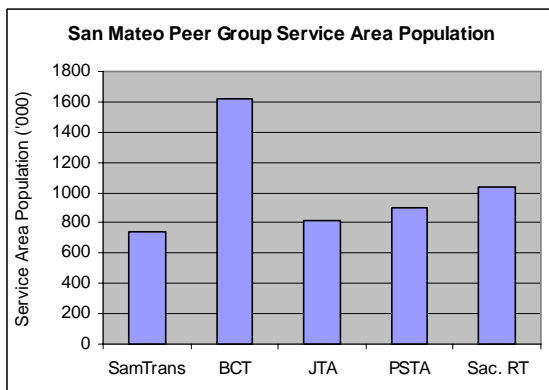
Source: US Census American Community Survey 2004 and US Census 2000 Supplemental Survey

San Mateo County has the highest median household income of the peer group. At nearly \$70,000 in 2004, this is nearly 30% higher than the next closest peer, the Sacramento MSA, and almost 75% higher than Pinellas County. San Mateo County's median household income declined slightly from 2000 to 2004, in contrast to all other members of the peer group. In order to attract riders, SamTrans may need to concentrate more on "choice riders" with higher incomes than other members of its peer group. While the level of median household income is high, the slight decline in the median household income from 2000 to 2004 is unexpected. The underlying cause of this is revealed by a more detailed analysis of SamTrans' household income data. The following table provides the changes in household income distribution in San Mateo County between 2000 and 2004.

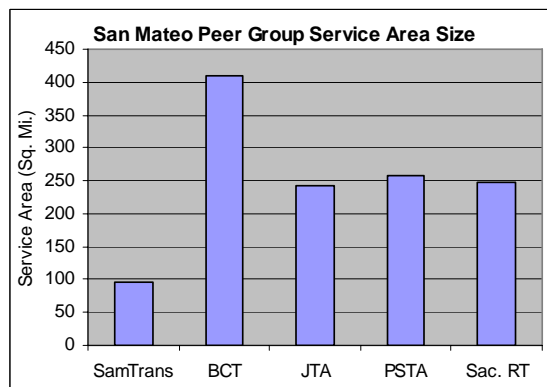
	Households in 2000		Households in 2004	
	Number	Percent	Number	Percent
\$0 - \$34,999	55,057	23%	60,173	24%
\$35,000 - \$50,000	30,536	13%	31,828	13%
\$50,000 - \$75,000	46,129	20%	43,919	17%
\$75,000 - \$100,000	40,967	17%	33,412	13%
\$100,000 - \$150,000	32,076	14%	44,161	17%
\$150,000+	30,599	13%	41,680	16%

Source: US Census American Community Survey 2004 and US Census 2000 Supplemental Survey

As can be seen from the table, San Mateo County experienced a “middle class squeeze” during this time period. There was a 9% increase in the number of households with incomes below \$35,000 and a 4.7% decrease in the number of households with incomes between \$50,000 and \$75,000. The number of households with incomes over \$100,000, however, increased by 37 percent. While the median household income of San Mateo County was declining from \$70,528 to \$68,782, the mean household income was actually increasing from \$95,181 to \$99,024. This disparity results from the loss of middle class households from San Mateo County during this time period. The declining middle class in San Mateo County represents a decrease in a key demographic of “choice riders.”

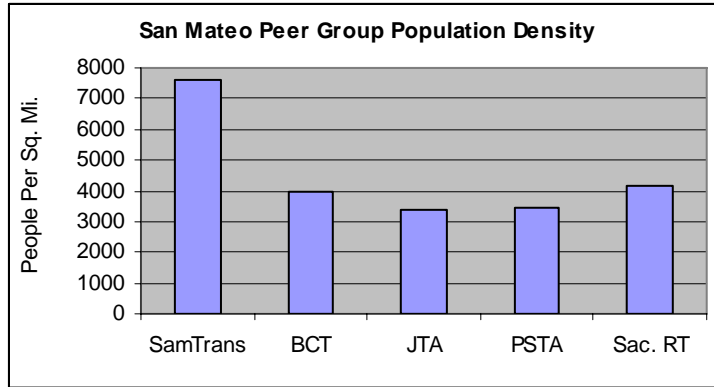


Source: National Transit Database

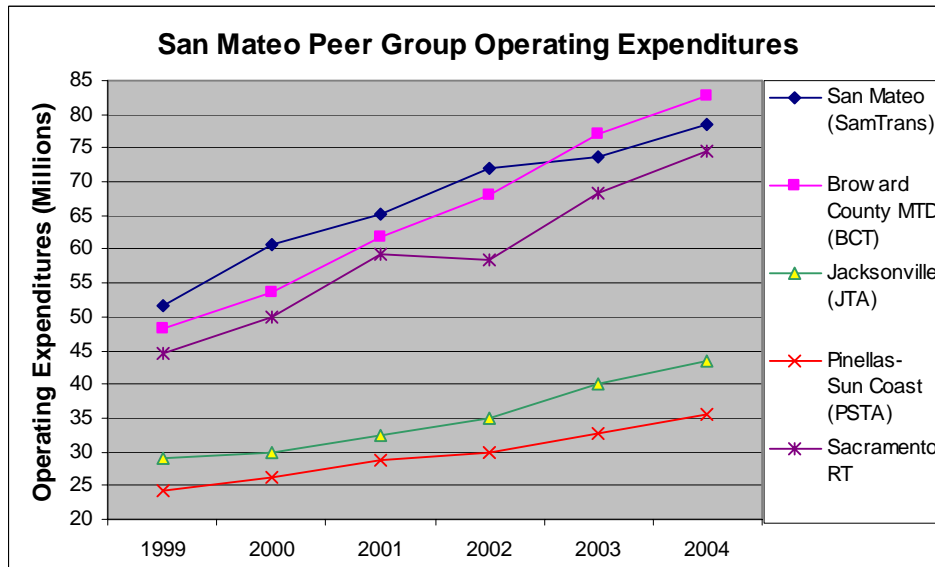


Source: National Transit Database

The SamTrans service area and population are each significantly smaller than those of its peers. In particular, Broward County MTD’s service area size and population are significantly larger than those of SamTrans. While the service area and population of the other three peers are similar to each other, SamTrans is closer in population than in service area size. The following graph compares SamTrans’ service area population density, as reported to the NTD, with the service area population density of its peer agencies, as reported to the NTD:



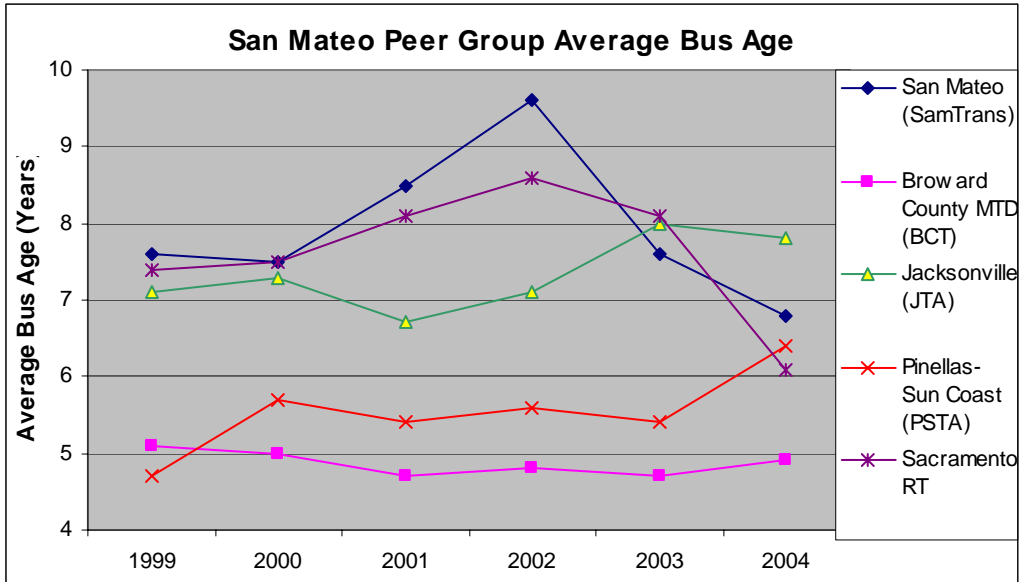
SamTrans' service area, which is concentrated in the suburbs of the Peninsula Corridor, and which contains few outlying exurban areas, has a substantially higher population density than those of its peer agencies. Although SamTrans does not serve a true high-density urban environment, it does serve the inner-most suburbs of San Francisco, in addition to serving the rural and exurban coastal portions of the county, although it does not serve the rural and exurban communities between the coast and Highway 280. This modest level of density benefits SamTrans in its already high levels of ridership relative to employment, compared to its peers, and creates the opportunity for further enhancements to ridership.



Source: National Transit Database

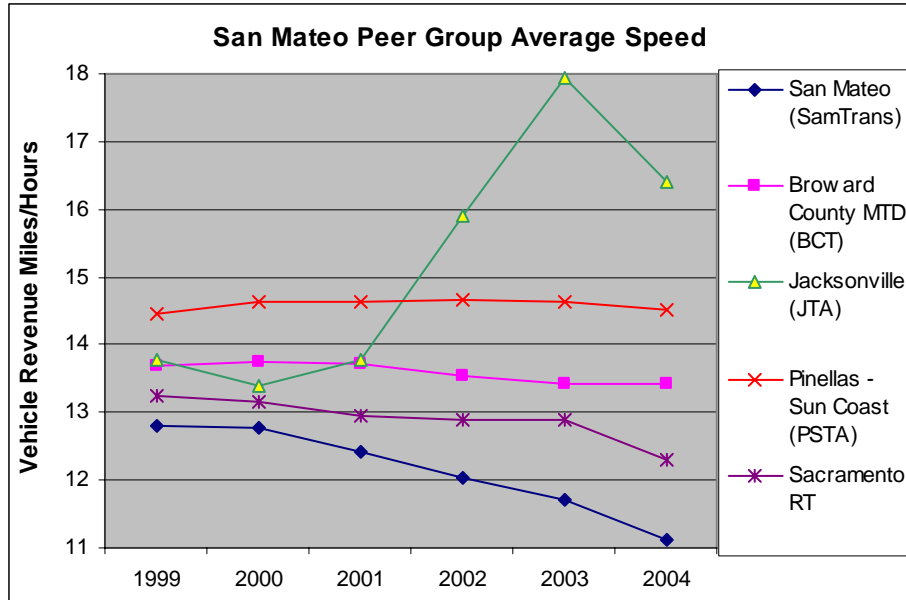
Despite declining ridership, SamTrans' operating expenditures have increased steadily, at a total rate of 52% that is very much in line with the rest of the peer group. The one exception is Broward County, which experienced a 75% increase in operating costs, albeit along with a 41% increase in ridership. Overall, San Mateo's operating expenditures are above those of its peer group, likely reflecting in part the higher price levels in San Mateo County. The percentage rise in operating expenses that is similar to the peer group is consistent with the data showing no change in the composition of

SamTrans' operating expenditures, suggesting that the increase in operating expenditures is likely the normal result of increasing costs. The combination of already-high operating expenses, further steady increases in expenses since 1999, and declining ridership levels suggests that there may be room for improvements in efficiency of service.



Source: National Transit Database

Particularly when attracting choice riders, it is important to provide a high quality of service, an important aspect of which is providing service on newer buses, which tend to be cleaner and less likely to suffer breakdowns while servicing a route. SamTrans' average fleet age spiked in 2002 before steadily declining to levels comparable to the rest of the peer group. The exception, however, is Broward County, which has maintained a relatively young fleet, likely as the result of acquisitions as part of service expansion. The decline in average bus age for SamTrans coincides with the purchase of 55 new ultra-low emission articulated buses during the time period. Although SamTrans' buses are older than those of some members of the peer group, particularly Broward County, bus age should not be a major factor in the current decline in ridership.



Source: National Transit Database

Another important aspect of service quality to choice riders is speedy service to the destination. The average bus speed of each member of the peer group was calculated by dividing annual vehicle revenue miles by annual vehicle revenue hours. SamTrans' average speed, by this measure, began as the lowest in the peer group and has since declined steadily since 2000. A major portion of this decline in average bus speed is a result of SamTrans discontinuing several express bus routes serving SFO with the introduction of BART service in the Daly City to SFO Corridor. This, however, was a one-time event, which does not account for the declining average bus speed in every year from 1999 to 2004, nor does it account for SamTrans having the lowest average speed of its peer group.

One possible contribution to declining average bus speed is increasing traffic congestion in the County. According to the ACS, however, congestion in San Mateo County, as measured by average travel time to work, was in the middle of its peer group. In fact, the average travel time to work for residents of San Mateo County declined from 25.7 minutes in 2000 to 24.2 minutes in 2004.

Another major difficulty for SamTrans, contributing to its relatively overall low average bus speed, is that San Mateo County contains relatively few major highways and Interstates, and SamTrans therefore must offer the bulk of its service on local roads. As choice riders are a key constituency in the San Mateo County service area, there may be opportunities for enhancing ridership through increasing average bus speed. Some of these opportunities might include improved route design, increasing skip-stop services, or other measures.

Overall, SamTrans faces unique difficulties in improving its ridership. The opening of the BART extension, which was funded in large part by SamTrans, imposed a significant fiscal constraint on SamTrans' budget, while at the same time rendering obsolete some of



SamTrans' highest-speed and highest-ridership routes. Two of San Mateo County's largest industries, high-technology computing and airline transportation, were also two of the hardest hit in the recent economic downturn, further impacting ridership. The economic situation has been further complicated by a growing middle-class squeeze in the service area, with a moderate increase in low-income transit-dependent households, a large increase in wealthy households, and a substantial decrease in middle class households. The peer group analysis further found that SamTrans has several unique aspects, including service area size, median household income, and ridership per employee, that separate it from its peers.

Nevertheless, the overall ridership trend, extending even beyond the expected substantial ridership decreases due to the overall economic situation and the new BART extension, suggest that opportunities for enhancing ridership do exist. While continuing to serve the increasing numbers of transit-dependent riders, the largest opportunities for enhancing ridership exist in attracting the rapidly growing ranks of higher-income choice riders with service that is clean, reliable, safe, convenient, and fast.

# Observations and Recommendations

## Service Coverage and Routes



Overall service levels, consisting of frequency, service span (hours of service), and route coverage, are the most important elements needed to achieve high ridership. Some researchers have found that service levels are much more important than service speed. Other elements, such as

delivering a high level of service, good public information, and marketing are also important, but rank below that of service levels in their impact on ridership.

Simplicity is also important. While existing riders may navigate through complex or inconsistent route or scheduling design, lack of simplicity will make it difficult to attract new riders. Even customers who have mastered complexity may be better served by a streamlined route and schedule.

Although SamTrans has some routes with frequent service, many provide service only once an hour during off-peak periods, many routes do not operate during the evening or on weekends even though they serve regional shopping centers, and some routes only provide hourly service during commute hours when more customers are time sensitive. In many of these cases, more frequent service was provided at one time but was reduced due to low productivity. It is unknown whether low productivity was the result of low demand or whether improved network connectivity, modified routes, and higher frequencies would generate more ridership, making low productive routes better performers. In some cases, routes and scheduling improvements could increase ridership and ultimately productivity. More service increases operating costs. However, there could be opportunities to reduce operating costs through a modification of scheduling practices which, depending on the savings achieved, could be strategically applied to fund frequency and service span improvements.

### **Scheduling Efficiency**

SamTrans does not provide road reliefs. Each driver takes his or her bus out from base. The round trip running time for many routes, with reasonable recovery periods, does not permit efficient use of equipment as stand-alone routes, resulting in a complex interlining arrangement. A different approach to scheduling could result in cost savings that could be used to increase frequency and service span and therefore generate more ridership.

## **RECOMMENDATION #1:**

***SamTrans should enter into a contract with a consultant to conduct an independent analysis of scheduling practices using multiple scenarios to determine if any scenario could generate a significant cost savings.***

The consultant should have extensive scheduling experience. Using SamTrans' software (Hastus), the estimated cost is from \$25,000 to \$50,000. SamTrans should set a dollar threshold to determine what constitutes significant versus insignificant savings. If the cost savings are significant, then the scenario achieving the largest cost savings should be implemented and the savings should be used to provide more service.

Three possible scenarios include:

1. Re-cut runs maximizing road-reliefs based on existing schedules.
2. Retain the existing practice of each driver pulling out of and into base but modify schedules and routes to be relatively efficient either as stand alone routes or with a consistent interline. See below for a thorough explanation of this.
3. The schedule modifications of scenario #2 utilizing road-relief's.

Each of the above scenarios should be tested with a 100% full-time driver complement and up to 15% part-time drivers assigned to weekday peak-only services. If the part-time variant produces significant savings over the non part-time variant and SamTrans does not want to reinstate part-time drivers based on past experience, then SamTrans should develop a new job classification to replace the part-time provision in its labor agreement with a full-time dual class provision. Up to a specified percentage of the labor force could drive in the peak hours and perform other tasks during the midday such as staffing information phone lines, information booths, timetable distribution, bus detailing, etc.

The schedule modifications for scenarios 2 and 3 should include the following principles:

- Base service on any route will be covered by the same buses all day.
- Routes which are naturally efficient (i.e. there is not excessive layover time) would have the schedule modified to take full advantage of this. For example assume a route has a 25-minute one-way running time. A bus that leaves one terminal on the hour would leave the other terminal at 30 minutes past the hour. Thus two buses an hour would be needed for 30-minute headways or only one bus for 60-minute headways.

- Routes that do not have a naturally efficient cycle time would be modified either through an interline with another route at a common terminal, minor modifications to the route, or recombining segments with other routes. The following SamTrans routes fall into this category:
  - Route 110 during 60-minute headway
  - Route 112 during 60-minute headway
  - Route 122 during 30-minute headway
  - Route 130 during 30-minute headway
  - Route 133 both 30- and 60-minute headway
  - Route 140 during 60-minute headway
  - Route 251
  - Route 260
  - Route 270
  - Route 274

Due to the short time to complete this project, not all routes identified above have recommendations associated with them. Some recommendations below increase service without increasing vehicles and platform hours under the second and third scenario to avoid excess layover. If SamTrans chooses to conduct the analysis with no added service, it could analyze each scenario with additional service and with excess layover time.

**RECOMMENDATION #2:**

***SamTrans should interline Route 110 with Route 14 clockwise at Linda Mar Park and Ride.***

During peak hours when both routes operate on 30-minute headways they can continue to be interlined to allow customers to ride through without transferring. However there will only be equipment efficiency when both routes operate on 60-minute headways.

**RECOMMENDATION #3:**

***SamTrans should interline Route 112 with Route 14 counterclockwise at Linda Mar Park and Ride when both routes are operating on 60 minute headways.***

During peak hours when Route 14 operates on 30 minute headways it should operate independently and Route 112 can be interlined with Route CX to provide efficiency. On weekdays this requires 4 buses instead of 5 buses if operated independently.

**RECOMMENDATION #4:**

***SamTrans should operate both Route 14 clockwise and Route 14 counterclockwise on Saturdays interlined with Route 110 and 112 as recommend above.***

This will require the same 4 buses that operate Route 110 and 112 independently. When operating on 60 minute headways, Route 110 and 112 schedules should be staggered, as should Route 14 clockwise departures and Route 14 counter-clockwise departures. If Route 110 and 294 are combined, as recommended under network connectivity, the 294 segment could be operated every 60 minutes weekdays and Saturdays, Route 14 clockwise would operate independently every 30 minutes on weekdays and route 112 and 14 counter-clockwise would be implemented as stated above. This will require seven buses on weekdays (same as the present service) and five buses on Saturday (same as the present service).

**RECOMMENDATION #5:**

***SamTrans should terminate Route 133 at San Bruno BART and interline with Route 140.***

When both routes are operating on 60-minute headways, this will require 3 buses instead of 4 buses if both routes are operated independently. When both routes are operating on 30-minute headways they could either be interlined or operated separately. There is no difference in the number of buses required. Extend Route 141 to Airport Boulevard and Linden, replacing Route 130, operating every 30 minutes during the peak period and every 60 minutes during the off-peak period.

**RECOMMENDATION #6:**

***Extend Route 251 from Bridgepointe Shopping Center to Fourth and El Camino in San Mateo via Mariners Island Boulevard, Third Avenue, and San Mateo Caltrain.***

As a stand-alone route, this line would have a 60-minute layover per roundtrip. This extension uses this layover to provide all-day local service to a high density area and a direct link to downtown San Mateo, Caltrain, and El Camino service.

**RECOMMENDATION #7:**

***SamTrans should operate all Route 260 trips between San Carlos Caltrain and the College of San Mateo on consistent 30-minute headways.***

As a stand-alone route this would require the same number of buses and bus hours as the current short turn arrangements does.

**RECOMMENDATION #8:**

***SamTrans should extend Route 270 trips not serving Seaport Village to Sequoia Hospital, providing approximately 30-minute service in combination with route 295 between Redwood City Caltrain and Sequoia Hospital during the mid-day.***

This uses excess layover time. If there is another mid-day destination (such as a senior center) that could use extra service, this route could be extended to that destination instead of to Sequoia Hospital.

**RECOMMENDATION #9:**

*SamTrans should recombine route 274 and 296.*

This would require 5 buses as a combined route compared to 6 buses as two stand-alone routes as presently provided.

**Network Connectivity and Transfers**

Customers who must use two or more transit vehicles to complete a trip should not be penalized for having to transfer. The customer who does not have a one-seat ride experiences inferior service compared to the customer who can reach his or her destination with a one-seat ride. If SamTrans did not experience a significant number of transfers during the years that transfers were offered, it could have been due to poor network connectivity. In some cases, customers who transfer also need to walk considerable distances to make connections (e.g. Hillsdale), or a customer not familiar with the area may be confused by unclear transfer arrangements (e.g. Redwood City where only one of three El Camino routes serves the transfer center). In other cases, the schedules are not compatible for reasonable transfer times. The lack of a transfer or a day pass remains a barrier to transferring. For example, when traveling from Hillsdale Shopping Center to Pacifica, one must take Route 294 and transfer to Route 110 at Linda Mar Park and Ride. When riding this route, although the same bus was immediately changing designation from Route 294 to Route 110 on continuous service, the driver required all through-traveling passengers to disembark, pay a new fare, and then reboard the same bus.

**RECOMMENDATION #10:**

*SamTrans should institute a transfer, a day pass, or both.*

This would allow customers to use multiple vehicles without penalty and also allow trip chaining without penalty (e.g. stop at a retail establishment after work). See recommendations #41, #62, and #73 regarding day passes.

**Transfer Scheduling to Improve Connectivity**

Schedules for SamTrans, BART, and Caltrain appear to be largely uncoordinated.

**RECOMMENDATION #11:**

*SamTrans should institute a timed transfer or pulse system among routes with 30-minute and 60-minute headways at key transfer points.*

This could be done as a stand-alone internal exercise to provide quick implementation, or included in the work scope for the analysis of road reliefs described above. Potential timed transfer points include:

- Redwood City Caltrain
- South San Francisco BART
- Colma BART

**RECOMMENDATION #12:**

*SamTrans should conduct an analysis to determine the most critical connections, since it is impossible to provide coordinated schedules to facilitate transfers between all bus-to-bus and bus-to-rail connections.*

Because of the high cost of conducting a system wide origin/destination (O/D) study, a more cost-effective approach is to use the most recent O/D data to determine if there are key connections that must be retained or higher than expected transfers between routes with poor schedule connectivity. The most recent travel data for all modes could highlight major trip patterns that would require a transfer (bus-to-bus or bus-to-rail) plus staff knowledge of travel patterns to determine where coordinated connections are critical. SamTrans should modify schedules to improve connections where closer coordination is identified.

**Headways**

Most, but not all routes operate on standard headways.

**RECOMMENDATION #13:**

*SamTrans should standardize all routes so that they provide a memory schedule (10-, 15-, 20-, 30-, or 60-minute headways).*

Since most routes have different running times for different times of the day, arrival/departure times should be standard at least at the most critical transfer points. Deviation from this pattern to serve a shift or bell time should be kept to a minimum and subject to standards that set minimum thresholds so that more customers benefit with a deviation. A process should be instituted to ensure that deviations are discontinued as soon as the reason for the deviation disappears.



## Bus Stops

There are numerous opportunities for improvement to SamTrans bus stops. In one example, the bus stop for Routes 110 and 112 at Rockaway Beach shopping center requires passengers to make two street crossings to reach the shopping center.

### **RECOMMENDATION #14:**

*SamTrans should analyze all transfer points (any place where two routes intersect where transferring is conceivable) to determine if the transfer experience can be improved.*

Such improvements include relocating bus stops to reduce walking distance and time, and way-finding signs or maps directing customers to connecting routes. Impediments to walking between connecting bus stops (lack of sidewalks, indirect paths, and problems with road crossings) should be catalogued and incorporated into the capital plan for funding and implementation.

## Hillsdale Shopping Center

Connections between most local bus routes with Caltrain and El Camino buses require a walk of up to 2/10 mile or up to 6 minutes at a normal walking pace. Due to this distance, customers making a connection for the first time may take much longer to reach the desired bus stop. Since a new Caltrain Station that could include a transit center consolidating all services for easy bus to bus and bus to rail connections will not be built for up to 15 years, short term improvements should be implemented. Four additional bus stops would facilitate these connections. City traffic engineers may initially oppose these proposals because they would be in traffic lanes. When traveling from Caltrain to Route 294 at Hillsdale, there are no signs to the Route 294 bus stop. A Caltrain employee at Hillsdale did not know the location of the Route 294 stop, and ultimately gave incorrect directions to the Route 294 stop. Although the Caltrain schedule provided a very generous 25 minute connection time with the Route 294 (“Caltrain Connection”), it took almost the entire connection time for a new traveler unfamiliar with the area to locate the appropriate bus stop.





**RECOMMENDATION #15:**

*SamTrans should add signs to Caltrain stations directing disembarking passengers to bus stop locations.*

**RECOMMENDATION #16:**

*SamTrans should instruct all Caltrain station attendants regarding the location of “Caltrain Connection” bus stops at the station.*

**RECOMMENDATION #17:**

*SamTrans should add a new bus stop in the right turn lane of east bound Hillsdale Boulevard, nearside of El Camino Real, with a queue jumper to allow buses to safely reenter traffic.*

These queue jumpers are common in downtown Los Angeles. The alternative choice is a bus stop in the traffic lane, just before the right turn lane for routes 250, 292, M, and MA. This will reduce by about 1/10 mile the distance customers need to walk when transferring to and from Caltrain and El Camino routes.

**RECOMMENDATION #18:**

*SamTrans should change the direction of the loops for Route 251 and 262.*

This will allow both routes on the way to Hillsdale to stop in front of the Caltrain station and at a northbound El Camino stop; then to layover at the pull out on Hillsdale Boulevard. When leaving Hillsdale it can use the new stop recommended above for connections from Caltrain and El Camino routes. This change will improve connectivity even if the stop is not added.

**RECOMMENDATION #19:**

*SamTrans should add a stop for route KX on the northbound El Camino frontage road, nearside of Hillsdale Boulevard to facilitate connections with Caltrain and all bus routes serving Hillsdale.*

This also provides a corresponding stop to the existing southbound stop. If SamTrans implements the recommended El Camino concept described below within one year, this stop would not be necessary.

**RECOMMENDATION #20:**

*SamTrans should add a stop on westbound Hillsdale Boulevard on the far side of El Camino for Route 250 to facilitate connections with Caltrain and El Camino Routes.*

**RECOMMENDATION #21:**

*SamTrans should add a stop on southbound El Camino Frontage Road nearside of Hillsdale Boulevard for route 294 and southbound route 295 to facilitate connections with Caltrain and northbound El Camino service.*

These buses frequently dwell in this location to wait for a green light. The buses could also use the westbound Hillsdale stop recommended above instead of this added stop.

**Route Improvements**

**RECOMMENDATION #22:**

*SamTrans should modify Route 390 to go into the Redwood City Caltrain Station and Route KX to deviate via Redwood City Caltrain instead of the old Greyhound station on Brewster.*

This should be done only if El Camino service is not restructured for at least one year. This will provide for consistent routing, eliminating confusion among customers, and provide better connections with Caltrain and local service.

**RECOMMENDATION #23:**

*SamTrans should extend Route 250 to Fourth and El Camino to provide a connection with El Camino bus service.*

Route 250 should pass the San Mateo Caltrain station traveling to and from El Camino to maintain connections with Caltrain.

**RECOMMENDATION #24:**

*SamTrans should combine Routes 110 and 294 into a single route.*

Many runs currently operate in this fashion. This will provide access from San Francisco (via BART or MUNI connections), Daly City, and Pacifica to Coastside communities. This is not a recommendation to increase service on the 294 segment, unless demand warrants, but to extend a comparable number of Route 110 trips to serve this route. This route should also deviate via the College of San Mateo eastbound in the morning and westbound in the evening to provide access from the Coastside to the college and a connection with Route 260.

**RECOMMENDATION #25:**

***SamTrans should operate Route 250 on Friday nights.***

Even though the College of San Mateo does not have classes on Friday nights, Hillsdale is open and could generate trips from both employees and customers. There may also be Friday night activities at the College that could help generate ridership

**RECOMMENDATION #26:**

***SamTrans should recombine Route 274 and 296.***

This was recommended above as an assumption for the analysis to determine if road-reliefs provide significant savings through the efficient use of equipment. This recommendation also improves network connectivity by providing better access from Menlo Park and East Palo Alto to Cañada College.

**RECOMMENDATION #27:**

***SamTrans should modify the schedules of Routes 280 and 281 to be evenly staggered along the common segment of the routes west of Highway 101 (15 minutes during the day, 30 minutes during nights and Sundays) to provide a better frequency.***

Schedules should be coordinated to provide convenient connections with El Camino service as well as with Caltrain.

**RECOMMENDATION #28:**

***SamTrans should include a bus transit center in the design of the future South San Francisco and Hillsdale Caltrain stations that will allow pulsing of all local buses serving the station.***

All bus routes serving the station should be able to be at the station at the same time with a short layover to facilitate transferring. Based on existing routes this would include Routes 130, 132, 133, 292, Brisbane community service at South San Francisco; Routes 250, 251, 262, 292, 294, 295, M, MA, and El Camino service at Hillsdale.

**El Camino Real**

El Camino Real is the centerpiece of the SamTrans bus system. A recent O/D study was conducted to identify the potential for Bus Rapid Transit (BRT) on the El Camino corridor. Customer activity is fairly evenly spread throughout the corridor with only a few locations generating significantly higher levels of ridership. Currently, three different routes serve the El Camino corridor, each with slightly different routes in certain areas. This can cause confusion for prospective customers and reduces frequency to

certain transit centers, which can have a negative impact on network connectivity. On just a few sample trips there was confusion even among regular riders who thought they boarded a different route than the one on which they were riding.

BRT is desirable, particularly in the northern part of the county where it could bypass BART stations while all local buses serve each station. A uniquely branded BRT can be a part of the long-term grand boulevard design for El Camino. In the short term, the following restructuring of north-south trunk service is recommended. At the service levels recommended, this will actually represent a reduction of resources during peak hours and the same number of resources at all other times. If BRT is implemented on El Camino, it should be overlaid on this service structure. This service structure should generate increased ridership since it embodies improved frequency, simplicity, and network connectivity.

**RECOMMENDATION #29:**

***SamTrans should provide a single El Camino route to operate between Daly City BART and Palo Alto Caltrain via John Daly Boulevard, Mission Boulevard, and El Camino Real.***

All trips would deviate to serve Colma BART, South San Francisco BART, San Bruno BART, Millbrae Intermodal Terminal, and Redwood City Caltrain. Service would be provided every 15 minutes during the daytime, seven days per week and every 30-minutes during the evening hours, seven days per week. If the market warrants, an all-day extension from Daly City BART to Mission and Goethe, a peak hour extension to Downtown San Francisco, and a peak hour extension to Stanford Industrial Park may continue as at present.

**RECOMMENDATION #30:**

***SamTrans should discontinue Route KX and extend Route REX to San Francisco from the Millbrae BART station non-stop to SFO, then via the KX route to San Francisco.***

During off-peak and during the weekend, when the current REX is not operating, service would be provided north of Hillsdale Boulevard. However, it would operate up Hillsdale Boulevard and terminate at Hillsdale (same loop and stops as Route 292). Service would be provided every 30 minutes during daytime hours and every 60 minutes in the evening, seven days per week.

**RECOMMENDATION #31:**

***SamTrans should reroute Route 292 between Broadway and Millbrae Avenue to operate via Rollins, Millbrae BART, and Millbrae Avenue.***

The upgraded REX (see Recommendation #30) would serve the segment of Airport Boulevard no longer served by Route 292.

### **RECOMMENDATION #32:**

***SamTrans should change Route 292 and REX in order to pulse in both directions at the Millbrae Intermodal Terminal.***

Schedules should also be coordinated with BART and El Camino service in both directions. This concept allows for connections between west of 101 and east of 101 at Millbrae Intermodal Terminal to facilitate work trips both north and south of Millbrae Avenue.

### **Shuttle Integration**

In recent years, due to low ridership and poor productivity, SamTrans has significantly reduced east-west service primarily serving one or two communities. However many communities still need more east-west service. SamTrans staff believes that community based shuttles are a possible solution to address this issue and beginning in 2009, funding will be available to provide increased community service.

East-west routes in low-density or highly affluent neighborhoods will never generate the same level of productivity as El Camino service or routes serving higher-density neighborhoods. However, the productivity of past east-west routes and some existing east-west service is impeded by frequency, short service span, or one-way loops that create round trip travel times for many customers that are up to twice as long as ordinary two-way service. For example, Orange County Transit found that replacing big buses with vans in lower-density and affluent neighborhoods has both reduced costs and improved ridership. Some routes became so successful that larger buses were ultimately reintroduced. Smaller, neighborhood-friendly vehicles with a unique brand and operating at 60% of the cost of big buses, coupled with a higher level of service, would generate additional ridership in these neighborhoods.

### **RECOMMENDATION #33:**

***SamTrans should develop a shuttle implementation plan, if it has not already been done.***

This plan would set service standards for shuttles, establish productivity thresholds for converting existing fixed routes to shuttles, and identify areas of the County which meet a minimum threshold of population or employment density but are not within walking distance of fixed route bus service. This plan would also develop a financial and partnership strategy for service, and should incorporate existing community-based shuttles into the structure of the overall service. See recommendation #68.

Service should be provided in two-way linear or loop routes, preferably at 30-minute headways. Service should be designed to serve local community travel but must also be integrated with connecting bus, shuttle, and rail services, including pulsing if there is a

timed transfer center in the community and coordinated with the schedules of major trunk bus and rail service. If a unique community brand is adopted, then there should also be an identity linking the service to the overall county transit network. Public information for each community-based shuttle should be treated as a full-fledged SamTrans route, appearing on system maps, SamTrans web site, and other public information avenues. All services should be open to the general public and should be available at designated stops without advance reservations.

#### **RECOMMENDATION #34:**

*In advance of 2009, SamTrans should sponsor shuttle service pilots that fulfill the above-mentioned standards.*

These pilots can be upgrades of existing shuttles, replacement of an existing route such as Route 262 or 342, or restoration of service to a previously served area such as San Carlos or north Burlingame. Funding for the pilots would come from local communities, savings from the elimination of the replaced bus route, or from special grants. The pilots could also demonstrate different service concepts such as operating a regular fixed route using smaller vehicles, a route deviation, or other non-traditional service. The pilots could determine which concepts work best in which environment.

## Fares and Fare Media



### **Farebox Recovery Ratio and Automated Fare Collection**

The importance of farebox revenue varies from agency to agency depending upon the availability and stability of other forms of revenue. If other revenue streams are healthy, stable, and constitute a significant percentage of the total revenue, then major investments in fare collection equipment, fare information systems, revenue control processes, and prevention of fare evasion are of lesser importance.

In the case of SamTrans, farebox revenue in FY 2004 constituted 15.8% of total revenue and only 11.4% in FY 2005. Many transit agencies require 30-50% fare recovery rates in order to balance their operating budgets. Independently, this relatively low farebox recovery rate would indicate that a major investment in automated fare collection equipment is not a priority; however, other factors indicate otherwise. These factors include dependence on a cyclical sales tax revenue source (44.1% in FY 2004), a need to introduce new fare instruments, a need for improved revenue control, and the opportunity to implement accurate revenue and ridership reporting.

Interviews with staff indicated that the development of the specification for the automated fare collection system is being led by the Operations Division. A budget has been identified for this effort. Experience at other transit agencies indicates that the

procurement of a fare collection system should be a cross-functional effort with major involvement by the departments responsible for Finance, Development (Engineering and Planning), Administration (Information Technology), and Communications (Marketing and Customer Service). This cross-functional effort is often difficult due to the legitimate, but often conflicting, needs of each department. However, revenue control, technology, reporting, customer education, and other needs must be addressed for the successful implementation of an automated fare collection system.

**RECOMMENDATION #35:**

*SamTrans should procure an automated fare collection system, as soon as possible, using a team from all relevant departments.*

Considering the age of the current fare collection equipment and the need to increase revenues, SamTrans should assign a high priority to the design and acquisition process as industry experience indicates this requires a minimum of two years. Smart card technology, compatible with TransLink, should be included as a part of the system.

**TransLink**

SamTrans is a major participant in the TransLink consortium. This consortium is a regional effort to unify San Francisco Bay Area transit fares using “smart card” technology. TransLink has had a difficult history due to contractor performance, the large number of agencies involved in the process, and the diverse fare policies in the region which must be integrated.

**RECOMMENDATION #36:**

*SamTrans should continue its active participation in the TransLink process.*

SamTrans has been and continues to be a leader in the TransLink effort. Continued active participation will ensure that the vision of a regional seamless fare collection system reaches fruition and that SamTrans will influence the implementation of technology and equipment that is compatible with SamTrans’ automated fare collection infrastructure.

**Farebox Vaulting**

SamTrans finance staff indicates their policy dictates that all bus fareboxes be emptied and their contents secured (“vaulted”) at the end of each run. This is a transit industry best practice. Random interviews with several staffers indicated a lack of knowledge of this policy. Buses were observed entering both North Base and South Base without being vaulted. One bus was observed being vaulted in the middle of its run.

**RECOMMENDATION #37:**

*SamTrans should ensure that farebox vaulting at the end of each run is consistently implemented throughout the system.*

**Farebox Maintenance Security**

The maintenance of fare collection equipment is organizationally and physically located in the Operations Division. Ridership team members were able to enter the unsecured farebox and ticket vending machine maintenance areas, cashboxes were readily accessible, and no agency staff was present, although the area was under active video surveillance.

**RECOMMENDATION #38:**

*SamTrans should place the inventory, control, and maintenance of key fare collection equipment items in the Financial Forecasting and Treasury component within the Finance division.*

This practice would be consistent with that of other transit agencies where keys, cashboxes, and other items are tightly inventoried and controlled. Security of these items should be tightened at SamTrans.

**Basic Fare Level**

SamTrans instituted a single ride fare increase of 20% by increasing the fare to \$1.50 from \$1.25 in September 2005. Classic fare elasticity theory indicates ridership will fall as fares increase. In fact, the District Cash, Contracted Cash, Pass Sales, and Redi-Wheels report indicates that ridership

	Local Routes and Routes (L, H, H2)	*981,028/987 From S.F.	Express Routes (E, E, H, H, H2)
Adult (Age 18 to 64)	\$1.50	\$3.00	\$4.00
Senior/Disabled (Age 65 & older, proof of disability required)	75c	\$1.50	\$2.00
Youth (Age 17 & younger)	\$1.00	\$2.00	\$2.00

remained flat after the fare increase. Using the American Public Transportation Association fare elasticity values for bus systems in areas with fewer than 1 million in population, for each percent increase in the fare, ridership should drop by .43%. Applying this factor results in a projected drop of 8.6% in ridership that did not occur at SamTrans. In addition, staff interviews indicated that there was very little public opposition to the fare increase. This would indicate that a larger fare increase could have been adopted to improve revenue without long-term damage to ridership.

**RECOMMENDATION #39:**

*SamTrans should enter into a contract with a consultant to conduct a formal fare elasticity study to determine a higher fare price point.*



The cost estimate for this effort is \$50,000. The information from this study can be used to set fare levels in the future.

### **Fares for Transit Dependent and Low-Income Riders**

Guiding Principle # 2 of SamTrans' "Vision & Guiding Principles" is: "Sustain basic mobility services for transit-dependent and low-income persons." The lack of free transfers and the limited availability of passes and tokens do not appear to support the Guiding Principle. The lack of an automated fare collection system, management and labor resistance to bus operator handling of fare media, and lack of customer complaints are cited as reasons for the current "no transfer" policy. In December 2005 discounted token sales accounted for only 3.54% of total District and Contracted Bus Revenue while cash payment accounted for 60.71%. The time and limited scope of this review did not allow for in-depth investigation of this issue. However, lack of availability or insufficient marketing of discounted tokens may be indicated.

#### **RECOMMENDATION #40:**

*SamTrans should take appropriate action to improve the sales of discounted tokens.*

See Recommendations #60 and #61 regarding token sales. Guiding Principle # 2 should be reviewed for its strategic importance. If total revenue generation is a higher strategic priority than fostering transit-dependent programs (since discounted media sales could have a detrimental effect on total revenue), then Principle #2 should be removed from SamTrans Vision and Guiding Principles.

### **Short Term Passes**

SamTrans lacks transfers among routes. This may have a detrimental effect on overall ridership and on mobility for the transit-dependent. Staff interviews indicate that the provision of transfers or fare media, such as day passes, is on hold pending the installation of a new fare collection system.

#### **RECOMMENDATION #41:**

*SamTrans should provide its customers with a day or weekly pass.*

Since the specification development, procurement, and installation cycle for a new farebox system will take at least two years, then a day pass, and possibly a weekly pass, should be considered for implementation as soon as possible. The price point for a day pass should be developed in consultation with the departments of Finance, Communications (Marketing), and Development (Planning). See recommendations #10, #62, and #73 regarding day passes.

# Operations and Maintenance

From all outward appearances SamTrans has a well-maintained and reliable fleet of buses that operate safe and dependable transit service. All fixed route vehicles have bike racks, are ADA accessible, and many have surveillance security systems. Customer amenities, such as passenger shelters, are well maintained.

SamTrans has several characteristics that show it to be a healthy system. SamTrans buses exceed 20,000 miles between road calls and service has a 90% on-time performance rate. The accident rate is 1 per 100,000 miles of service. Worker absenteeism is approximately 4%. Operator assaults and other security related incidents on the bus are rare. The California Highway Patrol allows SamTrans to “self-certify” equipment safety inspections due to their consistent good quality performance. Disciplinary actions with bargaining unit workers are infrequent.



Bus physical appearances are excellent. Buses do not exhibit graffiti or window etchings. Paint and exterior graphics are well-maintained, even on buses that are more than 12 years old. Interiors, including seats, are clean and well maintained.

## **Spare Factor**

The fleet spare factor rose from 8% in 1999 to 39% in 2004, before dropping to 28% in 2005. This is higher than FTA guidance of 20% and exceeds that of most other transit operations. For example, at Pierce Transit and Metro Transit, the spare factors are 16% and 14%, respectively. SamTrans’ high spare factor is due to buses that are no longer needed because of bus service reductions as a result of BART rail service introductions. High spare ratios result in unnecessary additional costs without adding measurable value to service or to reliability.

## **RECOMMENDATION #42:**

***SamTrans should reduce the fleet spare factor to no more than 20%.***

This would reduce the overall fleet requirement and make better use of the fleet by increasing the average annual bus mileage. SamTrans accumulates an annual average of 26,541 miles per bus. Many transit agencies operate an average annual per bus mileage of between 40,000 and 50,000. For example, Pierce Transit and Metro Transit operate an average annual per bus mileage of 52,734 and 41,250, respectively. A reduction would also reduce the number of buses needed for service each day and result in significant resource savings that could be applied to increased service coverage and frequency.

## **Use of Part-Time Staff**

Part-time operators comprise about 5% of the SamTrans operator work force. Their ATU contract allows up to 15% part-time operators. Other transit agencies generally apply the highest percentage of part-timers as their contract allows. Financial information supplied by SamTrans indicates that net annual savings of \$744,000 are possible by maximizing the percentage of the part-time work force. Currently SamTrans spends \$35.73 per hour to cover overtime. This means that their average straight time rate is approximately \$23.82. Since part-time workers have a higher turnover rate, their progression pay is lower. Part-timers average 80% of the regular full-time rate or \$19.06 per hour. If SamTrans were able to cover 75% of the overtime hours with part-time workers making \$16.67 per hour less, then the total savings would amount to \$1,144,000.

The benefits that the new employees would receive will offset some of these savings. In this analysis, it is assumed that 50 part-timers, each working 1,500 hours per year, would cover the total hours needed. Total benefit costs of \$650 per month per worker would total \$390,000 per year. Subtracting the total benefit costs (\$390,000) from the total savings (\$1,144,000) results in a net annual savings of \$744,000 which could be applied to service enhancements to increase ridership.

### **RECOMMENDATION #43:**

*SamTrans should maximize its use of part-time operators at 15% which is allowed by the contract.*

The schedules would need to be modified to make best use of the part-time work force for lower overall cost of operation. See the discussion under Recommendation #1 regarding the use of part-time operators.

## **Maintenance Staff**

SamTrans has 85 maintenance employees for a fleet that operates 7,351,998 miles. This represents 86,494 miles per maintenance employee. Most transit agencies operate 100,000 to 110,000 miles per year for each maintenance employee. For example Pierce Transit and Metro Transit operate 108,870 and 102,038 miles per year, respectively for each maintenance employee.

### **RECOMMENDATION #44:**

*SamTrans should increase its annual number of miles per maintenance employee to at least 100,000.*

## **Use of “Extra Board” Employees**

The dispatcher at the South Base reported that its daily operator sick list averages 3 to 5 operators per day where there is a peak pull out of 100 buses. Additionally, the South

Base on-duty dispatcher reported that SamTrans maintains a daily “extra board” of 39 operators (17 of which were hold-downs) in part to fill in for those operators who do not report to work. This number appears to be high, in light of the size of the sick list. Although the reason for this is not clear, it may be due to authorized paid time off for operators.

**RECOMMENDATION #45:**

*SamTrans should reduce the size of its “extra board.”*

**Workers Compensation**

In 2005, SamTrans commissioned the Midwest Employers Casualty Company to analyze the agency’s costs and potential savings in workers compensation expenses. The study analyzed SamTrans workers’ compensation activities for the period from April 1, 1999 through March 31, 2005 and concluded that SamTrans’ total direct losses were 59 percent below the average performance of peer agencies in California, that the number of claims was 51 percent lower than the average performance of peer agencies in California and that the average cost per claim was 17 percent below the average performance of peer agencies in California. The study also identified opportunities for SamTrans to further reduce workers compensation expenses by maintaining its rate of claim frequency and by reducing the severity and cost of claims to targeted levels. Specifically, the study recommended SamTrans continue to promote safety awareness through employee-targeted safety and training programs; undertake an audit to determine which departments incur the most claims so as to determine how best to reduce the rate of claims; and attend best-practices seminars and webinars aimed at claims management, medical management and return-to-work and program management to determine further measures to reduce average costs per claim.

**RECOMMENDATION #46:**

*SamTrans should implement the recommendations from the Midwest Employers Casualty Company report.*

# Marketing, Communications, and Advertising

**Marketing Target Audience**

While the Communications Department is engaged in many different activities, there does not seem to be a focus on recruitment and retention of everyday riders. There are many opportunities to do so by designing and implementing route-specific, destination,

employer, or student-based marketing and communications programs. In addition, there are opportunities to retain existing riders that can be explored. For example, some systems have created rider relationship marketing programs that provide advanced information via mail or e-mail regarding service and schedule changes, providing periodic transit incentives such as discount coupons, and offering other benefits such as tie-ins to entertainment events or retailers.

**RECOMMENDATION #47:**

*SamTrans should focus its marketing efforts on recruiting and retaining everyday riders by designing appropriate communication and advertising campaigns targeted to key markets.*

These markets include those connecting to work sites from Caltrain, middle and high school students, county residents using SamTrans to connect to Caltrain, and any other groups representing potential everyday riders. In addition, staff should explore relationship marketing programs to retain all riders. An overall program, or individual programs for commuters, students, and senior citizens may be appropriate. Everyday riders are defined as those using service for repetitive trips everyday or nearly everyday for employment, education, etc.

**Market Research**

There is very little SamTrans consumer or rider research available. This hinders marketing and communications planning, as well as an organizational understanding of key rider characteristics. Media cannot be targeted, nor can riders be segmented by trip purpose, fare payment, longevity, frequency, age, gender, ethnicity, turnover rates, etc. without additional information.

**RECOMMENDATION #48:**

*SamTrans should conduct basic consumer research to understand key rider characteristics.*

As soon as possible, research should be conducted using on-board surveys to establish an understanding of SamTrans rider characteristics. This method needs to be applied with consideration for “frequency bias” since the most frequent riders could be over sampled. See the discussion above for the types of information that should be gathered. Other surveys and focus groups could be conducted with key market segments such as youth or commuters. This research can be used in the design and implementation of marketing programs that support the recruitment and retention of everyday riders.

**Use of Broadcast Media**

Because of the cost of purchasing mass media, it is extremely important to set standards for media buys when they are appropriate. Typically, broadcast media is purchased using

age, sex, and ethnicity data that most closely matches the target market. In addition, advertising effectiveness is achieved by maximizing reach and frequency. Reach is the percent of the target audience and frequency is the number of times they hear (radio and TV) or see (TV, print) the message. Based on communications with Marketing staff, it did not appear that these standards are applied.

**RECOMMENDATION #49:**

*SamTrans, when making mass media buys, should apply target market parameters as well as reach and frequency standards.*

This assumes that the requisite market research already will have been performed.



**Use of Shelter Advertising**

SamTrans is about to embark on a program of shelter advertising that will result in new revenues and operational savings from the transfer of shelter maintenance to a contractor. This could mitigate the effects of the declining communications and marketing budgets over the last several years.

**RECOMMENDATION #50:**

*SamTrans should reinvest both the revenue and maintenance savings from shelter advertising into funding marketing programs directed at recruitment and retention of everyday riders.*

As part of this, SamTrans should negotiate free or low cost rates for their own shelter advertisements.

**Use of Direct Mail Advertising**

Because of the high cost of purchasing media, many marketers are turning to direct mail as a cost effective, measurable alternative. In the case of SamTrans, there have been only a few uses of direct mail promotion. Direct mail can communicate a high level of service detail as well as deliver incentives to try service or to purchase specific fare media. In addition, incentive levels and coupons can be varied to enhance effectiveness. For example, two free rides may not be as effective as six in some instances. Adding coupons for discounts to increase pass or token pack sales may boost ridership even more if the trial is followed by customer commitment to a prepayment option.

**RECOMMENDATION #51:**

*SamTrans should increase its use of direct mail to provide information and incentives.*

As part of this, SamTrans should test incentive levels and see whether combining pass and token incentives will lead to increased ridership.

### **Use of Interior Advertising**

The use of interior advertising cards to promote services or to communicate service related messages to riders stands out when riding the bus. Entire card racks are filled with numerous messages without any spacing, making it difficult to see what is available.

#### **RECOMMENDATION #52:**

*SamTrans' interior card racks should have limited messages, should use more "white" or blank space to improve readability, and the message should be rotated to maintain "freshness."*

In addition to spacing the cards out to create white space, some cards could be designed in over-sized format (42" long vs. 28" long), or in alternating formats to improve interest and readability (e.g. alternate non-reverse and reverse designs).

### **Web Site**

Transit agency web sites continue to be increasingly important as a marketing and communications tool, and SamTrans is no different. The SamTrans web site has not been updated in about four years. It should be revised to better relate to customers and be used as a ridership building tool.

#### **RECOMMENDATION #53:**

*SamTrans should add a guide for new riders.*

Those unfamiliar with the system do not know where to look for information to help them use SamTrans for the first time.

#### **RECOMMENDATION #54:**

*SamTrans should add features and functions that support new marketing programs.*

This will allow continual improvement to the site, make it more useful and interesting, and help bring people back to visit on a regular basis.

#### **RECOMMENDATION #55:**

*SamTrans should switch to content management software.*

This will enable the communications staff to have administrative access and be able to add or change content without the involvement of IT staff.

**RECOMMENDATION #56:**

*SamTrans should modify the “Shuttles” tab to include route, schedule, stop, and fare information.*

This should be for every shuttle operating in San Mateo County that is open to the general public, regardless of funding source. The shuttles tab currently contains information on BART shuttles and two community shuttles only. The Caltrain website includes information on all shuttles serving a Caltrain station. The SamTrans website should include information on all shuttles operating in the County, including those in Palo Alto that connect with SamTrans routes. The site should clearly state which shuttles are free.

**RECOMMENDATION #57:**

*SamTrans should provide a link under the “Schedules” subsection that would add connecting services.*

These services include BART, Caltrain, MUNI, Santa Clara Valley Transportation Authority, and Alameda County Transit as well as the transit page of the Bay Area 511 site ([www.511.org](http://www.511.org)).

**RECOMMENDATION #58:**

*SamTrans should work with BART to include on their website information on all SamTrans shuttles serving BART stations.*

This would be comparable to the information on SamTrans shuttles serving Caltrain stations that is on the Caltrain website. Customers seeking information on BART may not know that they must access the SamTrans website to obtain shuttle information nor should they have to seek two different web sites for public transportation information.

**RECOMMENDATION #59:**

*SamTrans should continue to work with MTC to improve the 511 travel planner tool.*

This includes ensuring that all shuttles are made part of the tool. Several attempts to use the 511 trip planner tool for a destination served only by a shuttle failed since the shuttle was not identified as an option. The directions given using regular services were also inaccurate. For example, a sample trip from the East Bay to the Doubletree Hotel in Burlingame directed the customer to get off at Daly City BART and take 2 different buses, one of which required a six-hour wait. The best routing is to take BART to Millbrae, then take a shuttle directly to the hotel. This was not offered by the site and



could be completed in a small fraction of the time that the travel planner tool had recommended.



### **Use of Real Time Information Systems**

SamTrans operates with an excellent on time record of 90%. Therefore, on time information is not significantly different than real time information. Frequently, riders request real time information and many transit operators, particularly rail operators, have adopted some form of real time information. Wireless technology is now making the need to develop a separate real time information system less relevant.

### **RECOMMENDATION #60:**

*SamTrans should study the potential of wireless communication of schedule information through web enabled devices as an alternative to investing in a real time information system.*

This study should be done as a preliminary step to updating the web site.

### **Fare Media Marketing Campaigns**

Monthly passes and tokens are discounted fare media that, when purchased, represent a significant commitment to riding SamTrans. Recently, SamTrans completed a “Get Your Pass in Gear” promotion that offered one free monthly pass after purchasing 11 monthly passes. Monthly pass sales increased and continue to increase, so whether the offer was considered successful or not, the continuing increase in sales is quite instructive. Therefore it appears that adult riders are good targets for monthly pass and token pack promotion. Also, student passes are a great value and are a reliable and convenient way for parents to pay for a child’s transportation. Especially without competition in the County from traditional yellow school buses, promotion of youth and student passes is an effective way to capture a large number of everyday riders. The initiation of all day passes may represent another way to promote prepayment.

### **RECOMMENDATION #61:**

*SamTrans should more actively promote passes and tokens targeted to adult riders.*

### **RECOMMENDATION #62:**

*SamTrans should expand its efforts with schools to promote student passes and youth tokens as appropriate.*

### **RECOMMENDATION #63:**

*SamTrans should institute a Day Pass that can be sold on buses or in multiple packs in retail sales outlets as soon as possible.*

This will accelerate the introduction of this product. See recommendations #10, #41, and #73 regarding day passes.

**RECOMMENDATION #64:**

*SamTrans should develop and use baseline data from the market research recommended above and set a goal for the amount of prepayment versus cash revenues expected annually.*

While there is no particular rule of thumb to apply to goal setting in this area, use of prepayment options will develop customer loyalty and can contribute to increased ridership.

**Fare Media Sales Outlets**

One of the features of the developing TransLink partnership is a proposal to limit SamTrans to a maximum of 40 TransLink outlets. Currently, SamTrans sells fare media at over 80 outlets. The Partnerships section of this report contains a recommendation to increase the number of fare outlets to include Senior Centers. A reduction in fare media outlets is a major long-term threat to ridership.

**RECOMMENDATION #65:**

*SamTrans should expand its diversity of fare media outlets, even after entering the TransLink partnership.*

**Special Services Promotional Efforts**

SamTrans operates and promotes many special services with mixed results. For example, services to 49er games are well used but it appears that ridership is tied closely to attendance. It may therefore not be sensitive to promotion at either current or reduced levels of promotion. In reviewing communications budgets, it appears that large amounts of funds are being spent on special services with little ridership payoff.

**RECOMMENDATION #66:**

*SamTrans should reduce spending on special services and reinvest savings on programs to recruit and retain everyday riders.*

**RECOMMENDATION #67:**

*SamTrans should apply the same service standards and minimum ridership requirements (e.g., farebox recovery rates, passengers per bus hour, etc) as is required for regular service when instituting any special services in the future.*

See recommendation #83 regarding special services.

## Partnerships



### Employers and Community Shuttles

The primary form of partnership with employers in San Mateo County is the shuttle program. Under this program, employers sponsor a shuttle service that connects their place of employment with a BART Station. A similar program connecting to Caltrain also exists, but riders on these shuttles are counted as Caltrain, rather than SamTrans riders in the NTD. Although two different financial arrangements are used, the sponsoring employers typically pay 25% of the operating cost of the shuttle, and the sponsoring employer's name is displayed on the side of the shuttle. The shuttle route itself, however, is open to the public. The shuttle program has also recently been expanded to include communities.

The community of Brisbane in South San Francisco currently sponsors a hybrid fixed-route and demand-response shuttle. The city of Foster City sponsors a shuttle service for its annual Independence Day festival and fireworks display. The Serramonte Shopping Center funds additional shuttles during extended hours in the autumn to winter holiday shopping season. SamTrans pocket schedule displays, however, do not typically include shuttle schedules. The pocket schedules for shuttle service that do exist are labeled as "employer shuttles", and may give the impression to new riders that these services are not open to the public.

### **RECOMMENDATION #68:**

*SamTrans should raise the minimum threshold for employer contributions to at least 30% of shuttle operating costs.*

This will increase revenues for the support of other services that can increase ridership.

### **RECOMMENDATION #69**

*SamTrans should expand the shuttle program by enlisting other community partners to sponsor additional shuttle services.*

These include “foothills communities” such as Burlingame, Hillsborough, and San Carlos that were previously served by SamTrans “community routes” that have since been discontinued. See recommendations #33 and #34.

**RECOMMENDATION #70:**

*SamTrans should make information on shuttle schedules more widely available, including providing shuttle schedules alongside other bus schedules at SamTrans information centers and in BART and Caltrain stations.*

Shuttle brochures should also be clear that these services are open to the public, as the current heading of “employer shuttle” may imply to some people that these services are restricted to employees of the sponsors only. See recommendations #55 to #57 regarding shuttle information on the website.

**Employer-Paid Transit Benefits**

Several employers in San Mateo County participate in the Commuter Check program operated by the Metropolitan Transportation Commission (MTC). Commuter Check is a voucher that employers purchase on behalf of their employees as a tax-free benefit and inducement to use public transportation in their commute to work. Employees redeem these vouchers for transit fare media.

The Peninsula Congestion Relief Alliance (The Alliance), which is funded in part by SamTrans’ sister organization, the San Mateo County Transit Authority, operates a guaranteed ride-home program, as well as other transit-related programs. Since these programs are not operated directly by SamTrans, information on these programs is not readily available to SamTrans staff. In particular, SamTrans staff did not have immediate access to the basic information needed to maximize this program’s impact on ridership, such as how many and which employers participate in the Commuter Check program.

**RECOMMENDATION #71:**

*SamTrans should take appropriate actions to increase participation in the Commuter Check program by employers within San Mateo County.*

At a minimum, SamTrans should seek a closer relationship with the MTC and The Alliance in the area of information exchange (such as statistical data), in order to better assess the use of these programs, and whether additional promotion of these programs by SamTrans might increase participation in them, and thus enhance ridership. SamTrans should determine how many employers in San Mateo County are using Commuter Check, which large employers in San Mateo County might be encouraged to begin providing Commuter Check benefits to their employees, and ensure that SamTrans receives regular updates on the use of the Commuter Check program in San Mateo County. Strong candidates for the Commuter Check program, if not participating

already, include United Airlines, the SFO Authority, the County of San Mateo, hospitals in the County, and other large employers.

**RECOMMENDATION #72:**

***SamTrans should institute a campaign among both mainline and shuttle riders, using the SamTrans website and printed materials, to increase awareness of the Guaranteed Ride Home program.***

SamTrans should include at least one line of information on the Guaranteed Ride Home program in existing white space on its bus route maps and pocket schedules. See recommendations #52 to #58 regarding updating the website.

**Airports**



The largest employer in San Mateo County is United Airlines, with 13,300 employees. SFO is a major hub for United Airlines, as well as the home to a major maintenance facility for United. The ninth largest employer in the County is SFO, with another 1,429 employees. There are currently no existing partnerships with United Airlines, the SFO Authority, or other airlines at SFO. SFO is served directly by both SamTrans and BART, and indirectly by Caltrain. Additionally, United recently transferred several of its operations to SFO from the Oakland Airport, and many of its employees live in East Bay, and are served by other transit agencies. Reductions in staffing by United Airlines during its recent bankruptcy have left a surplus of parking spaces available to United Airlines employees at the SFO Airport facilities. The available parking makes it more difficult to encourage workers to use SamTrans rather than to drive their own vehicles to work.

SamTrans currently provides schedules and system maps to the airport's visitor information center, and serves the airport with both an express bus route and a mainline route on the El Camino Real. Additionally, the airport contributes \$200,000 towards funding late-night bus service at the airport. The airport also has a partnership with SamTrans whereby SamTrans provides equipment and assistance in the event of an evacuation of a plane.

**RECOMMENDATION #73:**

***SamTrans should develop a partnership with United Airlines to sell them tokens, a day pass, or both.***

United would provide these fare media to distressed travelers who experience long delays resulting from canceled flights. This will provide those travelers with low-cost mobility from SFO or from United-purchased hotel rooms to nearby shopping areas and other activity centers.

## **Hospitals and Homeless Shelters**

San Mateo General Hospital is the largest healthcare facility in the County. Other hospitals include Peninsula Hospital, Mills Memorial Hospital, Kaiser Hospital, and Sequoia Hospital. SamTrans also services a major medical complex on the campus of Stanford University, including Hoover Pavilion Hospital, Stanford Medical Center, and Stanford Children's Hospital. There are currently no existing partnerships between SamTrans and the hospitals in the service area, although Santa Rosa Memorial Hospital in Sonoma County purchases transit passes for distribution to emergency room discharges who do not have transportation. SamTrans currently donates two transit tickets per day to a homeless shelter located on SamTrans property near its North Base facility. Other community and social service agencies often purchase SamTrans tokens to provide to needy individuals in the community.

### **RECOMMENDATION #74:**

***SamTrans should develop partnerships with area hospitals to sell them tokens and Day Passes.***

The hospitals would provide these fare media to the families of long-term care patients, or to emergency room discharges who are without their own means of transportation. Sequoia Hospital is located one mile west of El Camino Real, and may be a strong candidate for the partnership to provide mobility to emergency-room discharges. The other hospitals are principally located along the El Camino Real, which is the core of the SamTrans service area, and are strong candidates for both types of partnership. See recommendations #10, #41, and #62 regarding day passes.

## **Schools**

SamTrans currently partners with local area schools to sell discounted monthly youth passes. Additionally, local schools provide an even deeper discount on youth passes to students who are eligible for the Federally subsidized student lunch program. SamTrans is currently piloting a three-month summer youth pass this year. Although not all schools currently participate, SamTrans is currently encouraging all schools to do so, and those that are not participating are typically small. The sale of fare media through schools and other partners, however, may be threatened by the requirements of the future TransLink partnership.

In 2005, SamTrans partnered with the San Mateo County Office of Education to hold an art contest, called "Art Takes a Bus Ride," in elementary and middle schools. The winning art was displayed on advertising cards inside the bus, with the grand prize art displayed as a "queen" ad on bus exteriors and as a bus wrap on a special outreach bus. This contest, which boosts transit awareness among students and enlivens bus interiors, is planned to be repeated in 2006.

**RECOMMENDATION #75:**

***SamTrans should provide service in the afternoons and evenings between schools and activity centers.***

Through appropriate modifications to routes and schedules, this would make youth passes more attractive to students.



**Universities**



**STANFORD UNIVERSITY**

There is one small master’s university in San Mateo County, Notre Dame de Namur University, and three community colleges, the College of San Mateo, Skyline

College, and Cañada College. Some of these colleges are served by a single route, and none of these colleges has generated significant ridership to merit a deeper partnership. Stanford University is also located at the southern end of the SamTrans service area. SamTrans currently partners with Stanford University on the Marguerite Shuttle, which provides intra-campus transportation to Stanford students, faculty, and staff, as well as connections with Caltrain.

**RECOMMENDATION #76:**

***SamTrans should conduct a mobility study of area university students.***

This would be to determine student transportation patterns and whether SamTrans could do more to meet those needs such as coordination of route schedules with class times. The study would cover the three community colleges, Notre Dame de Namur University, and Stanford University. University students commonly have low mobility, and the reported low ridership levels from area students suggest an untapped opportunity for increased ridership.

**RECOMMENDATION #77:**

***SamTrans should develop and distribute a series of school-specific brochures highlighting only the specific routes serving the particular school, and the other “activity centers” served by the route.***

This effort could boost ridership among students and those in activity centers served by the routes.

Although SamTrans currently considers community college class schedules in route planning, there are opportunities for further coordination. For example, San Mateo Community College (SMCC) has large blocks of classes beginning at 6:00 pm each day. Yet, Route 250 arrives at SMCC at 5:42 pm and 6:16 pm, while Route 260 arrives at 6:05 pm on hourly headways. As another example, Cañada College has a major block of classes ending at 9:20 pm, but Route 274 departs the College at 9:16 pm on hourly headways.

As development of the El Camino Real corridor continues, SamTrans should consider providing increased service from Stanford University to areas of Redwood City, Menlo Park, and East Palo Alto that are closer to the University than would ordinarily be sensible to use Caltrain, and which contain activity centers such as shopping, restaurants, bars, entertainment venues, etc. This service should be coordinated with class schedules and activity schedules at Stanford University.

**RECOMMENDATION #78:**

*SamTrans should enter into an agreement with Skyline College to provide either a set-trip program or an unlimited trip “U-Pass” program, funded by the student activity fee.*

The success of any improvements suggested by the mobility study may facilitate approaching the other area universities about a U-Pass program. Skyline College is now well-served by the SamTrans route network, and should be a strong candidate for this type of partnership.

**Senior Centers**

SamTrans currently provides route maps and schedules to Senior Centers within the service area. SamTrans has also operated two pilot projects with the San Mateo and San Bruno Senior Centers, offering a field trip to a movie theatre and a recently renovated shopping center on existing fixed route service, with the aim of getting seniors to “try transit.” In another pilot project with The Alliance, seniors who participate in a mobility survey will be given a monthly pass purchased by The Alliance.

Seniors, while not typically candidates to be everyday riders, could benefit from some of the same techniques used to recruit, and especially retain everyday riders. These techniques include relationship programs such as frequent customer programs found in the retail and airline industries.

**RECOMMENDATION #79:**

*SamTrans should expand its efforts to sell passes through Senior Centers.*



## **RECOMMENDATION #80:**

*SamTrans should coordinate schedules with some of the Senior Centers for recurring events.*

### **Transit-Oriented Development**

SamTrans is a leading partner in the El Camino Real – Grand Boulevard project for the existing El Camino Real roadway and Caltrain corridor that connects the primary cities of San Mateo County. This project seeks to redevelop this corridor with transit-oriented development focused on both Caltrain and the core SamTrans bus service on the El Camino Real, as well as to support the construction of destination “places” in each of the cities. This project may be one of the most ambitious transit-oriented development projects in the nation and if successful, should greatly enhance ridership. SamTrans has also partnered with other transit-oriented developments, including the Colma Apartments around the Colma BART station and with First Community Housing, a developer of low-income housing. The latter partnership is developing an annual pass for community residents as a pilot program. A shared-car pilot program was also attempted at the nearby California Avenue Caltrain station, but was discontinued due to lack of interest. Overall, partnerships in transit-oriented development appear to be one of the greatest strengths of SamTrans. See recommendation #29 regarding El Camino Real.

### **Bus Shelters**

SamTrans recently finalized a contract with an advertising agency for the maintenance of all of its bus shelters. In addition to maintaining all existing bus shelters, the agency will also have the right to propose additional bus shelters in places where demand might not ordinarily warrant a shelter, but which are good places for the placement of an advertisement, subject to the approval of the local jurisdiction. This program should increase the number of bus shelters, and enhance ridership.



### **Tourism**

The Pacific coastline of San Mateo County is one of its greatest assets. The current SamTrans service area includes the scenic communities of Half Moon Bay and Pacifica, as well as three units of Golden Gate National Recreation Area (GGNRA), which is part of the National Park System. Staff at other GGNRA locations throughout the Bay Area was unaware of public transit access to the three GGNRA units near Pacifica. Staff at the Pacifica Chamber of Commerce and GGNRA Visitor Center, which did provide knowledgeable information of SamTrans service to the area, made personal comments that SamTrans service was too infrequent to support ridership in the area.

**RECOMMENDATION #81:**

*SamTrans should enter into a partnership with the National Park Service – Golden Gate National Recreation Area (GGNRA) to promote visitation to the Park units in the vicinity of Pacifica.*

At a minimum, this should include GGNRA providing its staff at all of its Bay Area locations with information on using SamTrans to access the Pacifica-area units and the Pacifica-area Visitor’s Center at Rockaway Beach. Longer-term opportunities may include application for an Alternative Transportation in Public Lands grant.

**RECOMMENDATION #82:**

*SamTrans should pursue sponsorship of additional service along the Pacifica-Half Moon Bay corridor during the tourist seasons and on weekends.*

Sponsors could be either corporate or through the Chamber of Commerce.

**Air Quality Days**

Through the Metropolitan Transportation Commission and the Bay Area Air Quality Management District, SamTrans provides up to three free transit days on non-holiday weekdays when the Bay Area Air Quality Management District designates a “Spare the Air Day” due to low air quality levels. In the first two years of this partnership, there have never been more than two “Spare the Air Days” in a single year.



**Año Nuevo State Reserve**

SamTrans runs a seasonal service to Año Nuevo State Reserve during the breeding season for elephant seals, which combines bus fare with admission to the reserve. This service is popular, and has attracted a recurring ridership in year after year. Año Nuevo State Reserve staff provides information on this service in response to inquiries.

**RECOMMENDATION #83:**

*SamTrans should discontinue promotion of the Año Nuevo service.*

Consistent with recommendations #65 and #66, this service consumes an inordinate portion of the marketing budget relative to ridership. If ridership decreases without marketing, and if the service is considered essential to managing visitation to the Reserve during elephant seal breeding season, then SamTrans should consider partnership with either the Reserve or a corporate sponsor in order to maintain this service. Savings from

developing this partnership should be used to expand other services that will support ridership increases.

### **San Mateo County Fair**

SamTrans participated in a reciprocal advertising exchange with the County Fair in 2005. SamTrans placed County Fair advertisements on its website, and interior and exterior bus advertisements, while the County Fair placed the SamTrans logo on one of its rides, provided SamTrans with a booth at the Fair, and mentioned SamTrans in its promotional material. SamTrans is currently reviewing this partnership due to disappointing results in 2005.

## **Appendix A: SamTrans' Response**

At the San Mateo County Transit District, we wholeheartedly embrace the FTA Ridership Improvement Program and welcomed the occasion to visit with team members and review the practices and policies of our District.

Moreover, we believe the FTA's Ridership Improvement Program presents a significant, perhaps even historic, opportunity to raise fundamental questions about standard industry practices – to revisit the habits, attitudes, traditions and customs that have been ingrained in all of us and to ask if there are new ways of approaching basic issues, including service, maintenance, deployment of resources and personnel and employee relations.

We regard as the overriding goal of this review the identification of ways to reach out to new riders, particularly to choice riders for whom using the bus is not the first option. To quote the FTA Ridership Report prepared by Bill Menczer and his team, "When attracting choice riders, it is particularly important to provide a high quality of service."

We concur completely and we are hopeful the FTA's efforts will be the catalyst for a constructive industry-wide discussion focused on a possible redefinition of what constitutes a high quality of service and the best way to achieve it. It is our view that adding new riders – reaching out to new customer bases that extend beyond a traditional urban environment and traditional must-use riders -- requires a host of strategic business decisions, many of which may run counter to the customary way all of us think about the basic components of our business.

We urge you to review the FTA Ridership Report on SamTrans and to take particular note of those areas where traditional measures are used.

For example, the common industry standards concerning the allocation of resources for bus cleanliness, time and mileage between road service calls and mileage between maintenance are built around fundamental assumptions that may be worth revisiting when measured against the priority of adding new riders who have traditionally declined to consider the bus as a transit option.

In another example, there are widely held understandings about the use of extra board personnel as a cost to an agency, about road relief practices and about the use of part-time operators as a cost-savings measure. We believe it is worth revisiting those standards with an eye toward ushering in a new era of management-employee relations that relies more on partnerships built on mutual respect and dignity, where good employee relations is not just a goal, but a value that is fundamental to the attracting new riders.

We welcome the opportunity to discuss this in further detail and to propose that the FTA Ridership Improvement Program be viewed as a vehicle for a new approach to basic industry standards of measurement.