

SMART

Opportunities for Improving Ridership



A Report by the FTA Ridership Team

September 2006

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Introduction

As part of its FY 2005 Strategic Business Plan, the Federal Transit Administration (FTA) set a goal of working with its partners in the transit industry to generate an average increase in ridership among the top 150 transit agencies of at least 1%. In support of this critical and challenging goal, the FTA Office of Budget and Policy has elected to conduct pilot ridership site visits at two of the top 150 transit agencies each year, selected on the basis of decreasing ridership for the previous two years.¹ These site visits are intended to identify opportunities where improvements in transit ridership could be made and to provide technical assistance to the selected transit agencies.

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

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

Members of the Ridership Team met with SMART employees with expertise in five focus areas, reviewed operational data, actively observed bus operations at peak and off-peak travel times, 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) fares and fare media, 3) operations, service quality, and amenities, 4) marketing, advertising, and communications, and 5) partnerships.

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

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

Service Coverage and Routes

The team made recommendations concerning route design and headways, service evaluation criteria, reallocation of resources, use of part-time operators, and use of automatic vehicle locator data.

¹ In the case of SMART, although ridership declined in 2000 to its lowest point, it began recovering in 2004, and then increased by 9.6% in 2005. This review provided an opportunity for SMART to enhance its recovery even further.

Fares and Fare Media

The team made recommendations concerning university passes, farebox data entry, revenue control, fare media, fare data analysis, and fare technology.

Operations, Service Quality, and Amenities

The team made recommendations concerning bus stop improvements, security, system information, fleet appearance, park and ride lots, express routes, fleet spare ratio, technology, and fuel procurement.

Marketing, Communications, and Advertising

The team made recommendations concerning market research, staffing, advertising, customer information, transfers, and the website.

Partnerships

The team made recommendations concerning community shuttles, the TransitChek program, environmental awareness, the website, a guaranteed ride home program, service to hospitals and educational institutions, tourism, and transit-oriented development.

SMART

Profile

The Suburban Mobility Authority for Regional Transit (SMART) was created in 1967 as the Southeastern Michigan Transportation Authority (SEMTA), and was renamed SMART in 1989. It primarily provides intra-suburban transit services, as well as commuter route services into downtown Detroit. SMART is one of two primary transit systems serving the Detroit Metropolitan Area. The Detroit Department of Transportation (D-DOT) has an extensive network of routes within the City of Detroit, as well as several routes that extend into suburban areas primarily serviced by SMART. SMART routes also connect to the Detroit “People Mover” Automated Guideway system in downtown Detroit, to routes of the Flint Mass Transportation Authority at Pontiac and at Auburn Hills, and to one route of Windsor Transit from Ontario, Canada in downtown Detroit. The inherent closeness of the SMART and D-DOT service area effectively necessitates that SMART coordinate with D-DOT on most major initiatives.

SMART’s statutory service area includes Oakland, Macomb, and Wayne counties, including downtown Detroit. In Oakland and Wayne counties, individual communities have the right to opt-in or opt-out of SMART’s service area every four years in local referenda to reauthorize SMART’s dedicated property tax. Currently, SMART’s fixed route service covers approximately the inner-half of Oakland, Wayne, and Macomb counties, centered on downtown Detroit. SMART has flexible-route and general public demand-response service covering the remainder of Macomb County that is not served by fixed-route service. SMART’s fixed-route system includes 54 bus routes with nearly 7,000 bus stops, including approximately 200 bus shelters.

A SMART user survey conducted in 1994 indicates that the average (mean) trip on its fixed-route service is 9 miles. The same survey indicated that 40 percent of SMART riders do not own a car, and that 60 percent of SMART trips are used for commuting to or from work. The majority of these trips, however, are actually connecting Detroit city residents with employment centers around the outlying suburbs. The automobile industry has left the Detroit area a legacy of decentralized employment that poses a unique reverse-commute challenge to the area.

SMART also operates an extensive network of flexible route and demand response services, all of which are open to the public, known as “Connectors” that are owned and operated by SMART and “Community Shuttles” which are funded by SMART but operated by community partners.

In 2004, SMART installed bicycle racks on its buses, launched its first website, and established an automated toll-free telephone schedule information line. In 2006, SMART upgraded its website, and on March 31, 2006, began selling bus passes through its website.

Data Analysis

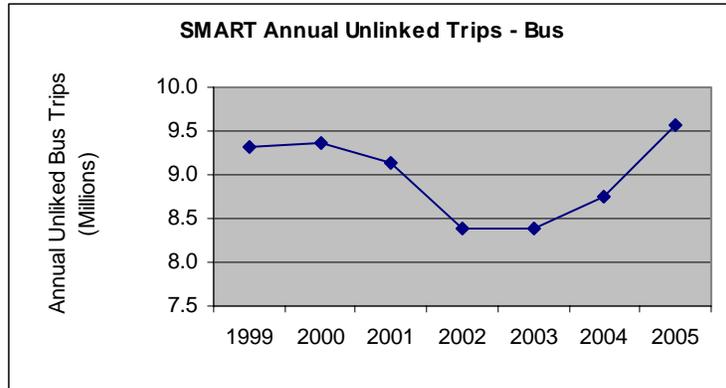
SMART data in this analysis was obtained using National Transit Database (NTD) data and SMART's own submission to FTA for the year 2005. In some cases, this data for SMART are compared to data from a peer group of four similar transit agencies which was assembled using NTD data for the motorbus mode only stored in the Florida Transportation Information System (FTIS). Peer systems were selected based upon similarities in service area size, population, population density, system ridership, operating expenses, average speed, vehicle utilization, and vehicles operated in maximum service. Based on this data, the following "peer systems" were selected for SMART:

- ◆ Pace-Suburban Division outside of Chicago, Illinois
- ◆ Greater Cleveland Regional Transit Authority
- ◆ Port Authority of Allegheny Country in Pittsburgh, Pennsylvania
- ◆ Metropolitan Transportation Authority (MTA) Long Island Bus system in Nassau and Suffolk Counties, NY.

SMART is the only transit agency in an urbanized area of its size that does not feed rail service of any kind. According to the Brookings Institution study on employment sprawl published in July 2001, SMART's service area is highly decentralized with only 5.2% of its metropolitan employment located within three miles of the central business district.

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 (ACS). For BLS and ACS statistics, the Metropolitan Statistical Area (MSA) was used for Pittsburgh and Cleveland, and combined data for Nassau and Suffolk Counties was used for the MTA Long Island Bus system. For data from these surveys for the Pace and SMART systems, data for the Cities of Chicago and Detroit was subtracted from data for the Chicago and Detroit Primary Metropolitan Statistical Areas (PMSAs) in order to produce "suburban" data metrics. In all cases, the demographic data from BLS and the U.S. Census Bureau may not exactly match a given system's service area, although the differences are assumed to be small.

The following graph shows the trend in SMART's ridership from 1999 to 2005. Ridership declined from nearly 9.4 unlinked trips in 2000 to a low of less than 8.4 million unlinked trips, in 2002 and 2003. Ridership began recovering in 2004, and then increased 9.6% in 2005 to over 9.5 million unlinked passenger trips.



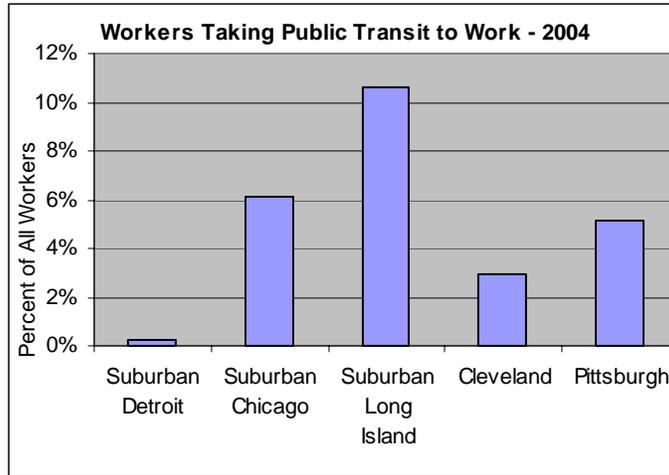
Source: SMART Internal Data

The American Community Survey also provides supporting evidence of a decrease in bus ridership among commuters from 2000 to 2003. The following table shows estimates of the method of commuting to work for suburban Detroit residents in 2000 and in 2003. As can be seen from the table below, the percentage of suburban Detroit residents stating that they took public transportation to work declined by 0.2 percent, representing approximately 3,600 persons, all of whom are potential everyday riders. (Note: 2004 data is not used for this comparison due to a definitional change in the 2004 survey.)

	2000	2003
Drove Alone	86%	88%
Carpooled	8.5%	7.9%
Public Transport (incl. taxi)	0.7%	0.5%
Walked	1.3%	1.0%
Other	0.9%	0.6%
Worked at Home	2.1%	0.9%
Total Employment	1,670,380	1,654,762

Source: U.S. Census American Community Survey 2003 and 2000

The decline in workers taking public transportation to work is particularly striking given that the overall percentage of these workers in suburban Detroit was already extremely low in comparison with the other areas in SMART's peer group. The following graph shows data from the 2004 ACS, for each of the areas in SMART's peer group. All of the areas in SMART's peer group have substantially higher percentages of workers riding public transit to work than the suburban Detroit area.



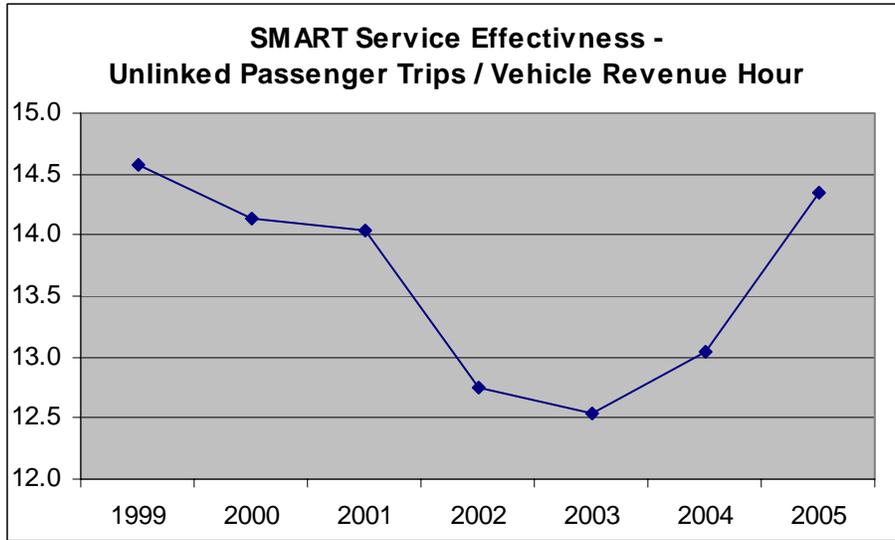
Source: US Census Bureau American Community Survey 2004

Part of the decline in the percentage of workers taking public transportation to work in suburban Detroit may be attributable to the decreasing number of transit dependent households in the suburban Detroit area. According to the ACS, the number of households without an automobile declined by 10% from 2000 to 2004, representing a decrease of 7,083 households. At the same time, the number of households with access to two or more vehicles increased by 47,782, or 5.7 percent. Higher personal income and improved access to automobiles in the suburban Detroit area are likely factors contributing to low levels of transit ridership.

	Households in 2000		Households in 2004	
	Number	Percent	Number	Percent
0 Vehicles	69,608	5.1%	62,525	4.5%
1 Vehicle	453,722	33.4%	452,334	32.3%
2 Vehicles	572,951	42.1%	596,512	42.6%
3+ Vehicles	263,809	19.4%	288,030	20.6%

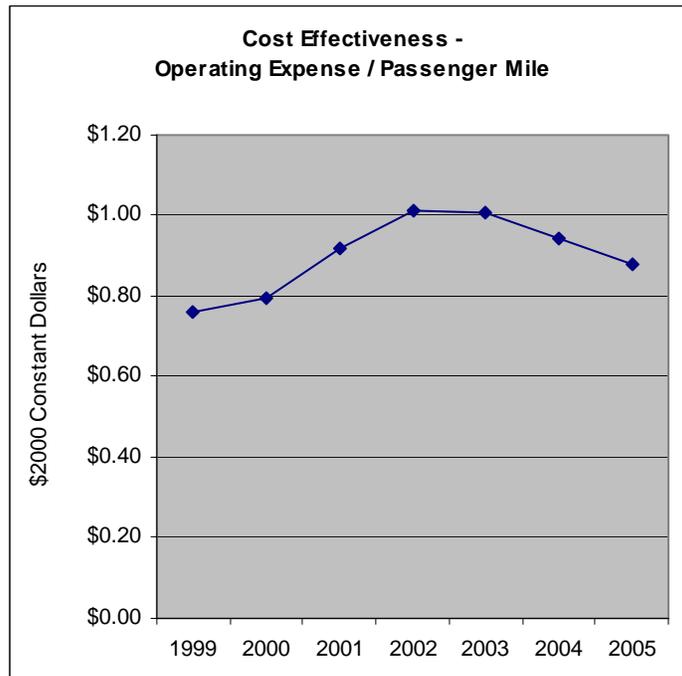
Source: U.S. Census American Community Survey 2004 and 2000

The following graph shows service effectiveness, which is the number of trips provided per hour of vehicle service, or more specifically, Unlinked Passenger Trips per Vehicle Revenue Hour. Service effectiveness declined from 1999 to 2003, but has since rebounded in 2004 and 2005. There have not been large changes in the number of vehicle hours provided by SMART, so changes in service effectiveness are strongly correlated with changes in ridership.



Source: SMART Internal Data

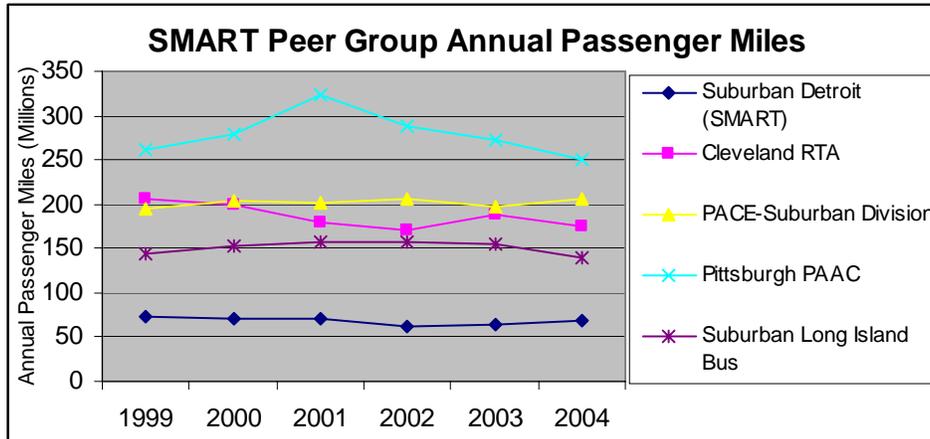
The following graph shows the trend in SMART’s operating expenses per passenger mile since 1999, with operating expenses expressed as constant 2000 dollars. An increase in operating expenses per passenger mile represents declining cost effectiveness, whereas a decrease in operating expenses per passenger mile represents increasing cost effectiveness. SMART’s inflation-adjusted operating expenses in 2005 were nearly the same as in 2001. Thus, SMART exhibited declining cost effectiveness from 2001 to 2002, as ridership decreased significantly in that year, but as SMART’s ridership rebounded in subsequent years, so did SMART’s cost effectiveness.



Source: SMART Internal Data

SMART’s vehicle revenue miles have remained roughly proportionate to vehicle revenue hours from 1999 to 2005. Additionally, SMART’s increases in operating costs do not seem to be unusual. An analysis of the composition of SMART’s operating expenditures shows that each major component of expenditure has constituted a nearly constant portion of overall expenditures over time.

Although SMART’s ridership has recently increased, its overall ridership levels remain well below those of all members of its peer group.



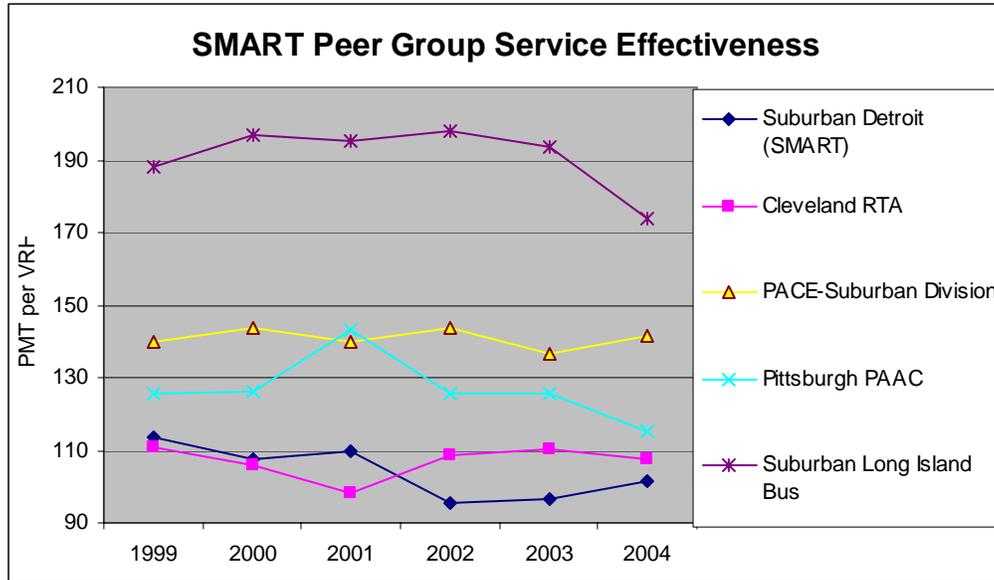
Sources: National Transit Database, SMART Internal Data

In comparison to its peers, SMART has a much higher average passenger miles traveled (PMT) per unlinked passenger trip (UPT). This reflects the high levels of ridership for SMART on its commuter routes, connecting the City of Detroit with the outlying suburbs, and its relatively large service area.

	2004 PMT per UPT
Suburban Detroit (SMART)	7.8
Cleveland RTA	3.7
PACE-Suburban Division	6.5
Pittsburgh PAAC	4.3
Suburban Long Island Bus	4.6

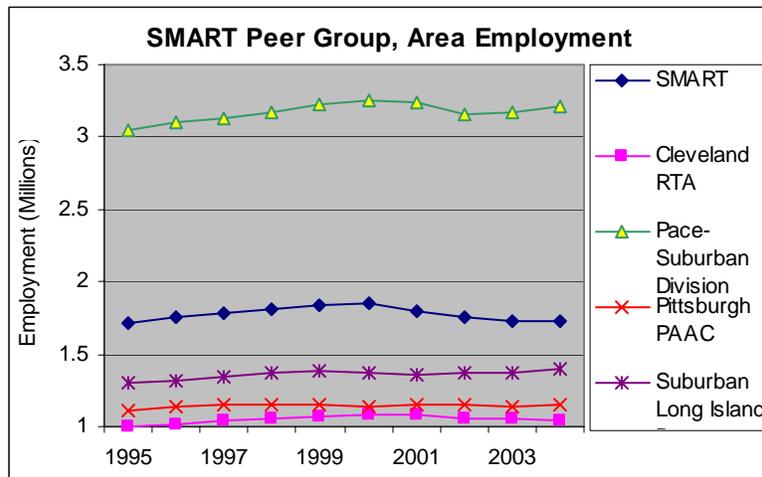
Sources: National Transit Database, SMART Internal Data

SMART’s PMT per vehicle revenue hour remains below that of its peer group, again indicating that while ridership has increased, there is still room for additional improvement.



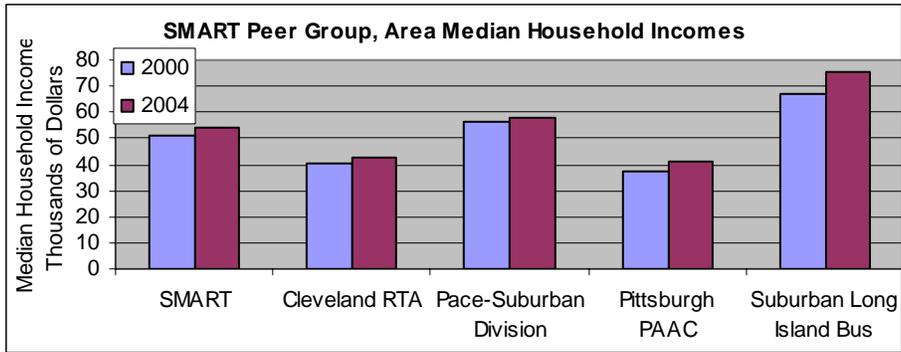
Sources: National Transit Database, SMART Internal Data

A major factor impacting ridership is employment, as shown in the following graph for each member of the peer group. SMART’s area employment peaked in 2000, about the same time as ridership also peaked. The area’s total employment, as measured by employed residents in the ACS, is above the other members of the peer group, except suburban Chicago, but nevertheless has less ridership than these areas.



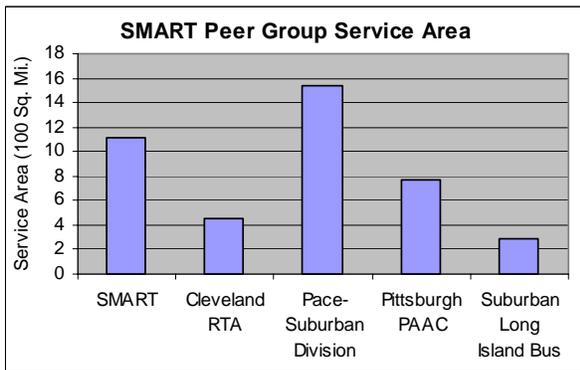
Source: U.S. Bureau of Labor Statistics Local Area Unemployment Statistics Survey

Ridership is also affected by household income, as wealthier households are more likely to be comprised of “choice riders,” rather than transit-dependent riders. The median household income of SMART’s service area is in the middle of the peer group at more than \$50,000, more closely matching that of suburban Chicago. Not surprisingly, the Cleveland and Pittsburgh metro areas, which both include inner-cities, have lower median household incomes. Meanwhile, the median household income of suburban Long Island is well above that of suburban Detroit, while also having higher ridership.

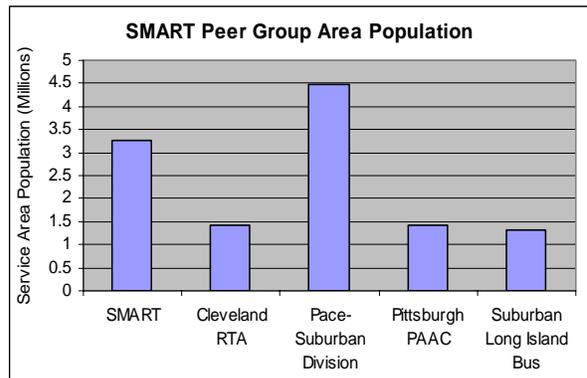


Source: National Transit Database

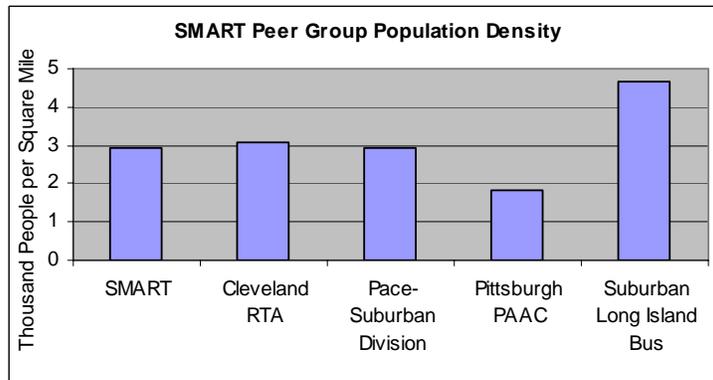
The follow graphs compare SMART’s service area, service area population, and service area population density with those of its peer group.



Source: National Transit Database



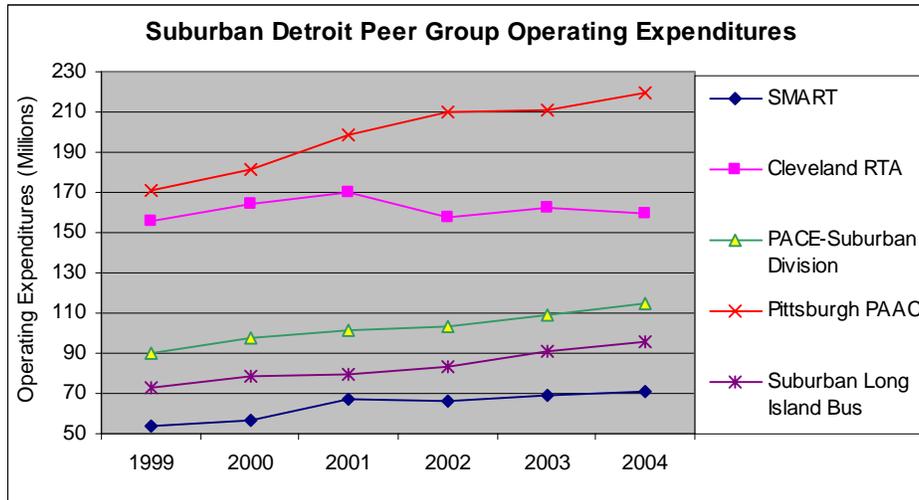
Source: National Transit Database



Source: National Transit Database

SMART’s service area is near the middle of its peer group, being larger than that of the Cleveland RTA or that of Pittsburgh’s PAAC. It is much larger than that of suburban Long Island and smaller than that of PACE-Suburban Division. Suburban Long Island, however, benefits from a relatively high population density as the following graph shows. SMART’s population density is comparable to that of Cleveland and suburban Chicago, both of which have higher ridership.

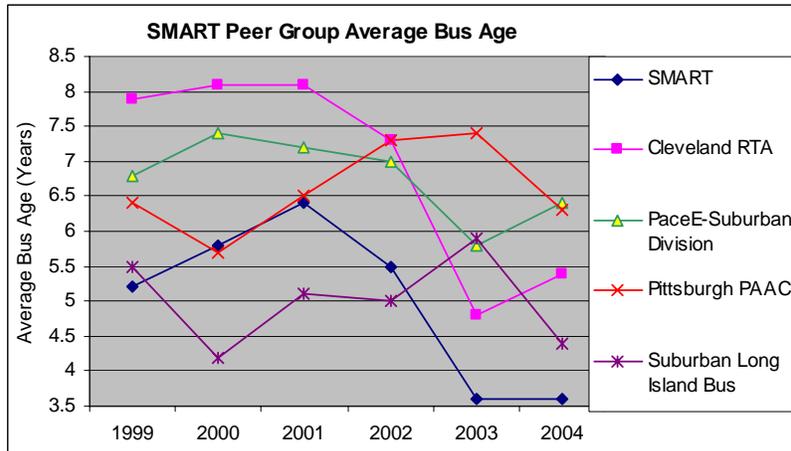
SMART has the lowest operating expenditures in its peer group, as shown by the following graph:



Sources: National Transit Database, SMART Internal Data

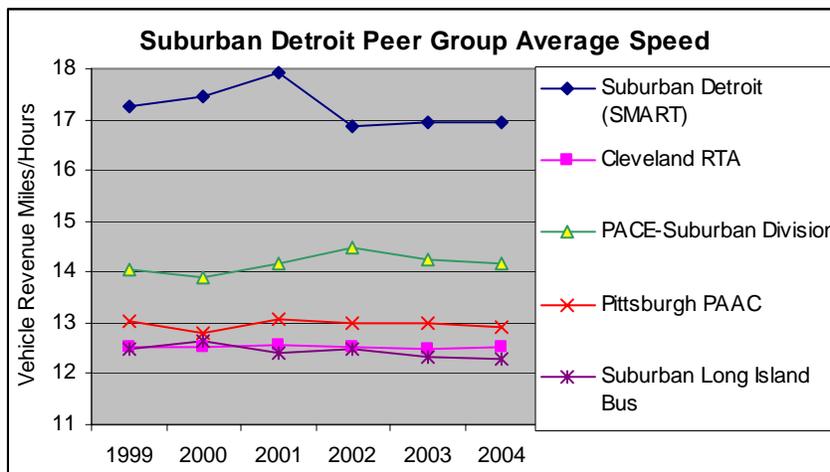
SMART’s operating expenses have increased by 32% since 1999, which is similar to the increase for the rest of its peer group, with the exception of the Cleveland RTA, which experienced nearly no overall change in its operating expenditures. Suburban Long Island Bus had a 31% increase in operating expenses, while those for PACE-Suburban Division and Pittsburgh PAAC increased by 27% and 28%, respectively. SMART’s operating expenditure level most closely matches those of PACE-Suburban division and the suburban Long Island bus, which are lower than those of the full metro-area Cleveland RTA and Pittsburgh PAAC. SMART’s service area and population are larger than those of suburban Long Island, so SMART’s lower operating costs may reflect not just lower prices in the suburban Detroit area, but perhaps a lower level of service frequency.

SMART has revitalized its fleet since 2001, giving it the lowest average bus age in its peer group at about 3.5 years. The purchase of new buses also coincides with SMART’s recent upturn in ridership. Newer buses, which tend to be cleaner and less likely to break down in the middle of a run, can often help attract “choice riders” to the service. The average bus age for members of the peer group is shown in the following graph.



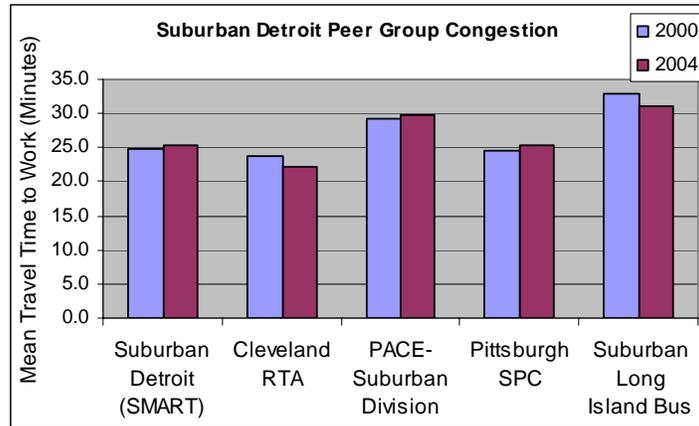
Source: National Transit Database

The average bus speed of each member of the peer group was calculated by dividing annual vehicle revenue miles by annual vehicle revenue hours, and is shown in the following graph. SMART’s average bus speed is significantly higher than those of its peer group. This reflects in part the large numbers of comparatively long-distance and high-speed commuter bus services provided by SMART, connecting downtown Detroit with the outlying suburbs. Even so, SMART’s average bus speed is significantly higher than those of PACE-Suburban Chicago and the suburban Long Island Bus, each of which would also be expected to have a similarly high proportion of commuter bus services. SMART’s higher average bus speed may reflect lower highway congestion in the suburban Detroit area than in suburban Chicago or Long Island.



Sources: National Transit Database, SMART Internal Data

Overall, neither bus age nor bus speed is a major impediment to ridership growth for SMART. SMART’s Average Bus Speed declined from a recent peak of almost 18 miles per hour in 2001 to 17 miles per hour in 2002 where it has remained steady. However, the ACS reports little change in the length of the average commute to work, which indicates that highway congestion in the suburban Detroit area is remaining relatively constant. Overall, the mean commute time to work in the SMART area is in the middle of its peer group at about 25 minutes.



Source: US Census Bureau American Community Survey 2000 and 2004

Conclusion

SMART is faced with several unique difficulties in enhancing ridership. As a suburban transit agency, it must continuously coordinate all major initiatives with its urban partner transit system. It has a large service area, with employment centers predominantly spread out among the suburbs, rather than being concentrated in an urban center. The area does not have the benefit of a strong economy, with employment below its peak, and decreasing numbers of transit-dependent households. The number of regular commuters on transit, already at a very low level, has decreased even further during the recent economic downturn.

Nevertheless, SMART operates a fleet of relatively new buses, with numerous express routes that provide a fast service to its customers. The example of other agencies that have sustained ridership despite below-peak employment or large and disparate suburban service areas suggest that there may be opportunities for SMART to enhance ridership, despite the difficulties of its operating environment.

Observations and Recommendations

Service Coverage and Routes



Service Planning

SMART's service planners and schedulers are well qualified and have good tools available to evaluate performance of the present system and to develop service changes. SMART's management is willing to adapt service to changing travel demand, financial conditions, and institutional arrangements. This dynamic approach to continually improve the network is commendable. SMART's service plan emphasizes increasing frequency of off peak service, improving crosstown service, and developing innovative ways to expand access to fixed route (e.g., community transit, bikes on buses, and hybrid routes).

Two areas to be considered for more service planning emphasis are:

- Improving service productivity to further stretch limited operating funds and increasing frequency on lines with the most ridership potential; and
- Creating a simpler network design to make service easier for customers to understand, reduce route overlap, decrease travel times and increase frequency.

Service Productivity

SMART's overall approach is to emphasize service productivity given limited funding for operations, and coverage needs associated with its mandate and local funding sources. Productivity has two aspects: efficiency deals with how well resources are converted into service; effectiveness deals with how much those services are used by the traveling public. SMART's focus on more crosstown service and more frequent off peak service is the correct approach. In addition, to better match growing demand for intra-suburban travel, crosstown service is more efficient than rush hour radial service. SMART has also developed innovative options for providing lower cost service coverage in lower density areas. The hybrid and dial-a-ride services are effective ways to cover large areas at low operating costs.

Headways

RECOMMENDATION #1:

SMART should improve service frequency to at least every 30 minutes on lines 125, 200, 415, 440, 494, 495 and 710.

Research and experience indicate that improving route headways, especially from every 60+ minutes to every 30 or 15 minutes, is the best way to improve ridership through service planning.

Most lines in the SMART system run on headways longer than 30 minutes and many run every 60 minutes. Long headway lines that have the highest boardings per revenue hour are the best candidates for more frequent service.

A short-term goal would be to have a skeletal network of lines that run at least every 30 minutes, seven days a week throughout the day (peak to early evening). Existing long- headway service (more than 30 minutes) with the highest ridership effectiveness (boardings per revenue hour) would have the highest ridership return for investments in more frequent service. The summary table below shows which lines and days of the week appear to have good short-term ridership potential. Shaded cells designate days of the week when improved service is needed.

Line	Weekday	Saturday	Sunday
125			
200-01			
415-20			
440-60			
494			
495			
710			
295			
400			
405			
550			
753			
760			

Appendix A contains a table showing the sketch level method to identify the most promising lines for improved frequency, and lines that could be reduced or eliminated based on January 2006 performance data.

Service Evaluation

RECOMMENDATION #2:

SMART should use the number of boardings per platform hour to evaluate service.

Boardings per revenue hour is a good way to look at service effectiveness from a customer’s perspective, but it does not capture the cost to provide a particular service. For example, a crosstown or local route may have a high ratio of revenue to platform time (low proportion of recovery and deadhead time) while a rush hour express line may have a large proportion of deadhead time to and from garages. Each line might have similar boardings per revenue hour, but the crosstown and local lines would have higher rides per platform hour. A simple comparison among three types of lines (crosstowns, Detroit linehaul service, and park and ride service) shows weekday revenue-to-platform ratios of 80%, 75% and 47%, respectively compared to the 73% system average. The comparison included crosstowns 710, 730,740, 760, 780; Detroit linehails: 410, 450; and park and ride expresses 810, 830, 851.

An additional consideration in evaluating effectiveness is the number of peak buses needed on a line, as total cost is determined to a large extent by the number of peak pullouts. For example, using this approach, line 810 would be considered a low performing line and a candidate for potential reduction or elimination.

RECOMMENDATION #3:

SMART should reduce low ridership service and reallocate these savings to improve routes with higher ridership potential.

Funding for service expansion is not expected to increase over the next several years and SMART must continue to make effective use of public funding. SMART should reallocate service with low boardings per revenue/vehicle hour to lines with substantially higher ridership potential. Reducing or discontinuing low ridership service can be a difficult decision for transit managers because of its impact on riders, transit workers, and concerns from other stakeholders. Two components of successful service reallocation are detailed ridership data and a comprehensive outreach process that involves stakeholders.

SMART has a good method of estimating ridership by trip and line using manual driver counts. This is reliable information on which to evaluate service effectiveness and service change decisions. A critical part of reallocating service is an outreach process with the stakeholders and the affected community. Steps in the process include identifying and engaging stakeholders, making sure they understand the fact that the service is low-performing, engaging them in ideas to increase ridership, and making the ridership-based changes on a trial basis. If ridership does not meet required levels, then the service would be reduced or eliminated. A safety net for special needs riders, such as community service, should be considered. The ombudsman positions should take the lead on the outreach process, working with a service planner to handle the technical aspects.

Lines with fewer than 10 boardings per revenue hour or 7.5 boardings per platform hour could be considered low-performing lines and subject to potential elimination, provided that there is no trend of significant ridership increases. A suggested goal is to reallocate 50-100 weekly platform hours (1-2%) each year over the next 3-5 years.

Vanpools

RECOMMENDATION #4:

SMART should use alternatives to fixed route service in low ridership areas.

SMART should use vanpool shuttles to provide short connections between fixed route service hubs and employment areas not served by fixed route service. These shuttles should be helpful when there is a need to expand service coverage to a low demand or when reducing fixed route coverage as part of service reallocation. TriMet runs a shuttle van program funded by the Federal Highway Administration's Congestion Management and Air Quality program, FTA's

Job Access and Reverse Commute program, and local general funds. While overall demand for the program is limited, it has proven to be a very low cost alternative to fixed route service in cases where TriMet was compelled to provide some service in low demand areas.

SMART would contract with a vanpool services provider who would offer vans, including insurance and maintenance to employers or other employer groups. The employer or van participants provide the driver and gasoline. SMART should also consider converting low ridership fixed routes to hybrid service in order to lower unit operating costs and to provide connections to fixed route service.

Part Time Operators

RECOMMENDATION #5:

SMART should analyze and re-evaluate the potential use of part-time operators.

The SMART working and wage agreement allows for the use of up to 17% part-time operators. The present number of part-timers is well below this contractual maximum. Apparently, SMART's previous experience with part-timers did not yield significant cost savings due to turnover, absenteeism, and other performance-related issues.

SMART should perform an analysis of the potential for part time operators by conducting a "dummy" runcut to estimate labor savings in the runcut. These savings would have to be balanced against the other costs and impacts noted above to determine net financial and service impacts. SMART should contact Seattle Metro and TriMet which have had success with part-timer operators to learn how they have dealt with the challenges.

AVL Data

RECOMMENDATION #6:

SMART should develop methods to collect and process automatic vehicle locator (AVL) data.

Buses are equipped with AVL, but there is no way for schedule writers and service planners to collect and use the data to fix running time problems. SMART should assess what it would cost to develop both the software and hardware needed to acquire this information. AVL data would also be helpful in measuring lost service and the adequacy of layover and recovery times.

Route Network Design

The network can be somewhat intimidating to both new and existing riders. This can discourage existing riders from taking more trips on the system and can be a deterrent to new riders. Of the more than 50 line numbers, several operate along the same streets, but turn off at different locations and, in some cases, have different patterns.

RECOMMENDATION #7:

SMART should simplify its overall route design.

As the network migrates from a long-headway, coverage-based system to more of a 30-minute or less system emphasizing transfer connectivity, it would be practical to simplify the route structure. Under this approach, most passengers would transfer from one line to another instead of having a direct trip.

Our review of the network did not permit a detailed analysis of specific route changes. However, the following suggestions are offered as conceptual examples of the types of changes that could be considered. For example, SMART could increase off-peak frequency on Lines 495 and 410 outside 8 Mile Road and provide for transfers to DDOT buses at Fairgrounds during the off-peak. All Woodward lines could serve the Royal Oaks Transit Center, as the more consistent service pattern and transferring would compensate for the few minutes of additional travel time.

If the Livonia area is not part of the network in the future, then the resulting route changes can be integrated with a reconfiguration of the southwest area to emphasize service along Ford Road, Michigan, Fort, and Telegraph.

The Grosse Point lines (610, 615, 620, and 635) appear to offer opportunities for restructuring due to their low or average performance, radial orientation, overlapping, and closely spaced coverage.

RECOMMENDATION #8:

SMART should conduct stop-by-stop passenger boarding counts.

Driver counts appear to provide reliable data for line and trip level ridership assessment, but it would also be helpful to obtain counts by route segment to identify particularly weak route segments. This should provide data to remove some of the weaker branches out of the network as part of the larger effort to provide more frequent and streamlined service.



RECOMMENDATION #9:

SMART should integrate community transit service with fixed route service.

The community transit program is an excellent way to address local circulation and control issues. It is appropriate to keep these services integrated into the regional system so that they can serve not only local circulation needs, but also provide transfers to the fixed route system.

RECOMMENDATION #10:

SMART should develop a multi-year Concept Plan to communicate service principles.

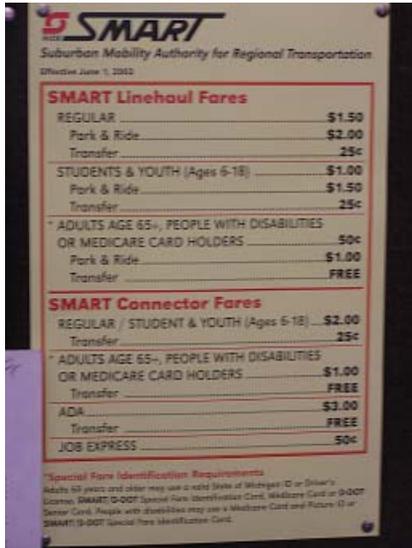
A sketch level plan that sets out principles for how SMART system will grow and change over the next 5-10 years would increase recognition of SMART's successes and build support for the changes needed to sustain ridership growth in the face of limited operating funds. Emphasizing productivity would build appreciation that SMART is using its funds wisely, has an unmet demand for more frequent service, and can productively serve that demand. This could include a peer comparison that would be expected to show that SMART is efficient, but that overall funding limitations result in lower service and ridership levels per capita than its peers.

RECOMMENDATION #11:

SMART should distinguish lines that have more frequent service from those with less service.

Lines that have 30-minute daily service should be distinguished from the rest of the system. Two lines now meet this threshold: 510 and 560. Candidate lines based on productivity based improvements include: 125, 200-01,415-20, 440-60, 494, 495 and 710. This could be as simple as giving them a different color or designation on the system map or branding the service with a name such as "Frequent Service." Using different colors to distinguish routes on the system maps might help sort out complicated route patterns for riders and would help emphasize crosstown route availability.

Fares and Fare Media



SMART
Suburban Mobility Authority for Regional Transportation
Effective June 1, 2002

SMART Linehaul Fares	
REGULAR	\$1.50
Park & Ride	\$2.00
Transfer	25¢
STUDENTS & YOUTH (Ages 6-18)	\$1.00
Park & Ride	\$1.50
Transfer	25¢
* ADULTS AGE 65+, PEOPLE WITH DISABILITIES OR MEDICARE CARD HOLDERS	50¢
Park & Ride	\$1.00
Transfer	FREE
SMART Connector Fares	
REGULAR / STUDENT & YOUTH (Ages 6-18)	\$2.00
Transfer	25¢
* ADULTS AGE 65+, PEOPLE WITH DISABILITIES OR MEDICARE CARD HOLDERS	\$1.00
Transfer	FREE
ADA	\$3.00
Transfer	FREE
JOB EXPRESS	50¢

*Special Fare Identification Requirements
Adults 65 years and older may use a valid State of Michigan ID or Driver's License. SMART ID-DOT Special Fare Identification Card, Medicare Card or ID-DOT Senior Card. People with disabilities may use a Medicare Card and Picture ID or SMART ID-DOT Special Fare Identification Card.

Fares are a critical component of SMART’s overall marketing mix for its services. Fares need to be properly priced to target different demographic groups, be easy to communicate and use, be readily available, and be priced appropriately to generate revenue without adversely affecting demand.

Overall, SMART has a good fare strategy and marketing program. The fare equipment is of high quality, with magnetic read and write capabilities. The fare media distribution system provides easy access with 36 pass sale vendors, order-by-mail, and website purchase options. The fare pricing is easy to use and understand and provides a good mix of discounted passes to attract choice cost conscious riders to the system.

Revenue Analysis

SMART has a base fare of \$1.50 with a premium \$2.00 fare for Park & Ride customers. The \$1.50 fare has been in place since FY 1993 when it was the highest bus fare in the United States. However, due to fare increases at other properties, the SMART base fare is now comparable to its peer agencies. Increases in ridership have increased revenues but at a lower rate than ridership. Ridership increased by 26% over the two year period from FY 2003 to FY 2005 while revenue increased by 10% for the same period. This discrepancy has served to reduce the average fare from \$1.07 in FY 2003 to \$0.97 in FY 2004 and \$0.93 in FY 2005. At \$0.97 in FY 2004, SMART’s average fare is consistent with that of its peer agencies.

A review of the ridership increases by fare type from FY 2003 to FY 2005 shows consistent growth across all fare categories. During this period, the most significant revenue growth was for Cash Fares with \$900,000. Tickets and Card sales increased a combined \$300,000. The large increase in cash revenue was expected, since it represents 71% of total revenue. The high cash to Pass/Ticket revenue is consistent with overall industry trends.

The revenue analysis does not indicate a need for a fare increase at this time. However, the decreasing average fare combined with the low farebox recovery ratio of 10% demonstrates the need to carefully consider a fare increase in next few years depending on SMART’s revenue needs. A good time to consider a fare increase is when ridership is growing since elasticity impacts on total revenue may be offset by the gains from new riders.

Passes

RECOMMENDATION #12:

SMART should develop a University Pass program targeted at local Community Colleges, Colleges, and Universities.

As indicated on the SMART website, the service area includes 21 campuses of community colleges, colleges, and universities. However, SMART does not have a specific fare targeted at this market. The college student market has a potential for producing high levels of ridership. A semester pass with significant discounting distributed by the colleges is one option. A university pass program that provides a pass to each student, employee, or both, for a fixed dollar amount is a second option. The university pass option requires significant front-end work to establish, but it has the most potential for building ridership. Other transit agencies have noted increased ridership from this type of program. Since the student would be given the pass upon enrollment, it is easy for them to try the service and become regular riders. The concept for a university pass would require a study to determine the current ridership and revenue generation levels to determine the payments the university would make to SMART. The program would be structured to be revenue neutral for SMART with the potential to increase ridership. In addition, the introduction of such a program has led to other service related changes negotiated between the transit agencies and the universities to improve service and to share costs.

Fareboxes

RECOMMENDATION #13:

SMART should ensure accurate and consistent farebox data entry by bus operators.

Farebox reporting capabilities are not being used to their full potential since bus operators are not consistently entering the route, run, and trip information correctly. Unclassified revenue is 10% of the ridership total for calendar year 2005. SMART staff does not have confidence in the ridership information overall or by route which dramatically decreases SMART's ability to analyze fare usage by fare type. SMART has a disconnect between its ridership reporting and the fares since overall ridership is reported by hand counts from the bus operators that do not provide fare related information. This disconnect in reporting reduces the effectiveness of any fare versus revenue analysis and reduces the ability to track route specific fare type market penetration.

Fare Revenue

RECOMMENDATION #14:

SMART should develop a specific protocol to verify the cash deposits made by Brinks Armored Car Services against the revenue counted by the fareboxes.

At this time, there is not a policy on cash revenue reconciliation between cash counted and cash reported in the farebox. Revenue is checked several times a year and discrepancies have not yet been found. However, tighter controls will help ensure that funds are properly secured and accounted for.



Fare Media

RECOMMENDATION #15:

SMART should continue to eliminate paper tickets as much as possible in the future.

SMART has significantly reduced the number of paper tickets being issued and plans to eliminate all of them in the future. The tickets are of little value to SMART and can pose farebox operational and maintenance problems due to their size. In addition, paper tickets are uniquely

vulnerable to counterfeiting and may contribute to fare abuse.

RECOMMENDATION #16:

SMART should implement a day pass.

The implementation of a day pass would provide a convenient fare to introduce new riders to the system. The customer would be guaranteed a return trip without the need for having the correct fare. It would be good for promotional activities and for area visitors. It could also be used to replace the paper tickets if priced properly and coordinated with DDOT.

Fare Data Analysis

RECOMMENDATION #17:

SMART should develop a mechanism for totaling pass sales and a methodology to analyze pass usage versus units sold and revenues.

SMART is very effective at monitoring its pass sales program to manage its revenues. However, it does not have the ability to analyze average fare by fare type for the regional pass or to compare revenue changes by pass type to the ridership usage changes. Being able to compare usage versus units sold is important to determine trip rates and average fare per trip for the regional pass. Revenue, ridership, and units sold trend analysis would ensure reporting validation.



Fare Technology

RECOMMENDATION #18:

SMART should continue to develop its smart card program.

SMART is currently developing its smart card abilities. There are several ways SMART can benefit from using smart cards in the future. Long-term cards can be established that can be paid for electronically. The need to register the cards in case they are lost also provides an instant customer database for use in customer research.

Operations, Service Quality, and Amenities

The SMART System operates nearly 300 fixed route buses and over 100 connector vehicles in providing over 11,000,000 passenger trips annually. These services are provided and supported from three terminals: Oakland, Macomb, and Wayne. The three terminals vary in size but they each provide similar services.

Tours of these three operating facilities, the Royal Oak Transit Center, and the Pontiac Maintenance Terminal were conducted by Diane McGill, Director of Transportation and Marvin Perkins, Director of Maintenance. Employees were forthright with their comments and the Transportation and Maintenance staff appear to be operating in a cooperative manner to provide the best possible service to the customers of the SMART system.

Through the interview process, observations at the facilities, and in our travels between facilities, it is evident that the maintenance program has greatly improved over the past few years. Quality buses are provided on a daily basis to provide full service. In addition, the entire fixed route fleet has been replaced with good quality Gillig buses, ranging from 29 feet to 40 feet in length. These buses are all “low floor” and equipped with ramps to expedite boarding of all passengers and to facilitate boarding by persons with disabilities.

Staffing levels in Maintenance and Transportation are below budget, but appear to be at sufficient levels to provide a full compliment of service on a regular basis.



Bus stops

RECOMMENDATION #19:

SMART should make improvements at bus stops to enhance the experience of waiting passengers.

There are 7,000 bus stops throughout the SMART service area, but only 200 shelters. SMART should identify and prioritize heavily used stops, and work with each jurisdiction to reach an agreement on the need for and provision of bus shelters. Then, SMART should coordinate with the jurisdictions on the design, procurement, and installation of the shelters within the community.

SMART should increase the number of bus stop concrete pads (waiting areas). There are relatively few bus stop pads compared to the number of stops. The majority of stops observed were stationed on grassy area, with no direct access to the waiting area. Passengers observed waiting for the bus were generally located on sidewalks, ten or more feet from the actual stop, and only walked to the stop as the bus approached. The potential for passing up customers increases when it is not apparent whether a person is waiting for the bus. Concrete pads should

be provided at stops currently in grassy areas with an access to the pads to improve the waiting experience especially during the wetter months of the year.

RECOMMENDATION #20:

SMART should provide customer information on bus stop signs.

Currently, bus stop signs only indicate that it is a SMART bus stop. The signs provide no information for current or potential commuters.

As signs are replaced, they should be redesigned to include route numbers, service restrictions (e.g. AM ONLY, NO PICK-UP, Limited Hours of Service), and a customer information telephone number. Maps and schedules should be installed in all shelters and at major bus stops. These additions will assist current patrons, but more importantly, provide sufficient information for potential customers to inquire about services provided at each stop.

Security

RECOMMENDATION #21:

SMART should install security cameras on all fixed route buses.

Many potential patrons and current patrons have a perception of a lack of safety or security or both, on the bus system. Currently, the entire bus fleet is not equipped with security cameras. On-board cameras increase the perception and reality of safety and deter crime. Cameras also become a valuable tool for use in investigations by Transportation, Service Development, and General Counsel staff reviewing third party claims and play a major role in accident and incident investigations.



RECOMMENDATION #22:

SMART should make regulatory and security announcements on all routes.

Bus operators do not appear to be regularly making the required ADA and security announcements on buses. The announcements are not only requirements, but are beneficial to passengers during their commute. In order to ensure bus operator announcements, SMART should consider installing public address systems, or install a technology that provides this

requirement and service (e.g., automated voice enunciators). These improvements should assist new passengers and particularly persons with disabilities.

Information on Buses

RECOMMENDATION #23:

SMART should attach fare information to the bus fareboxes.

Currently, the only information on the fare structure is found on cards in the bus interior advertising racks, past the farebox location.

SMART should install a decal on the farebox side facing the front door, which will provide information for any rider who boards the bus. This will reduce boarding time, reduce the need for customer and operator interactions, and will assist potential new customers who may be hesitant about riding the bus. These decals can be printed in sufficient size to allow passengers to read them prior to reaching the farebox.



RECOMMENDATION #24:

SMART should ensure that each bus contains system information for the public.

All buses are equipped with information holders located directly behind the bus operator's station. A sampling of the buses at each terminal found there was a little or no information in these holders. For example, route schedules, system maps, special event information, emergency information, and other agency information can be provided to customers using these holders.

Since many routes have long travel times, this is an excellent opportunity to share information with the customers on the agency, its goals, special events, and service changes.



Fleet Appearance

RECOMMENDATION #25:

SMART should change the black wheels with black tires appearance of its fleet.

The vehicles' initial appearance could be improved significantly. The existing black wheels with black tires produce a dull appearance, provide no contrast, and detract from the overall appeal of the vehicle. Consideration should be given to replacing the wheels with powder-coated steel wheels of a different color or shiny or brushed aluminum wheels. An example of the suggested change is found in the bus photograph.

RECOMMENDATION #26:

SMART should ensure that removal of advertising does not harm fleet appearance.

Advertising on vehicles is a component of revenue generation. However, the removal of advertising from the buses often removes the paint or leaves a residue behind. SMART should remove the residue, immediately replace advertising with new advertising, or clean and repaint the affected panels. Failing to do so distracts from the overall appearance of the vehicle.

RECOMMENDATION #27:

SMART should develop a program to repaint its buses every 4-6 years, based on funding availability.

SMART anticipates keeping the buses in service for at least 12 years and currently there are no plans to repaint the vehicles during their lifetime, unless it is required as a result of an accident or other factors. The appearance of the vehicle is an important component in attracting ridership.

Park and Ride

RECOMMENDATION #28:

SMART should implement restrictions on park and ride use in order to maximize space for SMART commuters.

Every park and ride lot is open to anyone who wants to park, whether they are using the transit system, carpooling, or using other carriers. SMART is reaching capacity parking levels at some lots. Any park and ride lot over which SMART has control should have restrictions placed on its use to ensure that SMART commuters have access to parking.

Express Routes

RECOMMENDATION #29:

SMART should offer additional express services to reduce travel times.

SMART could study reducing the travel times on certain long routes, by potentially providing limited or express route service combined with regular route service. This will reduce running time, and potentially attract additional riders. A premium fare may be a possibility on these services.

Technology

RECOMMENDATION #30:

SMART should use technology (e.g., ITS) to maximize the dissemination of information and planning.

Since SMART is investigating the replacement of its current AVL system, this is a good opportunity to investigate new technologies that integrate and incorporate existing systems that could provide real-time bus information to commuters through website links, personal digital assistants, cell phones, or at bus stops, and provide tools such as automatic passenger counters to assist staff in providing and adjusting service as conditions change.

RECOMMENDATION #31:



SMART should continue its effort to replace the Series 40 engines in all Gillig buses.

The Detroit Diesel Series 40 engines are not functioning properly in the SMART Gillig buses and the engine is not sufficient to meet the needs of a true transit bus. The engine exceeds its ability and then breaks down. SMART staff is pursuing a program that would replace the Detroit Diesel Series 40 with a rebuilt Cummins engine. With Detroit Diesel no longer in the engine business, Cummins is a viable and proven engine to meet the needs of the SMART

service demands.

Spare Ratios

RECOMMENDATION #32:

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

Due to the use of the Detroit Diesel Series 40 engines, SMART is maintaining a 27% fleet spare ratio to insure that an adequate number of buses is available for service since 20-30 buses are sidelined for engine repair at any one time. This spare ratio should be reduced to 20% or lower by the Cummins engine replacement program. The additional buses then should be taken out of the regular service cycle and placed in a contingency fleet for service expansion or fleet rotation. This reduces overall maintenance cost and frees funds for other efforts to increase ridership.

Fuel procurement

RECOMMENDATION #33:

SMART should promote the regional procurement of diesel fuel and the regional use of the agency-owned tank farm.

The regional procurement of diesel fuel will likely reduce operating costs which can positively impact other areas of the agency. The use of SMART's tank farm should be explored. In these times of uncertainty of timely fuel production, availability and costs, being able to leverage fuel and assure customers that SMART is "smart" on fuel should win public approval and appreciation for SMART. This may lead to additional ridership if the public envisions SMART as a reliable and cost effective alternative to the automobile during uncertain times affecting fuel availability and cost.



Marketing, Communications, and Advertising

SMART has been able to increase ridership during times of high area unemployment. The SMART staff is knowledgeable and dedicated to the success of the organization. SMART should continue the successful programs it has in place. SMART can undertake some additional actions that are affordable and easily implemented.

Market Research

RECOMMENDATION #34:

SMART should implement a market and rider research program.

There is minimal consumer or rider research available to SMART. This research, while not inexpensive, is vital to the formulation of targeted messages to riders and the community. This research will also be useful in any voter based campaign that SMART may need to undertake. If executed properly, the information obtained from this study can be used to discover the potential effectiveness of messages. The messages used should be based exclusively on research and such research should drive all of SMART's marketing and public relations efforts.

Staffing

RECOMMENDATION #35:

SMART should create and fill the position of the Director of Marketing.

The importance of reaching out to the community is measured every four years with an election. SMART has bright and dedicated individuals in the areas of marketing and public relations. Effectiveness in these areas as well as in public information, customer information, and telephone information is impossible without a talented and qualified professional coordinating and directing these efforts. This is particularly important with SMART facing daily its rider-voters and the general public voters every four years. These areas are much too important to leave as an additional job assignment for others in the organization. Another benefit of filling this position would be adding another member to the executive team.

RECOMMENDATION #36:

SMART should create and fill internship positions in both Marketing and Public Relations.

The Detroit area has twenty one campuses of community colleges, colleges, and universities. This should be a fertile area for recruiting interns to assist with the execution of the missions of the Marketing and Public Relations Departments. Interns can make real contributions, especially during the years when an election occur. Interns can work for either a salary or for academic credit. This accomplishes three goals: extra help at times of increased workload; the creation of a pool of potential employees and riders; and building relationships with the universities and colleges in the area.

RECOMMENDATION #37:

SMART should require representatives of Marketing, Public Relations, or both to participate in agency decisions that affect customers or the public.

The input of the Marketing and Public Relations staff is crucial to any project being undertaken by SMART. These departments should be charged with representing the customer in organizational discussions. Marketing and Public Relations should have the opportunity to participate in any area that has an agency-customer interface. This should include but not be limited to bus purchases, fare media, security, maintenance policies, fare policies, the web site, or actions that might impact the public and its perception of SMART. SMART's ombudsman concept works very well. The Marketing and Public Relations departments can offer one more layer of public consciousness.



Advertising

RECOMMENDATION #38:

SMART should assume the responsibility for bus exterior, interior, and shelter advertising sales.

SMART's contract with the sales organization allows for a 60%/40% split of revenues. Therefore, of the gross revenue of \$830,000, SMART receives approximately \$500,000 per year from its advertising contract. If SMART were to undertake the sales of advertising it could pay for a position to sell advertising, TransitChek, and other SMART services. This plan can generate enough revenue to undertake many of the marketing efforts recommended in this section.

Transfers

RECOMMENDATION #39:

SMART should create a transfer relationship with Transit Windsor in Ontario, Canada.

SMART customers can transfer to DDOT buses and DDOT customers can seamlessly transfer to SMART buses. This opportunity is also afforded to Flint Mass Transportation Authority customers. The next logical step is to include the other area transportation agency, Transit Windsor. Discussions should begin immediately to accomplish true area wide mobility.

Marketing

RECOMMENDATION #40:

SMART should closely examine its brand identity.

Brand identity is all that the public associates with a product. SMART should look closely at its product and discover what current and potential customers think of SMART. Areas of examination should include but not be limited to: bus stop locations and amenities, curb appeal of equipment, destination sign readability, availability of information, operator demeanor, ease of use and understanding of the system, and graphics. The entire notion of branding should be addressed throughout the organization.

RECOMMENDATION #41:

SMART should eliminate the term “line haul” from its corporate lexicon.

SMART uses the term “line haul” and fixed route interchangeably. The former term connotes movement of freight or live stock rather than the movement of people. To our knowledge, no other public transportation system in the United States uses this term. Therefore, SMART should exclusively use the term “fixed route” for service that was previously referred to as “line haul.” We recognize that this change will take several years to implement due to existing corporate culture and the public’s perception.

RECOMMENDATION #42:

SMART should expand the “get a job, get a ride” program to include part time employees.

The “get a job” program is an outstanding program sponsored by SMART. SMART should expand the program by offering it to the growing part time market. This is no different than using a successful brand to expand the product line. This will help increase ridership, help mobility, and contribute to the areas economic vitality. With appropriate administrative safeguards, SMART can grow an already successful program. The ability to capture a long term rider is more than offset by any early loss in revenue.



Have you gotten a new job within the past 30 days?
Do you work at least 32 hours a week?

Get A Job, Get A Ride!

Eligible employees receive one **FREE SMART \$1.50 31 Day Pass** to ride SMART's fixed route service. Your employer must first enroll by calling **(313) 223-2191**

SMART
For Our Community

For routes, scheduling & information in Braille, large print or audio, call **(866) 962-5515** or visit smartbus.org

RECOMMENDATION #43:

SMART should use transfers to educate passengers about the agency.

Placing information about SMART on the actual transfer medium is an inexpensive way to educate customers about policies, plans, and the importance of SMART

RECOMMENDATION #44:

SMART should use the bus radio boxes to place information for customers or to place advertising.

The radio box in each bus can be outfitted with a sign holder. The impact is the equivalent of an end cap in a grocery store. The radio box is a high visibility location that is readily available at no additional cost.

RECOMMENDATION #45:

SMART should expand telephone information hours.

The telephone information center is open from 6 a.m. to 6 p.m. This leaves a gap of at least five hours a day where customers without a schedule have no place to get bus information. Telephone information should be available at a minimum whenever vehicles are in operation. This could be accomplished by after hours contracting or by reduced staffing, as appropriate. With the increased use of cell phones, customer information can be more readily available than ever before.

RECOMMENDATION #46:

SMART should again become a member of the American Public Transportation Association (APTA).

The advantages of APTA membership outweigh the cost. There is much to be gained by SMART's renewing its membership. The Center for Transportation Excellence is an excellent resource for the issues facing SMART. PT2, an advocacy program of APTA, has materials available that provide ideas and research very much in line with SMART's needs. It is appropriate that an organization of this size make the investment in an association that has systems similar in size and in needs as those of SMART.

Web Site

Transit agency websites are increasingly important as a marketing and communications tool, and SMART's website is no different. The SMART website can be revised to better relate to customers and be used as a ridership building tool.

RECOMMENDATION #47:

SMART should add an interactive trip planner, routes search function, and real time bus schedule information to its website.

Partnerships

SMART embraces the concept that “we are willing to try anything,” when it comes to forming partnerships and increasing ridership. This philosophy is reflected in the wide array of partnerships that currently exist, or have been previously attempted by SMART.

Airport

SMART has attempted over the years to obtain the airport’s cooperation in establishing quality airport bus service. After several years, SMART was able to establish initial bus service, albeit at a remote and inconvenient location. In recent years, the airport has become more amenable to SMART service, particularly with an emphasis on serving employees. At this time, however, most airport-area employers are not purchasing TransitCheks for employee use in obtaining SMART bus fare.

RECOMMENDATION #48:

SMART should recruit the airport authority, airlines, and main concessionaries as participants in the TransitChek program.

Focusing SMART’s airport efforts on airport employees will alleviate concerns from the airport about cannibalizing the lucrative taxi contract, as well as help generate “everyday riders” for SMART services. Employer participation in this program will free up valuable parking spaces for the airport authority. Increased airport service based upon employee ridership may also make SMART airport service more attractive to travelers, further enhancing ridership.

Bus Shelters

SMART previously had a contract with Gateway Corporation to build, clean, and maintain advertising-supported bus shelters and to pass a portion of the revenues on to SMART. It did not fulfill its obligations under this partnership before filing for bankruptcy.

Advertising is not possible at all bus shelters due to the presence of restrictive “sign ordinances” in many SMART member communities. Prior experience and existing regulations make it difficult for SMART to enhance its bus stops through partnerships.

Community Shuttles

SMART has an extensive “community service” program, where it provides funding to numerous communities within the service area. In exchange, the communities operate demand response or flexible route services open to the general public in vehicles bearing the SMART logo. SMART coordinates these services with its own “Connector” flexible route and demand response service, its ADA paratransit service, and its fixed-route services. In particular, SMART’s Connector services are used as a backup for the community services in times of high demand, as well as

providing connecting service to community service passengers who wish to travel outside of the local community service area. This program has been very effective at increasing SMART's visibility in its constituent communities. In 2006, SMART is celebrating the 10 year anniversary of its community service program, and is hosting birthday parties in area senior centers and community centers, which has generated favorable news coverage.

Since ridership on community services is not reported to the National Transit Database (NTD), it is not used in calculating apportionments.

RECOMMENDATION #49:

SMART should report ridership to the NTD on these community services and it should be credited to SMART.

The SMART Connector Services are directly-operated demand response and flexible route services offered to the general public. Four communities are served by "Advanced Reservation Connector Service," requiring either 2 or 6 days advanced reservation, based on the type of destination. Four other communities are served by "Flexible Route Connector Service" offering same-day flexible route service at selected bus stops or by telephone call. One community is serviced by "Dial-a-Ride Connector Service," offering demand response service within 60 minutes of a telephone call. These three services are frequently used by the elderly and disabled, and reduce reliance upon SMART's ADA Paratransit Service, in addition to providing convenient services to the general public. There are additionally three "Jobs Express Connector Services," providing flexible route service to businesses in those areas.



RECOMMENDATION #50:

SMART should consolidate and simplify the requirements and practices of its Connector Services to make them easier to understand and use.

RECOMMENDATION #51:

SMART should consolidate and simplify the requirements and practices of its Community Services with the requirements and practices of its Connector Services, to the extent possible,

to make all of the services easier to understand and use.

Although the "Community Service" and "Connector" service are separate programs, the average rider is not aware of the differences in funding and operation between the two services. Rather, the average rider sees both services as fulfilling the same basic service niche. Unifying the requirements and practices of these services to the fullest extent possible, will make the service easier to understand, and will likely increase ridership.

RECOMMENDATION #52:

SMART should create a direct link on its website to information on its Community Shuttles, similar to its links for Linehaul, Connector, and ADA Paratransit service.

Ridership team members found it difficult and time consuming to locate information on Community Shuttles from the SMART website. Having a direct link to these services will help increase their visibility.

Employers

SMART frequently sponsors on-site presentations at local businesses, both large and small, on how to use transit. When SMART is planning route changes, it conducts a “Buses to Business” breakfast program with the local business association. Depending on the nature of the change, SMART may meet with other community groups as well.

SMART has an innovative program known as “Get a Job, Get a Ride”, whereby newly hired employees are given a free month’s pass, paid by the hiring employer. The idea is to get those entering the work force to try transit, and to provide mobility to new workers while they await their first paycheck. This program is very successful, with extensive participation from employers in the SMART service area. See recommendation #42 regarding this program.

SMART uses the “Get a Job, Get a Ride” program as a stepping-stone for recruiting employers for participation in the employer-paid TransitChek program. The TransitChek program allows employers to purchase transit fare media of up to \$105 per worker each month and provide the passes on a tax-free basis to their employees.

RECOMMENDATION #53:

SMART should emphasize the low per-hour cost of TransitCheks to employers in its “Get a Job, Get a Ride” program, but who do not yet participate in TransitChek.

The SMART 31-day pass costs \$47. With an average employee work month of 173 hours, this equates to an additional cost to an employer of \$0.27 per hour per employee. Since the costs are considered a business expense and may be deducted on an employer’s Federal corporate income tax return, the cost drops to only \$0.18 per hour per employee, using a 34% Federal corporate income tax rate. Payroll taxes do not apply since this is considered a tax-free employee benefit. The \$.18 represents a 3.5% increase for minimum wage workers, and significantly less for higher paid employees.



Environment

The Detroit Area has numerous “Ozone Action Days” during the summer, sometimes as many as five consecutively. This makes offering “free transit” on these days financially infeasible.

RECOMMENDATION #54:

SMART should partner with the Michigan Department of Transportation and DDOT to ensure that local highway signs on “Ozone Action Days” recommend that commuters “ride the bus.”

RECOMMENDATION #55:

SMART should ensure that local television and radio stations recommend that commuters “ride the bus” on “Ozone Action Days.”

RECOMMENDATION #56:

The SMART webpage should display a special banner or message on “Ozone Action Days.”

SMART participated in a major Earth Day celebration at Oakland University in Troy. SMART provided a demonstration bus and information booth at the event, as well as shuttle service from the parking lots.

RECOMMENDATION #57:

SMART should design an “Earth Day” bus, using bus-wrap style advertising to decorate the bus with an environmental theme for use at this event and at other outreach opportunities.

RECOMMENDATION #58:

SMART should occasionally use the “Earth Day” bus for regular route service. If possible, SMART should let passengers “ride free” if their route is being served by the “Earth Day” bus.



Fairs

SMART is a major sponsor of the Michigan State Fair, which is held annually in the heart of its service area. SMART is listed as a major sponsor on all State Fair printed material, has a large banner on the agricultural barn, has numerous smaller banners throughout the fair, and has its logo printed prominently on the back of the uniforms of State Fair volunteers.

Guaranteed Ride Home Program

Guaranteed Ride Home (GRH) programs assure commuters who forego driving alone that they will have a timely and inexpensive way to leave work in the event of an emergency. The purpose of the program is to increase transit use by addressing the concern of potential transit riders that they might be left without access to transportation in the event of a personal emergency when riding transit to work. SMART does not participate in the existing regional program sponsored by the Southeast Michigan Council of Governments (SEMCOG). SEMCOG's program only covers those who carpool or vanpool to work. SMART has taken preliminary steps to partner with SEMCOG for a pilot program that would include bus commuters only working in Auburn Hills, Michigan.

RECOMMENDATION #59:

SMART should implement a pilot program with SEMCOG for commuters working in Auburn Hills.

The program should be for at least a one year period.

RECOMMENDATION #60:

SMART's GRH pilot should include personal or family emergencies among authorized uses.

The present proposal only includes personal or family illness and unexpected overtime. The additional category would cover situations such as damage to one's home by fire, flood, or burglary or auto theft at home, which is consistent with most other GRH programs in the U.S.

RECOMMENDATION #61:

SMART's GRH pilot should add the requirement that claims for GRH may only be made on days in which the commuter used the bus.

This would make the program consistent with most other GRH programs across the U.S.

RECOMMENDATION #62:

SMART's GRH pilot should permit the use of taxicabs for trips of up to 20 miles and the use of rental cars for trips of from 20-50 miles.

The present proposal permits the use of taxicabs for rides of up to 50 miles. This could be cost prohibitive. The use of rental cars for the longer trips will be significantly cheaper than the use of taxicabs. This policy would be consistent with several GRH programs across the U.S.

RECOMMENDATION #63:

SMART should enter into an agreement with at least one rental car company to facilitate use by GRH customers and to contain costs.

Some rental car companies will deliver the cars to the location where it is needed at no additional cost. This will reduce the reliance on taxicabs in cases where rental cars are not available. SMART is in a position to negotiate prices with rental car companies that would be less than what an individual could obtain. This has been accomplished by several GRH programs across the U.S.

RECOMMENDATION #64:

SMART should evaluate the success of the pilot program after one year and include usage rates, costs, number of participants, and the number of new riders gained as a result of the program.

This information can be used by SMART to determine whether continuation or expansion of the program is appropriate.

Hospitals

SMART has occasionally given presentations at area hospitals to educate employees on how to ride SMART. There are more than 20 hospitals served by SMART.

RECOMMENDATION #65:

SMART should develop a partnership with area hospitals, where they would purchase SMART fare media for distribution to families of long-term care patients or to emergency room discharges who do not have their own transportation.

Other

On St. Patrick's Day, SMART offers free bus rides which are promoted locally by Mothers Against Drunk Driving. SMART also makes a presentation on how to use transit at the annual "Senior Day," sponsored by the Area Agency on Aging.

SMART engages in partnership activities with "Automation Alley," a consortium of businesses that promotes the use of technology. One company, Altair, is designing a technologically advanced bus, which will be first provided to the SMART and D-DOT systems.



Schools

SMART sponsors three health clinics each year, one at a school in each County of the service area, and taught by an assistant coach from the Detroit Pistons. SMART will occasionally give presentations at targeted schools in areas with low ridership.

RECOMMENDATION #66:

SMART should develop a "summer youth pass," sold through local schools.

Students often have limited mobility during summer months when school is not in session, and when their parents are at work. Individuals who begin using transit when they are young and unable to drive, may be more likely to ride transit when they are older. A summer youth pass can encourage these students to make use of SMART for basic mobility

during the summer months. By specifically targeting the summer months, SMART may reach additional potential users who have not tried the existing 31-day discounted youth pass program. A summer youth pass would target the summer break period, and would appear easier to use to potential riders who might otherwise try to maximize their use of successive 31-day-passes during the summer months. The summer months are typically associated with relaxation and recreation, which is also a valuable association for SMART's brand identity.

Sports

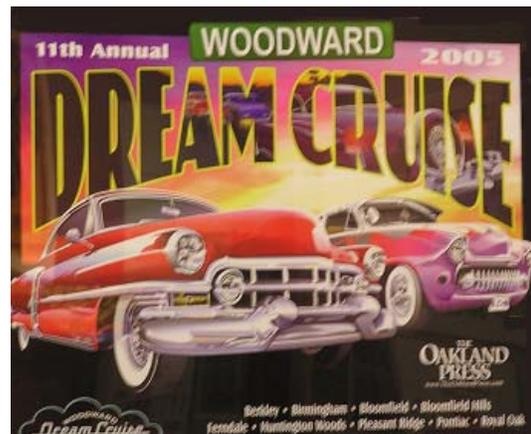
SMART has a partnership with the Detroit Pistons basketball team, offering a ticket-and-transportation package to fans in the city of Detroit to travel to weekend basketball games in suburban Auburn Hills. This bus service makes six stops in the city of Detroit before continuing on an express basis to Auburn Hills. The package includes a discounted game ticket, with the opportunity for fans to purchase an upgrade. This partnership is successful because SMART's most productive bus routes operate on similar service from the City of Detroit to employment centers in the suburbs, including Auburn Hills.

SMART offers free service to Detroit Tigers baseball games in downtown Detroit on Opening Day and selected "Thursday Senior Days" throughout the season.

SMART does not currently have any partnerships with the Detroit Redwings hockey team, nor with the Detroit Lions football team, both in downtown Detroit. In the case of hockey games, SMART believes that hockey fans do not represent a key demographic for transit ridership, and the timing of the games is often less conducive to offering transit service than the timing of basketball games.

Tourism and Recreation

A major annual event in the service area is the Woodward Dream Cruise, a parade of classic automobiles that attracts over one million visitors. SMART is a coordinating partner of the event, and has a non-voting board seat. SMART operates its existing Woodward Avenue service for free during the event, and coordinates the inevitable disruptions to its route networks caused by this event with the organizers.



The National Park Service runs a partnership program in Southeastern Michigan known as the MotorCities National Heritage Area. Four of the nine "visitor hubs" for the National Heritage Area are served by SMART: The Henry Ford Museum in Dearborn, The Walter P. Chrysler Museum in Auburn Hills, GM World in Detroit, and the Detroit Historical Society in Detroit. The hub at Nankin Mills in Westland is also located within the service area, but is not served by a SMART linehaul route.

RECOMMENDATION #67:

SMART should ask the MotorCities National Heritage Area to provide route information on their website on using SMART to visit these four hubs.

RECOMMENDATION #68:

SMART should develop a “walking map” of one or more key communities served by SMART, such as downtown Detroit or Royal Oak.

This map would show SMART bus stop locations including destinations served by routes at that stop, as well as key restaurants and businesses within walking-distance of the area.

RECOMMENDATION #69:

SMART should develop partnerships with area restaurants, shops, and businesses using its website (including its “areas served by SMART” page) and its “MySMART” e-mail updating service.

One such partnership could be comparable to the Dallas Area Rapid Transit’s “Destination Deals”, whereby area restaurants or shops offer small discounts to holders of their passes. A suggested name could be “Get a Pass, Get a Deal.” This would have the secondary effect of promoting the sale of SMART’s passes over individual fares, which could enhance recurring ridership. Participants in a SMART program could then be promoted through the SMART webpage or MySmart e-mail service. An example of a similar program run by the Bay Area Rapid Transit District can be found at <http://www.mybart.org>.



Transit-Oriented Development

SMART is a member of the Woodward Avenue Action Association (WA3.) WA3 has succeeded in designating Woodward Avenue as a National Scenic Byway, one of the only urban road stretches to be so designated. WA3 also promotes business development along Woodward Avenue.

SMART is a member of the 8 Mile Boulevard Association, which is a group promoting business development along 8 Mile Road. The road is the historic boundary between inner-city Detroit and the outer suburbs.

RECOMMENDATION #70:

SMART should encourage these communities to adopt the principles of transit-oriented development in their redevelopment plans, including the use of mixed-used development, walkable streets, and parking behind storefronts.

Universities

SMART, in cooperation with DDOT, has previously approached some of the larger area Universities about a U-Pass program, but they are opposed to adding the cost of the pass to tuition fees.

RECOMMENDATION #71:

SMART should undertake a mobility study of students at local residential colleges.

RECOMMENDATION #72:

SMART should undertake a separate mobility study of students at the 11 area community colleges.

University students often have atypical mobility patterns from other users. Demand for transit from University students is often at off-peak times, based upon the class schedule. Students may also have substantial demand for transportation to shopping centers, restaurant and night club districts, as well as to places of employment. A mobility study can provide valuable information on route structure, route scheduling, and opportunities for targeted marketing to university students

