Regional Travel Options
2005-06 Program Evaluation

Final Report

July 19, 2007

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Executive Summary

Background

Metro's 2040 Growth Concept sets forth a long-range growth management strategy intended to shape the region for the next 50 years. The strategy encourages growth within existing centers and corridors, along with some expansion of the urban growth boundary. The future success of the plan relies, in part, on significantly increasing the use of alternative modes of transportation, including transit, walking, bicycling, carpooling, and telecommuting. These are generally referred to as non-single-occupant vehicle (non-SOV) modes. To help implement the Growth Concept, Metro's Regional Travel Options (RTO) program works to increase awareness of non-SOV alternatives and increase the provision of those alternatives. In Metro Council adopted the *Regional Travel Options Program 5-Year Strategic Plan* in January 2004 to help direct those efforts. The RTO program receives funding through the Metropolitan Transportation Improvement Program (MTIP), which includes the programming of CMAQ funds.

The *Strategic Plan* places an emphasis on evaluation of the program to demonstrate results. In 2004, TriMet and Metro conducted an evaluation that covered 2003. That evaluation used the results of surveys conducted by employers to comply with the Employee Commute Options (ECO) Rules and presented an analysis of the region's centers identified in the *2040 Growth Concept*. In 2006, PSU's Center for Urban Studies (CUS) conducted a comprehensive evaluation of all RTO programs for FY2005 (July 2004 – June 2005). This report is a follow-up evaluation, covering FY2006 and the fist six months of FY2007 (July – December 2006). During this time, the RTO program used CMAQ funds for the following activities:

TMA Program
Clackamas Regional Center TMA
Lloyd TMA
Gresham Regional Center TMA
Westside Transportation Alliance (WTA)
Swan Island TMA
Troutdale Area TMA

Region 2040 Initiatives
Lloyd TMA/Lloyd District Ped Program
SMART Wilsonville Walking Program
City of Portland/CarpoolMatchNW
Swan Island Vanpool Program
WTA Carfree Commuter Challenge (2006)

RTO Core Program
Regional Vanpool Program
TriMet Employer Program
SMART TDM program
Metro Collaborative Marketing
Regional Evaluation
RTO subcommittee management and strategic planning

In addition, ODOT funds were used for the regional DriveLess/SaveMore (DLSM) marketing campaign. Metro staff and the RTO Subcommittee also developed a new Evaluation Framework to guide future evaluation efforts.

The 2005-06 evaluation is primarily based upon evaluation reports submitted to Metro by organizations receiving RTO funding, data from employee surveys submitted to TriMet (at the work site level), surveys of participants in the CarpoolMatchNW ridematching service, and ridership data for vanpools and shuttles receiving RTO funding. Unlike the 2004-05 evaluation,

the PSU CUS evaluation team did not interview funding recipients to obtain additional information. Otherwise, the methodology and approach is similar to the 2004-05 evaluation.

Findings

As in 2004-05, most of the programs achieved most or all of their output objectives in 2005-06. Several of the programs were able to demonstrate outcomes, including mode share changes and VMT reduction. However, the overall amount and quality of data available makes it impossible to develop an accurate overall estimate of the impacts of the programs. This is due, in part, to the fact that the outcomes of the various programs, as currently measured, may overlap. For example, people using the CarpoolMatchNW website may have gone there because of the efforts of a TMA or TriMet's Employer Outreach program. The Collaborative Regional Marketing Program (aka DriveLess/SaveMore) should have impacts extending throughout all of the programs. In addition, outside factors, including gas prices and the ECO Rules, may prompt travel behavior change among people participating in the RTO program. Assigning changes in behavior to specific external factors and programs is not possible given the data available.

The employee commute survey data from employers participating in TriMet's Employer Outreach program is currently the most comprehensive data source available to evaluate the effects of the RTO programs. That data show an increasing share of commuting by non-SOV modes (Figure 1). In 2006, over 35% of the commute trips were made in non-SOV modes, continuing a steady increase over the past decade. Nearly 20% of commute trips were made on transit. This rate about three times as high as for all workers living the in the region, according to the 2005 American Community Survey (ACS) conducted by the Census Bureau. The steady decline in rates of carpooling and vanpooling ended in 2006, with 8.7% of the commute trips at participating employment sites made in carpools and vanpools. This is, however, lower than the 10.5% rate in the first year of data (1996) and lower than the ACS data. Rates of walking and bicycling were up slightly in 2006 compared to 2005.
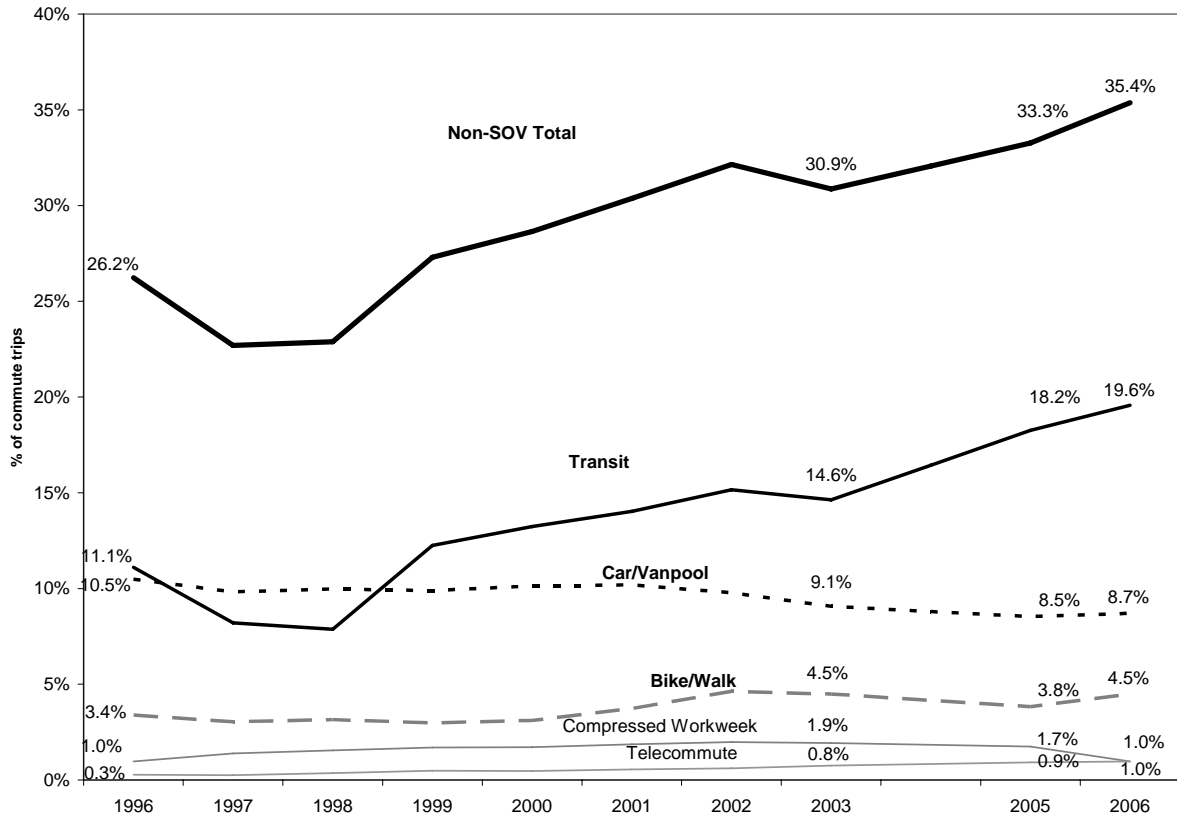
Figure 1: Non-SOV Commute Trips at worksites participating in the TriMet Employer Outreach program (1996-2006)

Sources: 1996-2003 figures are from TriMet and were included in the 2003 RTO Report. 2005 and 2006 figures calculated using original employer survey data from TriMet, using two year average. 2006 data reflects surveys conducted from July 2004 through December 2006.

Some additional key positive outputs and outcomes of the RTO programs during 2005-06 include the following:

- Nearly 1,000 work sites with over 200,000 employees participated in the Employer Outreach Program.

- Employers in downtown Portland that survey employees are close to meeting RTP modal targets of 70% non-SOV modes for commute trips (68%).

- The Metro DriveLess/SaveMore team staffed booths at 121 public events, engaging 6,400 people in conversation and handing out 8,500 DLSM notepads, decals and informational materials. 2,700 people signed DLSM commitments to change their travel behavior. This represents over 40% of those people who engaged in conversation.

- About 6,610 people are registered on the CarpoolMatchNW website for carpool matching, 37% more than at the end of 2004-2005. CarpoolMatchNW implemented a process to purge the database of inactive registrants, which should improve the quality of the matches.

- The Vanpool program undertook specific actions to improve its cost-effectiveness and increase the number of vans operating in the region. Each day they operated, the vanpools had about 118 total riders or 6.7 per van. This is an increase from an average of 6.2 riders per van in 2004-05.

- TMAs and area programs continued targeted activities such Carefree Commuter Challenge, SMART's WalkSmart, and Swan Island TMAs' evening shuttle.

- Most programs implemented their specific output objectives. When objectives were not met it was often due to lower than expected funding or staff turnover.

There are several findings that need to be addressed by the RTO program:

- Employers outside of downtown Portland and the Lloyd District have a long way to go to meet the RTP modal targets for 2040. Only about one-quarter of work trips to surveyed sites in the remaining area are made in non-SOV modes. The targets for 2040 range from 40% to 55%. However, it should be noted that a 25% non-SOV mode share is good for suburban areas with free and available parking.

- The vanpool program is not performing as projected and is significantly smaller in scope than programs found in other regions. The vanpools in the program are generally small. Seven of the 18 (28%) averaged five or fewer riders per day. While this is a significant improvement over 2004-05, on average, the vans were at 59% of capacity. However, the lack of a high-occupancy vehicle (HOV) lane network eliminates one of the factors that help other regions build large vanpool programs – a significant time savings.

- Some of the smaller TMAs may still be implementing programs that may not be consistent with the RTO objectives or that are not achieving measurable changes in the use of travel options. Staff turnover continues to be a problem at some TMAs.

- Some of the programs do not have clear output objectives and many do not have clear quantified outcome objectives against which to measure progress. Some of the end outcome objectives that do exist were based upon what appear to be overly optimistic assumptions.

- Not all of the programs are systematically tracking outcomes in a meaningful way.

- The success of many programs, particularly those focused on downtown and the Lloyd District are aided by parking pricing and supply constraints. Without such cost or time advantages for non-SOV modes (e.g. with HOV lanes), significant increases in non-SOV mode shares will be difficult to achieve in more suburban environments.

Several activities are underway that will help address many of these concerns:

- Metro made significant changes to the vanpool program in February 2007.

- The RTO Subcommittee adopted a new evaluation framework that will increase the level of monitoring by funding recipients and collect data through a regional survey.

- The RTO Subcommittee plans to develop a new strategic plan in the coming year.

Background

Regional Context

In 1995 Metro adopted the 2040 Growth Concept, a long-range growth management strategy intended to shape the region for the next 50 years. The strategy encourages growth within existing centers and corridors, along with some expansion of the urban growth boundary. The future success of the plan relies, in part, on significantly increasing the use of alternative modes of transportation, including transit, walking, bicycling, carpooling, and telecommuting. These are generally referred to as non-single-occupant vehicle (non-SOV) modes. Encouraging the use of non-SOV modes is a form of transportation demand management (TDM). One objective of TDM is to reduce demand for roadways (i.e. driving), thus reducing the need to expand infrastructure.

The *Regional Transportation Plan* (RTP), currently under an update process, provides the blueprint for the region's transportation system for a 20-year time horizon. Looking towards 2040, the RTP sets non-SOV modal targets for three categories of areas in the region. For regional centers, town centers, main streets, station communities and corridors the non-SOV modal target for all trips to and within those areas is 45-55% (ranging from a financially constrained target to a preferred target). The target for the central city is 60-70%. For other areas the target is 40-45%. The plans and policies in the RTP aim to support reaching these targets. The projects in the RTP are funded from a variety of sources.

In 1992, Metro's Transportation Policy Advisory Committee (TPAC) established a TDM Subcommittee to help oversee projects supported by the Congestion Mitigation and Air Quality (CMAQ) funds distributed to the region by the federal government. The mission of the subcommittee was to "reduce the need to drive by advocating TDM in the region, developing funding and policy recommendations to TPAC and coordinating regional TDM programs."[1] At this time, the TDM program at TriMet was expanded. The program evolved further in 1997 when the Department of Environmental Quality (DEQ) adopted the Employee Commute Options (ECO) Rules. Other partners were added to the overall program, including C-TRAN, SMART/Wilsonville,[2] the City of Portland's Transportation Options Division, and other cities and counties. Metro also established a Transportation Management Association (TMA) Assistance Program in 1999, providing funding for existing and new TMAs.

Given the expansion of efforts in the 1990s, the TDM Subcommittee saw a need to revise its mission to connect with the changing needs of the program. In December 2003, the *Regional Travel Options Program 5-Year Strategic Plan* was approved by consensus of the members of the renamed Regional Travel Options (RTO) Subcommittee. The *Plan* was adopted by the Metro Council in January 2004. The *Strategic Plan* included detailed work plans for most of the anticipated TDM projects and programs that would receive funding through the Metropolitan Transportation Improvement Program (MTIP), which includes the programming of CMAQ funds. Specifically, the *Plan* stated the following:

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[1] *Regional Travel Options Program 5-Year Strategic Plan*, December 2003, p. 1.
[2] Wilsonville is not part of the TriMet service district.

Regional travel options include all of the alternatives to driving alone – carpooling, vanpooling, riding transit, bicycling, walking and telecommuting. In order to increase the number of people using these travel options, the region needs to

develop a marketing message and communications plan that supports local program implementation

develop regional policies that support more people using travel options

evaluate program impacts that can be used to refine programs and marketing strategies, and

identify new funding sources that can be used to expand the travel options program over the next five years.

The Regional Travel Options program is primarily a marketing program that works directly with people to find the best option for them for any number of trips they make throughout the day. The focus in the past ten years has been reducing drive alone commute trips, specifically working with ECO employers to reduce commute trips as required by the ECO Rules. The TDM Subcommittee would like to take a new direction to more actively market travel options through a unified regional marketing program. (p. 1)

The *Plan* emphasized collaboration and integration to produce a program with "measurable results and tangible impacts."

Evaluating RTO

The *Strategic Plan* places an emphasis on evaluation of the program to demonstrate results. In 2004, TriMet and Metro conducted an evaluation that covered 2003. That evaluation used the results of surveys conducted by employers to comply with the Employee Commute Options (ECO) rule and presented an in-depth analysis of the Beaverton regional center and basic analyses of 21 centers. In 2006, PSU's Center for Urban Studies (CUS) conducted a comprehensive evaluation of all RTO programs for FY2005 (July 2004 – June 2005). That evaluation is available on-line in the RTO research library.

2005-06 Evaluation

What is included

This evaluation is intended to update the 2004-2005 evaluation report submitted to Metro in July 2005. This evaluation covers the individual projects and programs that were identified by Metro staff as part of the RTO program during the 18-months period, from July 2005 to December 2006. During this time, the RTO program used CMAQ funds for six TMAs, five specific projects under the Region 2040 Initiatives program, and the Core Program (Table 1). The Core Program includes regional vanpool and employer outreach programs and Wilsonville SMART's TDM programs, as well as evaluation and oversight. In addition, ODOT funds were used for the regional DriveLess/SaveMore marketing campaign.

Table 1: 2005-06 RTO Projects and Funding

Organization	2005-06 FY		July-Dec. 2006	
	Amount ($)	Percent	Amount ($)	Percent
TMA Program				
Clackamas Regional Center TMA	24,750	1.2%	12,375	1.2%
Lloyd TMA	24,750	1.2%	12,375	1.2%
Gresham Regional Center TMA	24,750	1.2%	12,375	1.2%
Westside Transportation Alliance (WTA)	24,750	1.2%	12,375	1.2%
Swan Island TMA	24,750	1.2%	12,375	1.2%
Troutdale Area TMA	37,688	1.8%		
Subtotal: TMA Program	*161,438*	*7.5%*	*61,875*	*6.1%*
Region 2040 Initiatives				
Lloyd TMA/Lloyd District Ped Program	11,597	0.5%	--	0.0%
SMART Wilsonville Walking Program	5,728[b]	0.3%	5,784	0.6%
City of Portland/CarpoolMatchNW	62,125	2.9%	6,695	0.7%
Swan Island Vanpool Program	12,500	0.6%	--	0.0%
WTA Carfree Commuter Challenge (2006)	24,576	1.1%	18,329	1.8%
Subtotal: Region 2040 Initiatives	*116,526*	*5.4%*	*30,808*	*3.0%*
RTO Core Program				
Regional Vanpool Program	151,000	7.0%	72,958	7.1%
TriMet Employer Program	337,000	15.7%	195,000	19.1%
SMART TDM program	55,000	2.6%	27,500	2.7%
Metro Collaborative Marketing	58,000	2.7%	103,528	10.1%
Regional Evaluation	100,000	4.7%	70,000	6.9%
RTO subcommittee management and strategic planning	124,000	5.8%	47,198	4.6%
Subtotal: RTO Core Program	*825,000*	*38.5%*	*516,183*	*50.6%*
ODOT funds				
Metro DriveLess/SaveMore Marketing Campaign	1,040,000	48.5%	411,718	40.3%
TOTAL	2,142,963	100.0%	1,020,583	100.0%

Source: Figures provided by Metro RTO staff.
Notes: Amounts do not include local matching funds, which are required for all programs except the ODOT funds.

Evaluation Methodology

This evaluation follows two key concepts put forth in the 2004-05 evaluation: (1) Examining the separate but related steps of service provision, participation, satisfaction, and action; and (2) Distinguishing between outputs and outcomes. These concepts are discussed in depth in the *Regional Travel Options 2004-05 Program Evaluation Final Report* date July 12, 2006 (herein after referred to at the *2004-05 Evaluation Report)* and are illustrated in Figure 2.

Figure 2: RTO Evaluation Framework and Example

Service/ activity provision	Participation	Satisfaction	Action
Output	**Intermediate Outcomes**		**End Outcome**

Example:

Carpool matching website offered	Employee registers at site to get matchlist	List includes good matches and information	Employee commutes by carpool
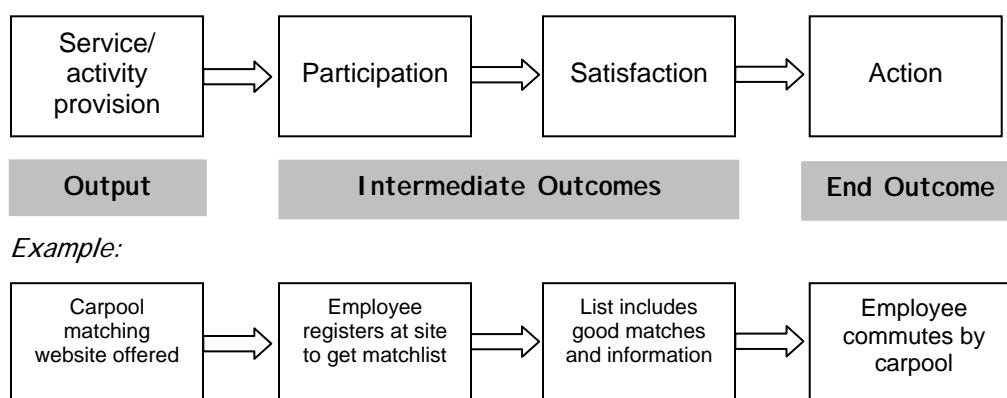
There are several reasons it is useful to evaluate both outputs and outcomes and to distinguish between these four steps:

- The end outcomes of the RTO programs often overlap, making it difficult to distinguish the outcomes of a single program.

- Several of the programs are new and have not developed the capacity to measure outcomes yet. Moreover, funding may not have been available to measure outcomes accurately.

- Understanding the outputs can help explain whether the program was the reason for the outcomes or something else. While it is nearly impossible to ever "prove" that the programs cause the outcome, making the link between outputs and outcomes help explain what may have happened.

With any evaluation it is important to establish criteria by which to judge success. Comparisons are usually made to the intended objectives, outputs, or outcomes, to a previous point in time, to an accepted standard, and/or to other comparable programs. In the *2004-05 Evaluation Report,* PSU evaluated programs against work plans and objectives from the *RTO 5-Year Strategic Plan*. The work plans always included outputs and sometimes included projected outcomes, such as the vehicle miles traveled (VMT) reduced. The evaluation found that the objectives in the plan, particularly the expected outcomes, were often unrealistic, unclear, or based on higher levels of funding. Metro worked with members of the RTO Subcommittee from January through June 2007 to create a framework for evaluation. Metro also plans to work with the RTO

Subcommittee in the coming year to develop a new strategic plan. Therefore, this evaluation places less emphasis on comparisons to these objectives.

For each program, Portland State University's Center for Urban Studies (PSU CUS) evaluators attempted to answer the following questions, as was done for 2004-05:

What services or activities were provided?

What was the level of participation in the services or activities?

What was the level of satisfaction with the services or activities?

To what extent did participants use travel options?

To what extent does the program support the RTO objectives?

In addition, when possible, this evaluation identifies changes that were made in response to the *2004-05 Program Evaluation*.

The evaluation is based upon the following sources:

- *Evaluation reports submitted to Metro.* On February 9, 2006, Metro staff requested information for this evaluation from each program. Reports were due March 3, 2006. By the end of May, most reports were forwarded to the evaluation team.

- *Data analysis.* If the program collected data from an activity, PSU CUS evaluators requested an electronic copy of the original data and then performed an independent analysis of the data. This included results from employee surveys submitted to TriMet (at the work site level) and surveys of participants in the CarpoolMatchNW ridematching service.

Findings

Overall

As in 2004-05, most of the programs achieved most or all of their output objectives in 2005-06. Several of the programs were able to demonstrate outcomes, including mode share changes and VMT reduction. However, the overall amount and quality of data available makes it impossible to develop an accurate overall estimate of the impacts of the programs. This is due, in part, to the fact that the outcomes of the various programs, as currently measured, may overlap. For example, people using the CarpoolMatchNW website may have gone there because of the efforts of a TMA or TriMet's Employer Outreach program. The Collaborative Regional Marketing Program (aka DriveLess/SaveMore) should have impacts extending throughout all of the programs. In addition, outside factors, including gas prices and the ECO Rules regulation, may prompt travel behavior change among people participating in the RTO program. Assigning changes in behavior to specific external factors and programs is not possible given the data available.

Regional Programs

Four year-round RTO programs were regional in scope:

- Collaborative Marketing Campaign, including DriveLess/SaveMore

- TriMet Employer Outreach

- Regional Vanpool Program

- CarpoolMatchNW

What services were provided?

Overall, the regional programs offered all or most of the services that were called for in the *5-Year Strategic Plan Work Plan*. There were no significant changes in the levels or types of activities compared to 2004-05, except for the Collaborative Marketing Campaign. During 2005-06, Metro and ODOT launched the DriveLess/SaveMore campaign. The Metro RTO program staffed booths at 121 events throughout the region in 2006 marketing various RTO programs under the DriveLess/SaveMore (DLSM) umbrella. The other three regional programs undertook these key activities in 2005-06:

- TriMet conducted a wide range of outreach activities as part of its Employer Outreach Program, including nearly 500 face-to-face meetings, staffing at transportation 123 fairs, quarterly newsletters, distribution of 8,619 new employee kits, and hosting a web site for employers.

- The Regional Vanpool Program funded 18 traditional vanpools. The Vanpool Program Financial Assessment Study was conducted to assess the cost effectiveness of the current vanpool program. Metro released a Request for Proposals (RFP) that established a list of approved vanpool providers.

- The CarpoolMatchNW continued to make improvements to the website and worked to purge inactive registrants, intending to improve the quality of matches. The program was marketed through regional partners, including the Collaborative Marketing Campaign.

What was the level of participation in the services?

All of the regional programs measured participation:

- Metro staff at DLSM event booths engaged in conversations with 6,400 people and handed out 8,500 pieces of informational material.

- TriMet's Employer Outreach program reached 997 work sites with over 202,000 employees. This is comparable to 2004-05.

- By the end of 2006, over 6,600 people were in the CarpoolMatchNW database. This is a significant increase over 2004-05.

- An average of 118 people per day rode in the 18 vanpools that operated in 2006. This is slightly lower than in 2004-05.

What was the level of satisfaction in the services?

Data on levels of satisfaction were not available for these programs in 2005-06.

To what extent did participants use travel options?

Data on the use of travel options in 2005-06 is available for the Employer Outreach program, CarpoolMatchNW, and the vanpool program. The Drive Less/Save More campaign had not been in effect long enough in 2005-06 to collect data on the use of travel options. Of the three programs with data, the most comprehensive and reliable source is the surveys of employees conducted at work sits participating in TriMet's Outreach program, presented below. Data from the other sources appears in the Appendices.

An increasing share of commute trips to work sites participating in TriMet's Employer Outreach program are being made by non-SOV modes (Figure 3). In 2006, over 35% of the commute trips were made in non-SOV modes, continuing a steady increase over the past decade. The steady decline in rates of carpooling and vanpooling ended in 2006. Rates of walking and bicycling were up slightly in 2006 compared to 2005.
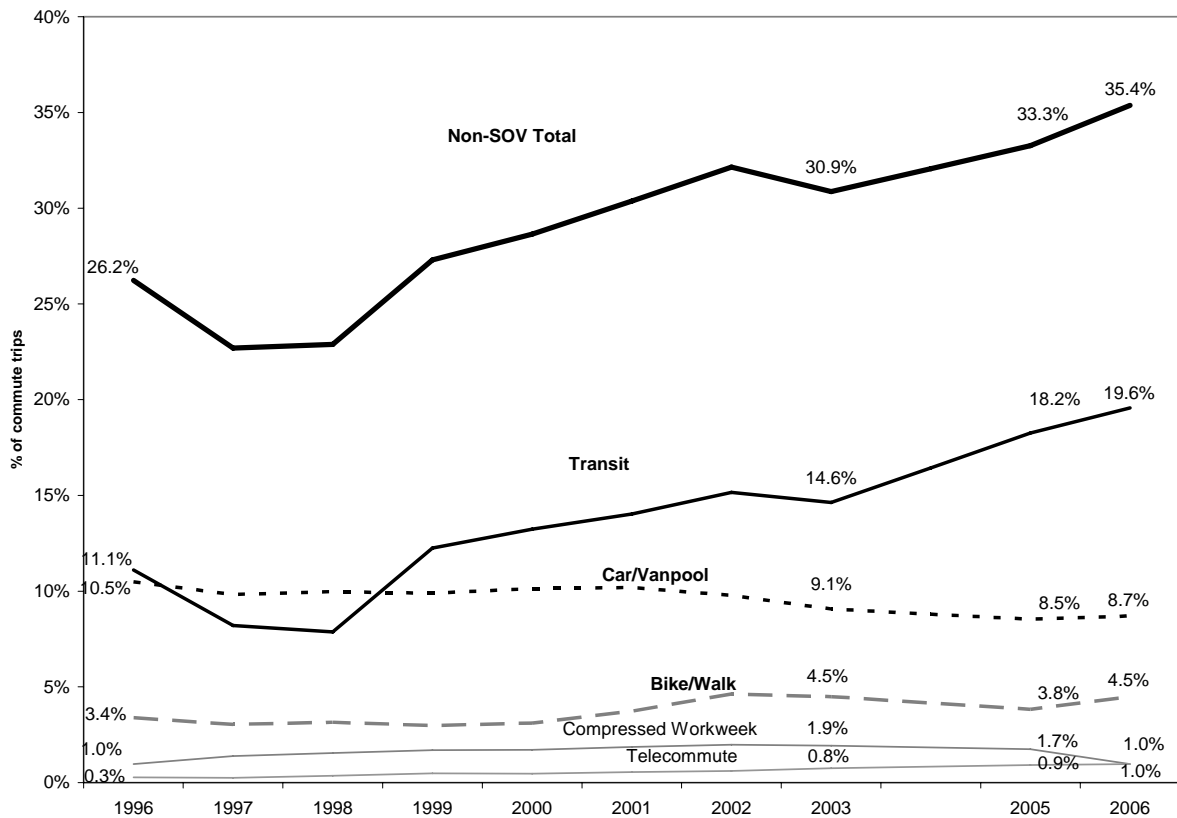
Sources: 1996-2003 figures are from TriMet and were included in the 2003 RTO Report. 2005 and 2006 figures calculated using original employer survey data from TriMet, using two year average. 2006 data reflects surveys conducted from July 2004 through December 2006.

Figure 3: Non-SOV Commute Trips at worksites participating in the TriMet Employer Outreach program (1996-2006)

The U.S. Census is now conducting a new annual survey, the American Community Survey (ACS) throughout the country. The ACS includes questions previously used on the decennial

Census "long form," including regular commute mode. The 2005 commute data is available for the Portland-Vancouver metropolitan area. The data are not directly comparable to the employer-based survey data presented here for several reasons:

- The ACS asks how people normally commuted to work the previous week. Respondents can only choose one mode. The employee surveys ask about commute mode for each day of the previous work week and, therefore, represent all modes used for the week. This will capture popular part-time modes, such as compressed work week, telecommuting, and bicycling, that may not show up in the ACS.

- The ACS is a random survey of all people and the commute data includes all workers 16 and older. The employee data only includes people employed at large work sites that are either subject to the ECO Rules or participate in TriMet programs that require surveys (e.g. Universal Pass).

- The ACS data available now are based on where people live and includes Vancouver, WA, while the employee data is based on where people work and does not include Vancouver, WA work sites.

- The ACS includes taxicabs and "other" modes. The employee surveys do not have these options. The ACS also includes "work at home." Because the ACS asks about the normal mode, this probably does not include employees that telecommute one or two days a week. The employee surveys would capture the latter.

- The ACS is conducted year-round, while the employee surveys are more often conducted in the spring and summer. This difference may affect seasonal modes, such as walking and bicycling.

Despite these differences, a comparison to the 2005 ACS and 2000 Census data can be useful for at least two reasons. First, the comparison can show how commute modes at surveyed employment sites differ from the region as a whole. This may show, in part, the effectiveness of employer outreach programs. The differences can also be explained, in part, by differences in work site characteristics (including size and location) and survey methodology, as describe above. Second, the ACS data can be compared to previous Census data to show trends over time. These trends can be compared to trends in the employee data.

Table 2 presents this comparison of the 2000 Census, 2005 ACS and employee survey data for 2000 and 2005, omitting modes not consistent between the two surveys. Several differences are important to note. First are the differences in the mode shares for 2005. The employee surveys show much higher levels of transit use, 20.1% versus 6.7%. Some of this difference is undoubtedly due to the effectiveness of the TriMet employer outreach program from which the employee data is gathered. Without a survey of a control group of employers that do not participate in the outreach program, it is impossible to tell how much of the difference is due to the TriMet and other RTO programs and how much is due to differences in the sample (all workers vs. employees at certain work sites) and the methodology. In contrast, levels of carpooling are lower among the employee survey respondents. Applying the margin of error for the ACS indicates that the share of carpoolers could be 11.0-12.4%, still higher than the 8.9% found in the employee survey. Considering that the employee survey would capture part-time carpooling (e.g. one or two days a week) in addition to the full-time carpooling that the ACS

records, this difference is notable. The reason for the difference, however, is unclear. The share of employees walking and bicycling to work in the 2005-06 employee survey is comparable to the 2005 ACS. Overall, these comparisons indicate that the TriMet employer outreach program is probably increasing transit use above what happens throughout the region, but may not be affecting carpooling, walking, or bicycling rates significantly.

Second, the direction of changes between 2000 and 2005 is consistent between the Census and employee surveys. In both sets of data, the share of people driving alone and carpooling went down, while the share of people using transit, walking, and bicycling went up. The difference is in the *magnitude* of the changes. The employee survey data show much larger percentage increases in transit, walking and bicycling. The differences in *changes* in mode shares can not be explained as much by differences in survey methodology, since both sources use very similar methods in each of the years. This reinforces the point that the TriMet and RTO outreach activities are likely having a significant, positive influence on rates of transit use for commuting.

Table 2: Comparison of Census and Employee Survey Commute Data

	2000 Census	2005 ACS	% Change	2000 Employee	2005-06 Employee	% Change
Drive alone	77.3%	77.1%	-0.3%	72.9%	66.4%	-9%
Carpool	12.1	11.7	-3.3%	10.4	8.9	-14%
Transit	6.6	6.7	+1.2%	13.5	20.1	+49%
Walk & Bike	3.9	4.4	+12.8%	3.2	4.6	+45%
Total	100.0%	100.0%		100.0%	100.0%	

Notes: For this analysis, taxicab, work at home, and other modes are excluded from the Census and ACS data. Telecommuting and compressed work week are excluded from the employee data.

A significant share of the participants in the three active programs did use travel options for commuting, resulting in a reduction in VMT in 2005-06. The estimated outcomes are shown in Table 3. Readers are cautioned about making direct comparisons between the programs or adding the impacts together. Changes in travel modes made by people participating in a program may not all be caused by that program. For example, increases in gas prices, the ECO regulation, and improvements in transit service may also explain the changes. These other factors would have different effects on each of the programs. In addition, the effects of the programs overlap. For example, people who formed carpools through CarpoolMatchNW who work for employers that work with TriMet may be counted in both programs. Also note that the cost-effectiveness estimates (dollars per VMT reduced) use the RTO funding levels for the program for fiscal year 2005-06. These estimates should not be compared to ones found in analyses of similar types of programs which may include all funding sources. In addition, the estimates for TriMet Employer Outreach assume that outcomes measured in previous years were sustained in 2005-06, yet the program costs from those previous years are not included.

Table 3: Travel Outcomes of Regional Programs

	TriMet Employer Outreach	CarpoolMatchNW	Vanpool Program
Number of participants	168,000 at sites with surveys 202,000 at all sites	6,610 registrants	~118 per day
Estimated % of participants using non-SOV modes for commuting	35%	2-20% of 2005-06 registrants are in carpool formed via program	100%
Estimated VMT reduced in 2004-05[a]	37,192,000 (low) 39,382,000 (high)	160,000 (low) 2,525,000 (high)	783,300 (low) 979,100 (high)
RTO $/VMT reduced	$0.01[b]	$0.02 - 0.39	$0.16 – 0.19

[b]A portion of program outcomes measured here may be the result of other RTO programs, e.g. CarpoolMatchNW, TMA efforts, etc., and the ECO Rules

To what extent do the programs support the RTO Objectives?

The regional programs generally supported the RTO program objectives of reducing drive alone trips while encouraging alternative modes (Table 4). The programs were defined as regional in scope, thus supporting the RTO objective of regional coordination and communication. Except for DLSM, the programs were designed to focus on work trips and thus may only indirectly affect other trip types. Commuters that use non-SOV modes to get to work may use other modes for mid-day trips (e.g. to lunch). They may also be more inclined to use these modes for other purposes, if they have a TriMet Universal Pass, for example. Finally, CarpoolMatchNW added a component to allow matching for one-time trips, which are more likely to be non-commute trips.

Table 4: Regional Programs and RTO Objectives

	Collaborative Marketing (DriveLess/ SaveMore)	TriMet Employer Outreach	CarpoolMatchNW	Regional Vanpool Program
Reduce drive-alone trips and encourage alternative modes	Yes	Yes	Yes	Yes
Regional coordination and communication	Yes	Yes	Yes	Yes
Include all trips, not just commute trips	Yes	Indirectly	Indirectly	Indirectly
Connections to other goals:				
2040 centers and corridors	Indirectly	Indirectly	Indirectly	Indirectly
Transit-oriented development	Indirectly	Indirectly	No effect	No effect
TriMet transit investment	Yes	Yes	Unclear	No effect
Community health[a]	Yes	Yes	Unclear	Unclear
Air and water quality	Yes	Yes	Yes	Yes

[a]Community health in this context focuses on increasing physical activity. Health benefits from reducing pollution are accounted for under "Air and water quality."

Smaller area programs

Background

The RTO program supports seven programs that cover specific smaller geographic areas, six of which are transportation management associations (TMAs):

- SMART/Wilsonville Travel Options Program (including Walk Smart)

- Lloyd TMA (including Lloyd District pedestrian project)

- Swan Island TMA (vanpools included in regional program discussed above)

- Clackamas Regional Center TMA

- Gresham Regional Center TMA

- Westside Transportation Alliance (including Carefree Commuter Challenge)

- Troutdale Area TMA

These programs share many features, but also differ significantly. Of the TMAs, Lloyd TMA (LTMA) has been in existence the longest, since 1994. The LTMA is the only program that covers an area that does not have free parking. It also has the highest density of employment of the seven areas. Both the LTMA and Swan Island TMA cover areas where almost all of the land area is non-residential. For lack of a better definition, the WTA is defined in this analysis as all of Washington County within the urban growth boundary, which is primarily residential land. However, WTA focuses their activities in employment areas. The TMAs in Troutdale and Clackamas have specific boundaries, but still include a large share of residential land. This reflects the lower density nature of these areas.

Because of these differences in land uses and employment characteristics, direct comparisons between the programs are not always possible. Activities in some areas may not be appropriate for others. The effectiveness of programs will be influenced by characteristics of the area, including the price and availability of parking, the quality of the pedestrian and bicycle infrastructure, levels of transit service, types of land uses, and other urban design features.

What services were provided?

The level of activities and services provided by the programs in 2005-06 were very similar to those provided in 2004-05. As found in the *2004-05 Program Evaluation*, the activities varied significantly between the organizations. This reflects, in part, the differences in the level of maturity of the programs. The older programs tend to have more overall funding, as they have developed their membership and other sources of funds. Programs that have been in existence longer tended to have more objectives in the *Strategic Plan Work Plan* and the objectives were more specific and measurable. Several of the programs have experienced staff turnover that negatively affected activities, including WTA and the Clackamas Regional Center TMA.

What was the level of participation in the activities and services?

As in 2004-05, the level of monitoring of participation in program activities also varied significantly, usually in relationship to the maturity of the program and scope of services provided. For example, the Lloyd TMA keeps track of employers participating in the Universal Pass program, and the Swan Island TMA keeps counts of shuttle riders. In both programs, participation rates met or exceeded objectives in the *Strategic Plan Work Plan*.

WTA tracked the number of employers participating in the Carefree Commuter Challenge (112 with 53,500 employees). This represented a significant increase over the 2005 event (68 employers and 41,200 employees).

The *Strategic Plan Work Plan* projected membership levels for five of the TMAs. It appears that only Lloyd TMA met this target. Swan Island nearly met their target of 15 members.

What was the level of satisfaction in the services?

The programs did not provide any data on levels of satisfaction. Anecdotally, most of the programs indicated that satisfaction is growing among participating employers and organizations.

To what extent did participants use travel options?

Not all of the smaller programs collected data on the use of travel options. Of those that did, the use of travel options remained steady or increased over 2004-05:

- At Lloyd TMA employer work sites that offer the Universal Pass program, the share of commute trips made driving alone fell by 3.1 percentage points in 2006 compared to 2001, but by less than one-half of a percentage point over 2005. The drive alone rate has been about the same since 2003. In 2006, about 58% of the commute trips to these sites were made in non-SOV modes, about the same as in 2003 and 2005.

- Swan Island TMA employers saw a reduction in drive alone work trips of three percentage points in 2005-06 compared to 2004-05. About 27% of the commute trips made by employees surveyed are by non-SOV modes. Evening shuttle ridership increased from 59 to 64 trips per day.

- The WTA estimated that the Carefree Commuter Challenge (CCC) reduced VMT by about 521,700 in 2005-06.

- SMART's Walk Smart program included 972 participants that logged the equivalent of about 938,000 miles. About 11,500 of this was estimated to replace car trips.

Any attempt to estimate VMT reductions for the other programs would be questionable, because of the lack of data collected. Given the level and types of activities undertaken by the Gresham, Clackamas, and Troutdale TMAs, it is unlikely that significant VMT reduction or changes in non-SOV mode share occurred as a result.

To what extent do the programs support the RTO Objectives?

The programs generally supported the RTO program objectives.

Conclusions

Some key positive outputs and outcomes during 2005-06 include the following:

- Nearly 1,000 work sites with over 200,000 employees participated in the Employer Outreach Program.

- The non-SOV mode share for commute trips to sites working with TriMet was 35% in 2006, up from 33% in 2005 and 26% in 1996. Transit use accounted for most of this, increasing to nearly 20% in 2006, compared to 18% in 2005.

- The decline in carpooling and vanpooling subsided in 2006, with 8.7% of the commute trips at participating employment sites made in carpools and vanpools. This is, however, lower than the 10.5% rate in the first year of data, 1996.

- Rates of walking and bicycling were up in 2006 to 4.5%, following a recent decline since 2002 and an increase over the first year of data – 3.4% in 1996.

- Employers in downtown Portland that survey employees are close to meeting RTP modal targets of 70% non-SOV modes for commute trips (68%).

- The Metro DriveLess/SaveMore team staffed booths at 121 public events, engaging 6,400 people in conversation and handing out 8,500 DLSM notepads, decals and informational materials

- 2,700 people signed DLSM commitments to change their travel behavior. This represents over 40% of those people who engaged in conversation.

- About 6,610 people are registered on the CarpoolMatchNW website for carpool matching, 37% more than at the end of 2004-2005.

- CarpoolMatchNW implemented a process to purge the database of inactive registrants, which should improve the quality of the matches.

- Each day they operated, the vans had about 118 total riders or 6.7 per van. This is an increase from an average of 6.2 riders per van in 2004-05.

- The Vanpool program undertook specific actions to improve its cost-effectiveness and increase the number of vans operating in the region.

- TMAs and area programs continued targeted activities such Carefree Commuter Challenge, SMART's WalkSmart, and Swan Island TMAs' evening shuttle.

- Most programs implemented their specific output objectives. When objectives were not met it was often due to lower than expected funding or staff turnover during 2005-06.

Despite these positive outcomes, there are several findings that need to be addressed by the RTO program:

- Employers outside of downtown Portland and the Lloyd District have a long way to go to meet the RTP modal targets for 2040. Only about one-quarter of work trips to surveyed sites in the remaining area are made in non-SOV modes. The targets for 2040 range from 40% to 55%. However, it should be noted that a 25% non-SOV mode share is good for suburban areas with free and available parking. On the other hand, the employers in these areas that conduct surveys are likely to have higher non-SOV mode shares than those that do not survey, because they are more likely to offer trip reduction programs and incentives to employees.

- The vanpool program is not performing as projected and is significantly smaller in scope than programs found in other regions. The vanpools in the program are generally small. Seven of the 18 (28%) averaged five or fewer riders per day. While this is a significant improvement over the figures for 2004-05, many vans are undersubscribed. On average, the vans were at 59% of capacity. However, the lack of a high-occupancy vehicle (HOV) lane network eliminates one of the factors that help other regions build large vanpool programs – a significant time savings.

- CarpoolMatchNW program shortened the web-based surveys and removed questions about registrants' current commute mode and levels of satisfaction. Due to the changes, evaluating the program became more difficult for 2005-06. Those questions were added back into the surveys in Spring 2007.

- Some of the smaller TMAs may still be implementing programs that may not be consistent with the RTO objectives or that are not achieving measurable changes in the use of travel options

- Some of the programs do not have clear output objectives and many do not have clear quantified outcome objectives against which to measure progress. Some of the end outcome objectives that do exist were based upon what appear to be overly optimistic assumptions. Programs with no or a shorter track record were more likely to have unrealistic outcome projections.

- Not all of the programs are systematically tracking outcomes in a meaningful way.

- The success of many programs, particularly those focused on downtown and the Lloyd District are aided by parking pricing and supply constraints. Without such cost or time advantages for non-SOV modes (e.g. with HOV lanes), significant increases in non-SOV mode shares will be difficult to achieve in more suburban environments.

Several activities are underway that will help address many of these concerns:

- Metro made significant changes to the vanpool program in February 2007.

- The RTO Subcommittee adopted a new evaluation framework that will increase the level of monitoring by funding recipients and collect data through a regional survey.

- The RTO Subcommittee plans to develop a new strategic plan in the coming year.

Recommendations

For each of the recommendations made in the *2004-05 Program Evaluation,* the PSU CUS evaluation team notes the progress made:

- Though the time frame for the *5-Year Strategic Plan Work Plan* is not yet complete, RTO should, in a collaborative process, develop a new work plan that includes specific, quantified output and outcome objectives, using the categories in the framework presented above. The outcome objectives should be based upon the RTP modal targets and the new RTP update. They should push programs to increase the effectiveness of their activities in reducing SOV trips. Output objectives should clearly be consistent with the RTO objectives.

  Progress: This is planned to occur in 2007-08.

- RTO staff and the Subcommittee should work together to develop consistent and reasonable methods to track and measure outputs and outcomes.

  Progress: Completed by RTO Subcommittee in June 2007.

- RTO staff should work on developing consistent methods for converting data collected by programs to measures of effectiveness, such as VMT reduction, mode share, and new non-SOV participants. The methods will need to include assumptions similar to those employed in this evaluation, such as days per year and trips lengths.

Progress: RTO staff is working on obtaining standard numbers, such as trip lengths, and methods to use for calculating VMT reductions.

- Evaluation efforts should include outputs (activities/services provided), intermediate outcomes (participation and satisfaction), and end outcomes (actions).

  Progress: The RTO staff and Subcommittee have adopted this approach.

- Programs should collect data on participant's travel mode prior to making a change. This will allow the program to measure net benefits of the program, e.g. new people switching to non-SOV modes. The program should develop standard question wording to collect this information consistently.

  Progress: In 2007, RTO staff has added questions regarding previous commute mode to the CarpoolMatchNW site and a survey of vanpoolers.

- RTO staff should work at enabling data from different programs to be linked and made available to other program staff. For example, the CarpoolMatchNW website includes a list of employers. If those employers were identified in the database by the identification numbers used by TriMet in their database, both programs and RTO staff could better evaluate outcomes. For example, TriMet could track whether carpool registrations go up at sites where marketing programs were undertaken. Similarly, the employer survey data could be used by TMAs to help in their evaluation and programming efforts.

  Progress: RTO staff plans to make progress on this in 2007-08.

- RTO staff should approach TriMet to determine whether the automatic passenger counting and GPS systems on the transit vehicles would be useful in tracking program outcomes.

  Progress: The PSU CUS evaluation team explored this option while preparing this evaluation. We were prevented from pursing it very far due to a TriMet policy to not release the detailed passenger count data due to security concerns. TriMet recently rescinded that policy.

- Consider conducting an annual, regional survey of residents to track overall trends in mode share.

  Progress: The RTO Subcommittee adopted this recommendation in June 2007.

- RTO should require that programs collecting data as part of an RTO-funded project provide, upon request, the original data for independent analysis.

  Progress: RTO staff is pursuing this.

- The RTO program should collect data on all funding sources used by programs to implement the RTO projects to demonstrate whether the RTO funds leverage other sources and to develop more accurate estimates of cost-effectiveness.

  Progress: RTO hired a staff person that is focusing on budgets and expenditures. This person may be able to address this issue.

- Examine similar programs in other regions for new ideas. For example, some regional employer outreach programs award employers levels (e.g. platinum, gold, etc.) based upon their efforts at promoting alternative modes.

  Progress: The PSU CUS evaluation team has collected some of this information for Metro.

In addition to pursuing recommendations from last year, the RTO program should consider undertaking the evaluation-related activities listed below. Additional, more detailed, program-specific recommendations appear in the Appendices.

- Perform comprehensive evaluations, including interviews with program managers (as was done in for 2004-05) on a two-year cycle. Evaluate and monitor programs on an interim basis using quarterly basis, with standard reporting requirements.

- Require all funding recipients to provide original survey data upon request, to be used for independent evaluation. This requirement should be included in all funding agreements.

- Compare overall commute mode trends to annual American Community Survey (ACS) data.

- Work with DEQ to see if their database of employee surveys could be used as a control group for comparison to TriMet Employer Outreach program participants. The database may also provide data missing from the TriMet database.

Appendices

Appendix A: Collaborative Marketing Campaign

Program Background

According to the *Strategic Plan* Work Plan (p. 1)

> The RTO Collaborative Marketing Campaign is the number one priority for the next three years. The Campaign will work to coordinate all marketing and outreach efforts of the regional partners to create a broader public awareness of the travel options available to people travelling around the region. The regional Campaign will support the projects & messages currently being implemented by the partners and will be a clearinghouse of information that helps people learn about and access the options available to them.

The *Strategic Plan Work Plan* projected $491,000 in funding in 2005-06 for the Campaign. Actual funding included $58,000 from CMAQ and $1,040,000 in ODOT funds for the DriveLess/SaveMore campaign. The CMAQ funds were used for direct outreach activities, including staffing events to reach people in person, and contract management. The ODOT funds were used primarily for the larger media campaign, including television, radio, and print media, along with some outreach activities.

Evaluation

What activities were provided?

During 2005-06 Metro and ODOT launched the DriveLess/SaveMore (DLSM) campaign. During 2006, the Metro DLSM team staffed booths at 121 public events, including 78 farmer's markets, 15 concerts, and 15 transportation fairs.

What was the level of participation in the services?

Metro reports the following interim outcomes from the 121 public events:

- 291,000 people attended the events

- 6,400 people engaged in conversation with DLSM staff

- 8,500 DLSM notepads, decals and informational materials were distributed

- 3,700 informational materials were distributed for partners, such as CarpoolMatchNW and TriMet

- 2,700 people signed commitments to change their travel behavior. This represents over 40% of those people who engaged in conversation. 92% of the commitments were from people living within the Metro region or Vancouver.

What was the level of satisfaction with the services?

No direct measures of satisfaction were undertaken.

To what extent did participants use travel options?

The 2,700 people that signed commitment to change travel behavior indicated that they would make one or more of the following changes:

- 84% would trip chain

- 56% would use transit

- 40% would rideshare

- 49% would bicycle

- 64% would walk

As part of the larger ODOT-funded marketing program, PacWest, the contractor, conducted a random phone survey in spring 2007 to assess the effectiveness of the program. Those results are not yet available. The findings will help evaluate what share of the general public heard and remembered the message and whether they state that they changed their behavior.

How does this compare to the work plan in the 5-year Strategic Plan?

The DLSM activities are very consistent with the actions outlined in the Work Plan, including creating an RTO identity package, launching a two-year campaign, having an RTO booth at events, and soliciting radio, tv, and print ad media.

How does this compare to the RTP modal objectives?

Unable to measure outcomes yet.

To what extent does the program support the RTO objectives?

RTO Objective	Supportive?
Reduce drive-alone trips and encourage alternative modes	Yes.
Regional coordination and communication	Yes. The Campaign was coordinated through the RTO Subcommittee. Events were held throughout the region, with many of the commitments made by residents of suburban communities.
Include all trips, not just commute trips	Yes. The Campaign includes all trips and does not distinguish between commute trips and other trips.
Connections to other goals:	
2040 centers and corridors	Yes. Several of the events were held in centers.
Transit-oriented development	Indirectly
TriMet transit investment	Yes, to the extent that people use transit more in response to the campaign
Community health	Yes, to the extent that people increase physical activity by walking and biking more in response to the campaign
Air and water quality	Yes, to the extent that trips and VMT are reduced

Conclusions

During 2005-06, the Collaborative Marketing Campaign was launched under the DriveLess/SaveMore banner. It will reach its two-year mark in 2007. Metro's DLSM booths at events complement the larger marketing program by making personal contact with the region's residents. The program also brings together many of the RTO partners. Most of the events attended were beyond inner/downtown area of Portland. This is probably a good strategy, as these are the more challenging areas to get people to reduce their driving and are areas that are facing increasing growth and congestion. Metro staff kept track of the outputs and interim outcomes of these events.

Recommendations

The *2004-05 Program Evaluation* recommended that Metro measure the effectiveness of the campaign using random phone surveys. PSU CUS provided Metro with input on the follow-up survey questionnaire that was used in spring 2007 to measure program outcomes. Those results should be available soon. Additional recommendations are as follows:

- Metro should obtain the original survey data to perform additional analysis with the data, beyond what the program contractor will provide.

- Follow up with people signing commitments to change behavior, through email or other low-cost means. This can serve two purposes. The contact can assess whether the people did change behavior and how satisfied they were with the DLSM informational materials. It also serves to reinforce the message of changing behavior and provides another opportunity to provide information that may help make that change.

Appendix B: TriMet Employer Outreach

Program Background

TriMet has been working with employers since the 1980s to encourage increased transit use among employees. The program evolved when the State adopted its Employee Commute Options (ECO) Rules, which became effective in 1996. TriMet targets employers affected by ECO Rules, but will work with any interested employer. The program includes one-on-one assistance to employers, transportation coordinator training, transportation fairs, promotional events in the community, and publications and materials. In addition, TriMet works with employers to offer their Universal Pass program and other programs that provide transit passes to employees, sometimes subsidized by the employer.

Evaluation

Data Sources

TriMet provided their database of 1,282 employers who have participated in the past or are currently participating in the program and who have surveyed their employees. Of the 1,282 employers, 767 employers have worked with TriMet at some time during the past three years. This evaluation only includes those 767 employers for the purpose of assessing the effects of the TriMet Employer Outreach program, which is consistent with previous evaluations. The database included survey results for the most recent survey and a baseline survey, in addition to basic information about the employer and worksite. The average length of time between the baseline and latest survey was 5.4 years.

What services were provided?

TriMet provided a wide range of outreach services to employers, as shown in **Error! Reference source not found.** and listed below.

How does this compare to the 5-year Strategic Plan Work Plan?

With a few exceptions, TriMet met or exceeded their objectives. However, the targets in the Work Plan were set for each fiscal year, while the evaluation period covers 18 months from July 2005 to December 2006. The program met or exceeded the objectives for the following activities from the *Strategic Plan Work Plan*:

- Calls and correspondence (9,786 achieved vs. objective of 8,300)
- Support sites with ECO planning (631 vs. 425)
- Circulate quarterly newsletters (2,023 vs. 1,900)
- Distribute brochures (21,554 vs. 10,000)
- Conduct transportation fairs (123 fairs and 15,259 employees vs. 100 fairs and 10,000 employees)
- Distribute new employee kits (8,619 vs. 4,000)
- Host visits to employer website (2,941 vs. 1,000)
- Attend events (179 vs. 140)
- Maintain employees in emergency ride home program (76,000 vs. 74, 000)

The program did not reach the objectives in the *Strategic Plan Work Plan* in the following areas:

- Enroll sites in TDM program (977 sites and 202,151 employees vs. 964 sites and 235,000 employees)
- Face-to-face meetings (489 vs. 525)
- Provide sites with ECO survey assistance (423 vs. 500)
- Train transportation coordinators (The TC training program has been temporarily suspended.)
- Enroll transportation coordinators in incentive program (activity has discontinued because of ineffectiveness).

Table 5: 2004-06 TriMet Employer Outreach Activities

	2004-05 (12 months) Outputs & Outcomes	2005-06 (18 months) Outputs & Outcomes	2005-06 (12 month) Objective from Strategic Plan
Make calls/correspondence	12,919	9,986	8,300
Conduct face-to-face meetings	355	489	525
Enroll sites on a Transportation Demand Management program	977 worksites 210,000 employees	997 worksites 202,151 employees	964 sites 235,000 employees
Train Transportation Coordinator Representatives	33 attendees to trainings	The TC training program was temporarily suspended and is being reworked.	72
Enroll Transportation Coordinator Incentive Program Members	Determined ineffective in supporting goal	The program was discontinued.	390
Provide sites with ECO survey assistance	301	423	500
Support sites with ECO planning	542	631	425
Circulate quarterly "To Work" newsletters	2,138	2,023	1,900
Distribute employer/employee brochures	22,000*	21,554*	10,000
Conduct Transportation Fairs	95 (13,034 employees)	123 (15,259 employees)	100 (10,000 employees)
Distribute "New Employee Kits"	4,015	8,619	4,000
Host visits to Employer Website	2,682 total visits in Apr/May/Jun 2005	2,941 total visit in Oct/Nov/Dec 2006	1,000
Maintain Employees Emergency Ride Home/Guaranteed Ride Home Programs	70,000	76,000	74,000 eligible employees
Attend Chamber, Business Association, and TMA meetings and other events	162	179	140
Total Number of Employees Surveyed	102,327	87,524	189,000
Annual VMT Reduction	27,359,000-45,981,00	37,873,000-39,382,00	45,500,000
Program Cost (RTO funding, not including match)	$392,289	$337,000 (2005-06 FY)	$404,929
Cost per VMT Reduced	$0.01	$0.01	$0.009

Source: Unless otherwise noted, information is from report submitted by TriMet to Metro.
Notes from TriMet:
*New method that counts one-on-one interactions at Transportation Fairs and assumes 70% of visitors pick up literature, averaging 2.8 pieces each. These averages are based on experience working in the field and not on scientific study. This summary no longer includes the "To Work" newsletter (included under quarterly newsletter).

What was the level of participation in the services?

There are 767 worksites participating in the program with commute survey data and have worked with TriMet in the past three years. They represent 166,953 ECO-eligible employees[3]. All sizes of employers are participating in the program. Over one-quarter (29%) of the sites have 50 or fewer employees, which is below the ECO threshold in effect in 2005-06 (Table 6). However, these sites only represent three percent of the ECO-eligible employees. Nearly half of the ECO-eligible employees (47%) are at the 51 worksites with 500 or more employees. This is similar to the 2004-05 data.

The 767 sites with survey data represent 22% of the employers with 50 or more employees in the region (Table 7).

Table 6: Size of Worksites Participating in TriMet's Employer Outreach Program

# ECO-eligible employees	# sites		# ECO-eligible employees		
	#	**%**	**Total #**	**%**	**Cumulative %**
50 or fewer	220	29%	4,846	3%	3%
51-99	166	22%	12,068	7%	10%
100-199	191	25%	27,420	16%	26%
200-499	139	18%	43,543	26%	52%
500+	51	7%	79,076	47%	100%
Total	767	100%	166,953	100%	

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[3] ECO-eligible employees refers to employees affected by the ECO rules: "The count of employees at a work site must include:
(1) Employees from all shifts, Monday through Friday, during a 24-hour period, averaged over a 12-month period;
(2) Employees on the employer's payroll for at least six consecutive months at one work site; and
(3) Part-time employees assigned to a work site 80 or more hours per 28-day-period; but
(4) Excludes volunteers, disabled employees (as defined under the Americans with Disabilities Act), employees working on a **non-scheduled work week,** and employees required to use a personal vehicle as a condition of employment."
(Source: OAR 340-242-0060 http://www.deq.state.or.us/nwr/ECO/ECO_Rules.pdf)

Table 7: Estimated Participation Rate for Employers in the 3-County Area

Size of employer	Employers in 3-County area[a]	Worksites in TriMet's Outreach Program	
		Sites with survey data	Estimated Participation Rate[b]
up to 50	44,627	220	< 1%
50 or more[c]	2,560	547	21%
50-99[c]	1,472	166	*11%*
100-499	982	330	*34%*
500+	106	51	*48%*
Total	47,187	767	

[a]Data from Census County Business Patterns, 2004. The data includes employers in Multnomah, Clackamas, and Washington Counties, which will include some employers outside of Metro and the TriMet service area.
[b]This is an *estimate for comparative purposes only*. The number of employees working for an employer, as reported by the Census, is not always the same as the number of employees at a worksite, the number used to categorize participating employers. Employers with multiple worksites may be represented once in the Census data with all employees, but multiple times in the TriMet data, for each site.
[c]The Census data divided employers in categories of 1-49 and 50-99, etc. For the analysis of the TriMet data, the categories were made as 1-50 and 51 and higher to be consistent with the ECO Rules.

What was the level of satisfaction with the services?

Data was not available on levels of satisfaction with the services, either the employers or employees.

To what extent did participants use travel options?

About one-third of the commute trips made by ECO-eligible employees to the worksites surveyed are made in non-single occupant vehicle (non-SOV) modes (Table 8). The share of trips made driving alone was 67.0%, compared to 74.1% in the baseline surveys.[4] Transit use and walking/bicycling went up. The share of trips made in carpools and vanpools fell. There were increases in the use of compressed work week schedules and telecommuting, which eliminates a commute trip altogether. The figures in Table 8 differ from those in Figure 3; Figure 3 is based on a two-year rolling average, using only surveys conducted in the year indicated and the previous year. Table 8 includes all follow-up survey results, no matter how old the data are. This was done to be consistent with previous evaluations.

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[4] The dates of the baseline surveys vary, depending upon when the worksite started working with TriMet.

Table 8: Commute Trip Mode Share for TriMet Employer Outreach Participant Worksites

| Mode | % of weekday commute trips[a] | | | |
	Baseline survey	Most recent survey	Percentage point change over baseline	2004-05 change over baseline[b]
Drive Alone	72.2%	67.0%	-5.2	-5.9
Transit	12.7	17.6	+4.9	+5.6
Carpool/Vanpool	9.7	8.6	-1.0	-1.0
Walk/Bike	3.9	4.2	+0.3	+0.2
Compressed work week	1.2	1.4	+0.2	+0.3
Telecommute	0.3	1.1	+0.8	+0.5
Total	100.0%	100.0%		
# work sites	767	767		814

[a] The survey collects data on commute trips for each weekday for an entire week. The data in the table are based on the sum of all commute trips made by employees at surveyed sites, not an site average.
[b] Note that the baseline is different for the 2004-05 data, because set of employers included differ.

The age of the follow-up survey data should be examined further. For 32% of the sites, representing 37% of the employees surveyed, the latest follow-up survey was conducted before July 2004 (Table 9). The lack of a more recent survey may indicate that the employer is less active in implementing its trip reduction program, which could lead to an increase in SOV commuting. On the other hand, the site is only included in this analysis if they have been in contact with TriMet during the past three years. This indicates that they are still maintaining some level of effort.

There are valid reasons for not having more recent survey data. Some sites are not required to survey under the ECO Rules because of their size or location (e.g. downtown). However, of those with 101 or more employees (the new threshold for employers affected by the ECO Rules), 35% have follow-up surveys conducted before July 2004 (Table 9). Moreover, of the large (101+) sites outside of downtown Portland and the Lloyd District, 34% have follow-up surveys conducted before July 2004. Therefore, the lack of ECO requirements does not appear to explain the old survey data.

Table 9: Employers by Latest Survey Date

Follow-up Survey Year	Worksites		Employees		Worksites with 101+ ECO Eligible Employees	
	Number	Percent	Number	Percent	Number	Percent
Before July 02	118	15%	36,263	22%	60	16%
2002-03	54	7%	10,137	6%	31	8%
2003-04	74	10%	14,996	9%	42	11%
2004-05	284	37%	54,290	33%	127	34%
2005-06	156	20%	38,220	23%	79	21%
After July 06	81	11%	13,047	8%	36	10%
Total	767	100%	166,953	100%	375	100%

The age of the survey data is a problem in the evaluation if there is a relationship between not having survey data and program implementation. As noted above, the lack of survey activity could indicate the lack of an active trip reduction program and an increase in the rate of driving alone. However, an examination of the mode shares by the date of the most recent survey indicates that this is not the case. Figure 4 shows the mean share of employees driving alone to work, along with a 95% confidence interval by the year of the latest survey. Since 2002-03, average drive alone rates have fallen each survey year, while surveys conducted before July 2002 were about the same as those in 2005-06.
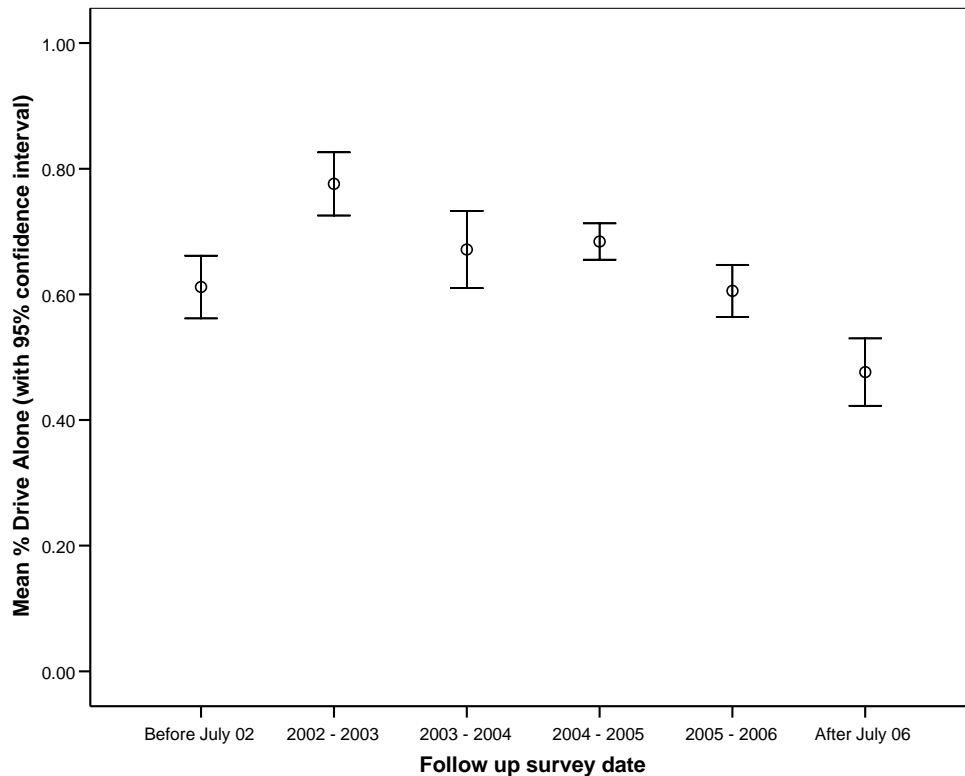
Figure 4: Drive Alone Rate and Latest Survey Date

The estimated annual VMT reduction for the program is between 37,873,000 and 39,382,000. This estimate used the change in mode shares in Table 8 for the 767 worksites in the database applied to the current number of employees, and methods consistent with the *2004-05 Program Evaluation.* The high estimate is lower than last year's high estimate for two main reasons. First, the number of worksites included is lower (767 vs. 814), so fewer total trips were effected. Second, the baseline drive alone rate was lower for the sites this year (72.2% vs. 74.1%). This also reduced the number of trips reduced.

This calculation used the following explicit assumptions, consistent with the *2004-05 Program Evaluation*:

- Average one-way commute distance of 8.45 miles (based upon Metro travel demand model)
- Same mode used to travel to work (from survey) was used to travel home
- 251 (low) or 261 (high) work days per year
- Survey non-respondents commute the same as respondents

The *2004-05 Program Evaluation* made two additional adjustments to create a low estimate. First, there was an assumption that at sites with old surveys, the effectiveness of the trip reduction programs declined since that survey. The analysis above does not support applying such an assumption. Second, the low estimate assumed that 70% of the VMT reduction is related to the program and 30% is due to other factors. Without this adjustment, the VMT reduction

estimate assumes that all of the mode shift measured by the surveys is due to the Employer Outreach program. In reality, some of the improvement may be due to other factors, such as improvements in transit service, other RTO programs, changes in gas prices, and the ECO Rules. The 70%/30% split was somewhat arbitrary, related to differences in mode shift from the 1990 and 2000 Census. Making an adjustment that recognizes that the change in modes is not *entirely* attributable to the Employer Outreach program is very reasonable. However, without a control group of employers who do not participate in the program, it is difficult to accurately estimate the share of improvement that should be assigned to the program. The PSU evaluation team did have access to data from employers reporting survey results to DEQ. Of these, there were 376 that did not work with TriMet that had baseline and follow-up survey data. Using the baseline and current "auto trip rates" reported by DEQ and the current number of employees, those sites reduced total vehicle trips by 5.5%. This compares to a 7.6% reduction for the TriMet program sites. If the DEQ-only sites were considered a control group, this would indicate that a majority (72%) of the VMT reduction could be due to factors other than the Employer Outreach program. If this assumption was applied to the low estimate, the annual VMT reduction would be 10,678,000 and the cost per VMT reduced would be about $0.03, rather than $0.01. However, without more information about the DEQ data, the PSU evaluation team is not confident in this adjustment. For example, there is a chance that some of the DEQ sites do work with TriMet.

Most of the sites experienced an increase in transit use and a decline in drive alone rates.[5] Overall, 63% of the worksites experienced an increase in the share of work trips made on transit (Table 10). This is slightly more than in 2004-05 (60%). The largest worksites (500 or more employees) were most likely to see an increase in transit use and decline in the drive alone rate. The declining trend in the drive alone rate has intensified since the last evaluation. The overall percentage of sites with declining drive alone rate has increased from 2004-05 by 10 percentage points, from 51% to 61%.

Table 10: Change in Mode Share by Worksite Size

# ECO-eligible employees	Transit Mode Share		Drive alone Mode Share	
	% of sites with decline	% of sites with increase	% of sites with decline	% of sites with increase
50 or fewer	35%	57%	55%	39%
51-99	30	61	58	37
100-199	29	65	64	31
200-499	28	65	64	35
500+	18	73	71	27
All sites	30%	63%	61%	35%

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[5] If the mode share increased or decreased by one-half of a percentage point (0.5%) or more, that was considered a change. Mode shares that changed by less than one-half of a percentage point were categorized as not changing.

How does this compare to the work plan in the 5-year Strategic Plan?

The *Strategic Plan Work Plan* projected an annual VMT reduction of 45,500,000 in 2005-06. The program probably did not meet that projection. The primary reason is a difference in the number of sites included in the survey data. The *Strategic Plan* projected that 964 sites would be affected, including 189,000 surveyed employees. The VMT estimate made here includes 767 sites with about 167,000 surveyed employees. TriMet reported enrolling 997 work sites in a TDM program, though there is only survey data for 767 sites that had contact with TriMet within the past three years. This evaluation does not attempt to assess program change at the sites without survey data.

How does this compare to the RTP modal objectives?

The *2004 Regional Transportation Plan* sets modal targets (to be met by the year 2040) for three categories of areas in the region. For regional centers, town centers, main streets, station communities and corridors the non-SOV modal target for all trips to and within those areas is 45-55%. The target for the central city is 60-70%. For other areas the target is 40-45%. Almost one-third of the worksites (32%) meet the non-SOV modal target of 45%. This is an increase over last year, when 30% of the sites working with TriMet met the 45% non-SOV modal target.

Table 11: Distribution of TriMet Employer Outreach Participant Worksites by Non-SOV Mode Share

Non-SOV mode share	% of worksites	% of ECO-eligible employees	% of worksites in downtown Portland	% of worksites in Lloyd District[a]	% of other worksites
45.0% & higher	32%	25%	89%	70%	12%
35% - 44.9%	9	7	5%	12%	10%
25% - 34.9%	12	17	3%	12%	14%
15% - 24.9%	22	32	3%	5%	30%
Under 15%	25	18	1%	0%	33%
Total	100%	100%	100%	100%	100%
n	767	166,953	151	57	559

[a]This data may not be consistent with data from the Lloyd TMA.

To what extent does the program support the RTO objectives?

RTO Objective	Supportive?
Reduce drive-alone trips and encourage alternative modes	Yes. The program's primary objective is to reduce SOV commuting. Some of the data indicate that the program has encouraged transit use more so than carpooling and other non-SOV modes.
Regional coordination and communication	Yes. The program is regional by definition.
Include all trips, not just commute trips	Indirectly. The program focuses on commute trips. To the extent that employees try other modes for commuting, they may be open to using other modes for other trip purposes.
Connections to other goals:	
2040 centers and corridors	Indirectly
Transit-oriented development	Indirectly
TriMet transit investment	Yes. The largest shift to non-SOV modes was to transit.
Community health	Yes. Walking and bicycling commuting increased slightly at the worksites. Employees using transit may walk to access transit.
Air and water quality	Yes, to the extent that trips and VMT are reduced

Conclusions

The Employer Outreach Program has helped increase rates of non-SOV commuting in the region. Employers with survey data showed significant increases in transit commuting and modest gains in walking, bicycling, compressed work week, and telecommuting. However, there was a decline in car/vanpooling. This evaluation points out the difficulty in trying to attribute changes in commute modes to any one program. While vehicle trips to worksites participating in the program fell 7.6% compared to their baseline surveys, trips fell by 5.5% at sites reporting to the DEQ that were not in the TriMet database as recent participants in the program. In addition to the Employer Outreach Program, changes in non-SOV commuting could be due to the ECO Rules, improvements in transit service, increases in gas prices, and other RTO programs.

Recommendations

- Effort should be made to collect updated survey data from employers with surveys over three years old.

- Evaluate the employee survey questionnaire to identify what additional information could be collected. For example, collecting the employee's nearest intersection, rather than just home zip code, could provide better information on commute distance and mode choices.

- Collect data from employers participating in the program regarding their satisfaction with the services provided.

- Work with DEQ to use their data to compare sites working with TriMet versus sites not working with TriMet.

- Compare trends to annual American Community Survey (ACS) data.

Appendix C: Regional Vanpool Program

Program Background

In the Metro region vanpools have been used in two ways to provide travel options: (1) "traditional" vanpools where employees at a worksite commute together in a van from a pick-up location to/from work each day; and (2) vanpools that operate as shuttles between a MAX light rail station and a worksite. At the start of the *Strategic Plan* Work Plan in 2003, TriMet operated six vanpool shuttles and two traditional vanpools. C-TRAN operated nine traditional vanpools and one shuttle. In 2004-05, TriMet ran the regional vanpool program with CMAQ funding. Rider fares covered 30-35% of the vanpool costs for most traditional vanpools and shuttles were fully subsidized. Since then, vanpool shuttles have shifted to other sources of TriMet funding and are not evaluated here. TriMet continued to run the vanpool program under contract from Metro in the 2005-06 fiscal year. The program is now run by Metro. In 2006, Metro released a Request for Proposals (RFP) to establish a list of approved vanpool providers. Three approved vanpool providers operate in the region: Enterprise Rent-a-Car, Flexcar and VPSI.

Evaluation

Data Sources

Metro provided a spreadsheet with 2006 data on each vanpool, including operating dates, ridership, roundtrip mileage, and costs. Metro also provided a report on the Financial Assessment Study conducted by Siegel Consulting in 2006.

What services were provided?

During 2006 18 vanpools received funding through CMAQ (Table 12).

Table 12: Traditional Vanpools Operating in 2006

Provider	Destination	Origin	Capacity	Months of 2006 data	One-way mileage:	Avg. daily ridership:	Avg. ridership to capacity:
ERAC	Swan Island	Orchards, WA	12	12	14.3	5.6	51%
ERAC	Swan Island	Battleground, WA	7	12	23.4	6.4	84%
ERAC	Swan Island	Vancouver, WA	7	12	7.5	3.8	60%
ERAC	Swan Island	Hazel Dell, WA	7	12	10	4.7	68%
FlexCar	Swan Island	Washougal	7	12	23.3	4.8	64%
VPSI	VA Medical Center	Washougal, WA	15	6	30	9.7	32%
ERAC	SE Portland (Fred Meyer)	Salem	15	12	35	6.7	44%
Flexcar	VA Medical Center	Vancouver, WA	7	9	16	4.8	75%
FlexCar	Intel	Vancouver	7	12	22.7	4.9	70%
VPSI	VA Medical Center	Vancouver, WA	15	6	11.4	9.1	61%
VPSI	Tigard (Farmers Ins.)	Vancouver, WA	15	6	18	6.9	46%
VPSI	Tigard (Farmers Ins.)	Vancouver, WA	15	6	18	4.8	32%
VPSI	Tigard (Farmers Ins.)	Vancouver, WA	15	6	18	5.9	39%
VPSI	SE Portland (Fred Meyer)	Vancouver, WA	15	6	15	11.1	74%
VPSI	Hillsboro (Intel)	Keizer	15	6	51	4.8	32%
VPSI	OHSU/VA Medical Center	Salem	12	6	46	7.8	65%
VPSI	Tektronix (Beaverton)	Vancouver, WA	15	3	20	9.1	61%
VPSI	Tigard (Farmers Ins.)	Vancouver, WA	9	6	20	7.0	98%
				Average	22.2	6.5	59%

* Has been discontinued at the end of 2006

How does this compare to the 5-year Strategic Plan Work Plan?

The 18 traditional vanpools is an increase of 16 over the start of the *Strategic Plan Work Plan* in 2003. This is below the objective of creating 30 new vanpools. The funding level in 2005-06 was also lower than planned for in the *Strategic Plan Work Plan*. The *Plan* anticipated $221,560 for subsidizing vanpools, while $151,000 was provided.

What was the level of participation in the services?

The 18 traditional vanpools averaged a total of 118 riders per day. On average, the vans were 59% full (the ratio of average ridership to capacity).[6]

What was the level of satisfaction with the services?

There is no data on the level of satisfaction with the vanpool services.

To what extent did participants use travel options?

Each day they operated, the vans had about 118 total riders. The vanpools in the program are generally small. Seven of the 18 (28%) averaged five or fewer riders per day (Table 13). This is a significant improvement over the figures for 2004-05. Still, based on the capacity of the vans, many are undersubscribed. On average, the vans were at 59% of capacity.

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[6] Calculated by dividing the average number of riders per month by the van's capacity. Metro also calculates this figure using the total number of riders. This method can overstate use if vans have part-time riders. In an extreme example, a seven passenger van could have 14 half-time riders, operating at 100% of capacity. Calculating the ridership/capacity ratio using the total riders in this example would result in a figure of 200%.

Table 13: Vanpool Size

Average number of riders	2004-05	2006
5 of fewer	50%	28%
6-8	35	39
9-11	10	22
12 or more	5	0
Total	100%	100%
# vanpools	20	18

The estimated number of trips and vehicle miles reduced due to the traditional vanpools is shown in Table 14. The estimates use a high (optimistic) and low (conservative) assumption for the share of riders that would have driven alone without the vanpool. In addition, for several of the vanpools, data only covered July-December 2006, even though the van operated for the full year. For these vans, it was assumed that the van operated with the same characteristics and ridership levels in January-June 2006. Otherwise, the calculation is based on the actual data for each van, without any further assumptions. The annual VMT reduction in 2006 was between 783,300 (low estimate) and 979,100 (high estimate).

Table 14: Estimated VMT Reduction for Traditional Vanpools in 2006

Item used to calculate estimate	Source	Low	High
Commute trips and VMT reduced			
Average number of rides per day	Vanpool data	4 – 11 (specific to vanpool, 6.5 average)	4 – 11 (specific to vanpool, 6.5 average)
Length of vanpool trip (roundtrip)	Vanpool data	15 – 102 miles (specific to vanpool, 44.4 average)	15 – 102 miles (specific to vanpool, 44.4 average)
% of vanpool commute trips that would have been made driving alone instead of vanpool	Assumption	80%	100%
Annual trips reduced	Calculated assuming 12 months of operation in 2006	10,900	13,600
Program costs			
Subsidy (CMAQ and TriMet match)	Calculated from vanpool subsidy data	$152,000	$152,000
Estimated VMT reduction in 2006		**783,300**	**979,100**
Cost-effectiveness		**$0.19/mile**	**$0.16/mile**

Notes: Estimates of annual trip and VMT reduction rounded to nearest 100.
The VMT estimates do not include miles that might be driven by each rider to access the park-and-ride location where many vans originate. It is assumed that if the vanpool did not exist, about the same number of miles would be driven to access a transit stop or carpool pick-up point or as part of the drive all the way to work.

How does this compare to the work plan in the 5-year Strategic Plan?

The number of trips and VMT reduced is significantly lower than projected in the *Strategic Plan Work Plan*. This is primarily due to two factors: (1) far fewer vanpools operating; and (2) the Work Plan assumed 90 miles round trip mileage per vanpool. This is about twice the actual average.

How does this compare to the RTP modal objectives?

Not applicable.

To what extent does the program support the RTO objectives?

RTO Objective	Supportive?
Reduce drive-alone trips and encourage alternative modes	Yes. The program's primary objective is to reduce SOV commuting.
Regional coordination and communication	Yes. The program is regional by definition.
Include all trips, not just commute trips	Indirectly. The vanpool program focuses on commute trips. However, traditional vanpool and shuttle riders may then use other modes for mid-day trips, e.g. walking to lunch rather than driving. The program may also enable some riders to avoid owning an additional personal vehicle, which could affect non-commute trips.
Connections to other goals:	
2040 centers and corridors	Indirectly. Some vans go to employers located within centers.
Transit-oriented development	No effect
TriMet transit investment	No effect
Community health	Unclear. The program may have a small impact on encouraging walking, in that vanpool riders can not drive personal vehicles to lunch or other errands during the day.
Air and water quality	Yes, to the extent that trips and VMT are reduced

Conclusions

The program clearly supports the objective of reducing drive alone trips and encouraging alternative modes. However, the overall impact of the program is currently very small. The program has not expanded significantly over the past two years in part because it was conducting a market analysis, as called for in the *Strategic Plan Work Plan*. The resulting document, *Rideshare Program Market Research and Implementation Plan* (August 2005), prepared by UrbanTrans Consultants, Inc. provided an in depth analysis of which markets could be targeted to increase the program. Seigel Consulting prepared a Vanpool Program Financial Assessment Study to assess the cost effectiveness of the program by comparing the cost per ride and cost per passenger mile to other programs. The report was submitted to Metro in December 2006 and recommended expanding the vanpool program and reducing the public incentives to ensure that the public incentives to be no more than fifty percent of total cost. Metro staff is now working to implement many of the recommendations from that analysis, with major changes going into

effect in February 2007. In particular, Metro aims to increase the share of van costs covered by rider fares. Now that the contracting and financial aspects of the program have been addressed, Metro is working to increase the number of vanpools.

Recommendations

Metro staff is starting to address several of the evaluation recommendations from the *2004-05 Program Evaluation*, including surveys of vanpool riders to gather information about previous commute mode. Staff is also examining the use of odometer readings to calculate mileage, rather than the estimates of roundtrip mileage. This 2004-05 recommendation was more important for the vanpool shuttles, though it was included for both types of vanpools. Finally, the *2004-05 Program Evaluation* recommended that Metro survey program participants on satisfaction with program. For example, RIDES for Bay Area Commuters has conducted surveys of vanpool drivers to assess their levels of satisfaction, along with collecting data on vanpool characteristics. Because the survey Metro is administering is collected by the driver of the van and passed on through the vanpool provider, staff felt that that survey might not result in completely accurate responses. Staff is exploring other options. One option would be to include a postage-paid envelope for returning the survey. Given the small scale of the program, the cost for this would be minimal.

Appendix D: CarpoolMatchNW

Background

CarpoolMatchNW.org is a self-serve Internet based service that links riders and drivers. The program allows registered users to enter relevant information about their commute (e.g. destinations and travel times), then view a map which displays the locations of other registered users who share their commute. The program was initiated in 2001 by the City of Portland, with help from a grant from the Climate Trust Fund. The site started in 2002. The City's Department of Transportation (PDOT) continues to operate the website. Initially, customer service for the program was provided by a staff person at TriMet. That responsibility was shifted to PDOT and then moved to Metro in 2006-07.

Evaluation

Data Sources

In addition to reports describing activities taken place during 2005-2006, the City provided the raw data from the surveys conducted of people registered with CarpoolMatchNW. The database included 6,610 people who registered with the website before December 2006, covering four years and six months (July 2002 – December 2006). This does not include registrants that were purged from the database prior to December 2006. There were also data for registrants for partial years before July 2002 (March through June 2002) and after 2007 (March 2007). Unless otherwise noted, any data presented below regarding registrants of the CarpoolMatchNW website is from our analysis of this database and includes registrants from March 2002 through December 2006 (end of the 2005-06 evaluation period).

CarpoolMatchNW sends follow-up surveys to registrants after 30 days and every six months after the initial survey.[7] Since the *2004-05 Program Evaluation*, CarpoolMatchNW revised the survey questionnaires. They shortened the surveys by removing questions about the level of satisfaction with the program, current commute modes, and socio-demographics of the participants.[8] About 20% of the registrants responded to the 30-day survey and 15% to the semiannual surveys.

The City of Portland also provided a report they submitted to the Climate Trust in August 1, 2006 about the program.

What services were provided?

The City of Portland operated and maintained the CarpoolMatchNW website in 2005-06. As recommended in the *2004-05 Program Evaluation* the City of Portland began purging inactive accounts in May 2006. This includes contacting the registrants with e-mail addresses that "bounced back" when automatic surveys were sent. Registrants that could no longer be contacted were deleted from the CarpoolMatchNW system. Purge rates in December 2006 and after have been at 40 to 80 people per month.

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[7] The first survey has since been changed to occur 15 days after registration.
[8] Questions about satisfaction and current commute modes were added back in to the surveys in Spring 2007.

The program also undertook significant outreach and marketing activities. Metro began distributing CarpoolMatchNW marketing materials at the DriveLess/SaveMore (DLSM) campaign booths. Metro set up DLSM booths at farmer's markets, fairs and community events, and employer transit and safety fairs in the region. According to CarpoolMatchNW staff, marketing CarpoolMatchNW along with DLSM has particularly reached commuters living in the suburbs. They estimate that between July and December of 2006, hundreds of people became acquainted with the program in this way. In October 2006, CarpoolMatchNW administrator with the City of Portland drafted Regional Rideshare 2007-2008 Marketing Plan which includes components to support CarpoolMatchNW. One of these is a prize program designed to reward regular carpoolers, as well as vanpoolers who as part of the Metro VanPool program. The prize program began in January of 2007.

How does this compare to the *Strategic Plan Work Plan* for 2005-06?

For the most part, the program was able to achieve their *Strategic Plan Work Plan* technical and customer service objectives. They did reach the number of registrants indicated (discussed below).

Table 15: 2004-05 CarpoolMatchNW Activities

	Objective	2004-05 Outputs & Outcomes	2005-06 Outputs & Outcomes
From 5-Year Strategic Plan			
Technical			
Project management, site maintenance, monitoring & verification	Ensure site runs well and is accessible	Staff turnover may have disrupted. Various technical problems solved. Partnership with C-TRAN in limbo because of funding cuts.	Met objectives. Fixed many issues identified in previous year.
Site improvements: one-time trip component, improving administrative tools, translation, etc.		One-time trip component added. Intranet option added for matching within employers. Translation not added because of unknown status of regional program.	Survey questions were changed. Also the interval of the initial survey was changed to 15 days to 30 days. Began to purge inactive registrants
Customer service	Keep database current and maintain existing 1,700 users	Customer service staff person housed at TriMet during 2004-05	Exceeded objectives. Over 6,000 users, even after active purging process.
Outreach and Marketing			
One-to-one outreach, e.g. transportation coordinator campaigns, t-fairs, promotions to users, outreach to magnet schools	2,630 registrants	Cool to Carpool outreach in February 2005, including 85 companies. Worked with 3 companies in Rivergate area.	Partnership with Drive Less/Save More campaign started in July 2006
General public marketing, e.g. bus backs, drive time sponsorships, promoting translated site	5 major sponsors 2.5 million impressions 800,000 people driving alone	Partnership with KISN FM in summer 2004.	
Partnership development	500+ registrants	Unclear what was intended in work plan.	
RTO funding	$345,520	$60,000	$61,125
Program impact	1,059 new carpools 1,800 trips/day reduced 11,224,080 annual VMT reduction		32-301 new carpools in 2005-06 See Table 19
Cost/VMT reduced	$0.03		See Table 19

What was the level of participation in the services?

The database includes 1,655 people that registered at the site in 2005-06. By December 2006, there were about 6,600 people registered in the database provided to PSU CUS. The City of Portland staff indicated that 7,100 people were registered at the site in December 2006. The

number of active participants in the database provided to PSU CUS was 38 percent higher than that provided for the *2004-05 Program Evaluation* (4,780).

The *Strategic Plan Work Plan* set objectives of maintaining 1,700 users, adding 2,630 registrants through marketing and adding 500 registrants through partnership development. This was achieved by the end of June 2005 during the last evaluation period. The number of people registering each month exceeded 100 in most months during the 2005-06 evaluation period (Figure 5). The Cool to Carpool marketing campaign held in February of 2004 and 2005 generated a significant number of registrants.
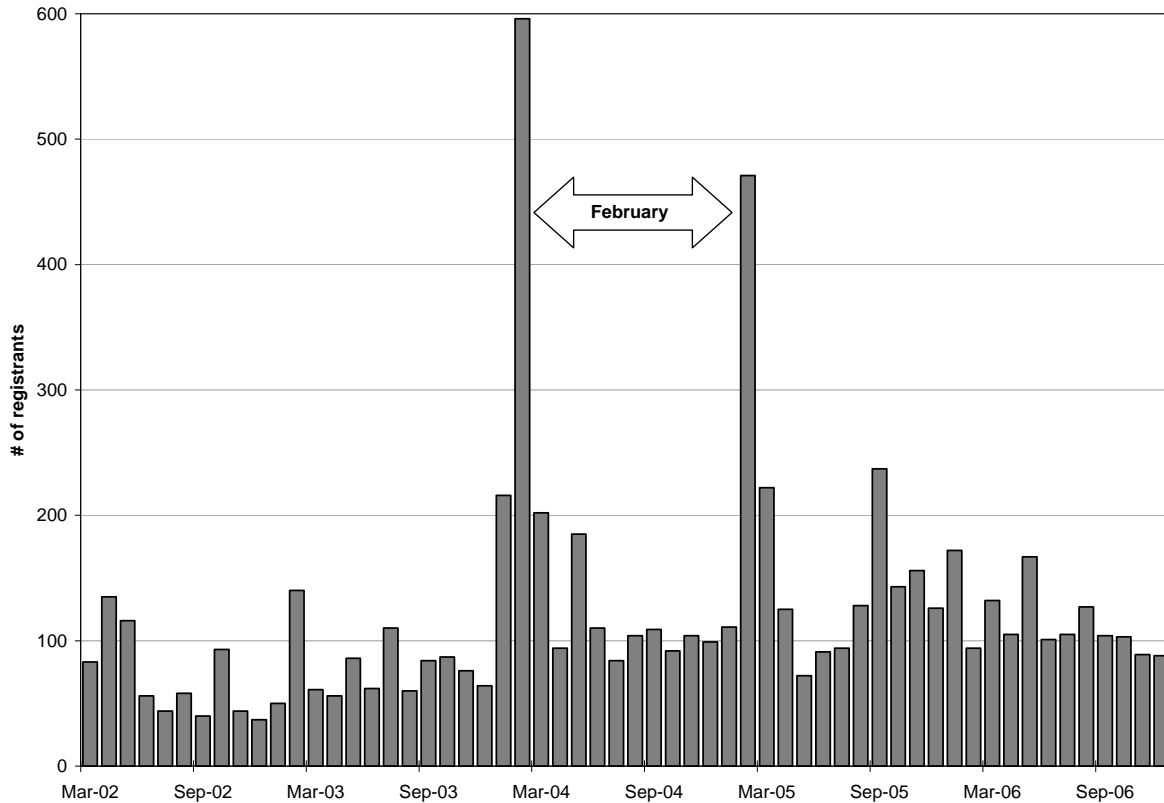
Figure 5: Monthly Registrants on CarpoolMatchNW Website

What was the level of satisfaction with the services?

In previous years, the semiannual survey asked registrants for the level of satisfaction with five aspects of the program. Because those questions were not included in the new survey, the level of satisfaction is unknown. The *2004-05 Program Evaluation* found that satisfaction levels increased over time, with 2004-05 registrants giving the service the highest rating, compared to the previous two years. The lowest levels of satisfaction were with the quality of matches. Half (50%) of the registrants from 2004-05 rated the quality of matches as excellent, compared to 47% of registrants from 2002-03. The improvement probably reflected the increasing size of the database. Given the increasing size of the database and recent efforts to purge it of inactive registrants, there is reason to expect that levels of satisfaction, particularly with the quality of the matches, increased in 2005-06.

To what extent did participants use travel options?

Overall, about 20% of the survey respondents indicated that they were in a carpool or vanpool formed at CarpoolMatchNW. The rates differ between registration years and between the 30 day and semiannual survey (Table 17). In the entire database, about 20% of the registrants responded to the 30 day survey and 15% responded to a semi-annual survey. Given the relatively low rates, the responses may be biased towards people who were genuinely interested in forming a carpool and those that succeeded. Overall rates of forming carpools among the entire database are likely lower.

Table 16: CarpoolMatchNW Registrants that Form Carpools/Vanpools

| | Are you in a carpool or vanpool formed at CarpoolMatchNW? | | | |
| | 30-day survey | | Semi/Annual survey | |
Registration Year	Percent	total # respondents	Percent	total # respondents
July-Dec 06	17%	12	28%	23
2005-06	18%	176	17%	194
2004-05	20%	407	24%	276
2003-04	24%	460	23%	306
Before Jul 03	13%	267	19%	174

The versions of the surveys used in 2005-06 do not ask the registrant's normal or previous commute mode. This information is useful in estimating changes in commute mode and has since been added back into the follow-up surveys. The *2004-05 Program Evaluation* found that only half of the registrants that responded to the annual survey drive alone to work (Table 17). Excluding the people who commute by a car/vanpool formed via CarpoolMatchNW, 64% drove alone to work. This indicated that many of the participants were already inclined to use alternative modes and did so at a fairly high rate without the matching service. This also meant that some of the carpools formed through the site are not reducing VMT because they are drawing people from transit and other alternative modes.

Table 17: Commute Mode of CarpoolMatchNW Registrants (2004-05)

| | % of respondents to annual survey | |
Commute Mode	Including carpools/vanpools formed via CarpoolMatchNW	Respondents who did not form or sustain car/vanpool
Drive Alone	50%	64%
Carpool/vanpool formed via CarpoolMatchNW	22%	
Carpool/vanpool	12%	16%
Bus or MAX	15%	20%
Drive alone to Park & Ride, bus or MAX	7%	8%
Drive with others to Park & Ride, bus or MAX	1%	1%
Bike	7%	9%
Walk	4%	5%
Total respondents (n)	521	407

Note: Percentages do not total 100% because multiple responses allowed.

The typical carpool/vanpool formed through CarpoolMatchNW has two or three people and travels about 30 miles round trip at least four days a week. Over the whole evaluation period, the average carpool/vanpool size is 2.2 people according to respondents of both the 30-day survey and the annual or semiannual survey. A problem associated with the surveys is that some respondents may not understand the question, or they are being honest, after previously falsely or mistakenly indicating that they were in a carpool. In the 30-day survey, 61% of respondents who answered that they were still in carpool indicated zero for the number of people in their carpool or vanpool, and 23% indicated that there was one person in their carpool or vanpool including themself. However, the majority of the respondents who indicated zero or one person in their carpool or vanpool registered during 2003-04 or 2004-05. Only 10% of the respondents indicating zero or one person carpools registered during 2005-2006.

Table 18: Characteristics of Car/Vanpools formed through CarpoolMatchNW

| Registration Year | 30-day survey | | | Annual survey | | |
	Mean # people	Median Roundtrip miles	Mean Days per week	Mean # people	Median Roundtrip miles	Mean Days per week
After Jul 06	Too few to report					
2005-06	2.2	36	4.2	2.2	28	4.1
2004-05	2.1	32	4.3	2.1	30	3.8
2003-04	2.4	30	4.2	2,4	30	4.4
Before Jul 03	2.3	30	4.4	2.2	28	3.8
Overall	2.2	30	4.3	2.2	30	4.1

Note: Median distance used for roundtrip miles instead of mean because of a small number of very high estimates.

The estimated number of trips and vehicle miles reduced due to the car/vanpools formed through people registering with CarpoolMatchNW in the 2005-06 fiscal year is shown in Table 19. The last six months of 2006 is not included in the evaluation because of the small number of survey responses from people who registered in that time. The estimates use a set of high (optimistic) and low assumptions. For example, for the number of car/vanpools formed, the low estimate is the actual number of people indicating in the 30-day survey that they formed a carpool. This assumes that none of the non-respondents formed a car/vanpool as a result of CarpoolMatchNW.[9] This is a very conservative estimate. The high estimate assumes that non-respondents formed car/vanpools at the same rate as respondents to the 30-day survey. The assumption of 2.2 people per car/vanpool is based upon the survey responses from 2005-06 registrants. This is significantly lower than the assumption used by in the *Strategic Plan Work Plan* of 2.7 people per car/vanpool. The round-trip mileage (32 miles) is the midpoint between the 30-day and annual survey median values for 2005-06. This distance is longer than what was assumed in the *Strategic Plan Work Plan* (about 24 miles) and what is assumed by Metro in their regional travel modeling (about 18 miles). The assumption of 4.2 days per week is based upon the survey average. Applying this to 52 weeks results in about 218 days per year, lower than the assumption of 262 workdays per year in the *Strategic Plan Work Plan*.

These assumptions were applied to the two previous years as well. The results are shown in Table 20. The total for the three years optimistically assumed that carpools formed in previous years continued through 2005-06.

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[9] The numbers were not adjusted down to account for any potential double-counting – survey respondents being in the same carpool.

Table 19: Estimated VMT Reduction for CarpoolMatchNW in 2005-06

Item used to calculate estimate	Source	Low	High
Commute trips and VMT reduced			
% of survey non-respondents forming carpools	30-day survey responses	None	Same rate as 30-day survey respondents
Number of carpools formed	Calculated from above	32	301
Length of carpool trip (roundtrip) *Assumed to be the commute distance if not vanpooling*	Survey data	32 miles	32 miles
% of carpool commute trips that would have been made driving alone instead of carpool	Assumption, based on data from Table 17	60%	100%
Carpool size	Survey data	2.2	2.2
Days per week	Survey data	4.2	4.2
Weeks per year	Assumption	52	52
Annual trips reduced	Calculated, including trip for the carpool	5,000	78,900
Program costs			
RTO Subsidy	Metro	$62,125	$62,125
Estimated VMT reduction in 2005-06		**160,000**	**2,525,000**
Cost-effectiveness		**$0.39/mile**	**$0.02/mile**

Notes: Estimates of annual trip and VMT reduction rounded to nearest 100.

Table 20: Estimated VMT Reduction for CarpoolMatchNW for Three Years

Registration Year	Number of Car/vanpools		Annual VMT Reduction	
	Low estimate	High estimate	Low estimate	High estimate
2005-06	32	301	160,000	2,525,000
2004-05	81	335	406,000	2,813,000
2003-04	112	459	563,000	3,846,000
Total	229	1,095	1,129,000	9,184,000

[a]Assuming carpools formed in previous years continued in 2005-06.

How does this compare to the work plan in the 5-year Strategic Plan?

The estimated impacts of the program shown in Table 19 and Table 20 are significantly lower than projected in the *Strategic Plan Work Plan*. The *Work Plan* projected 882 new carpools in 2003-04 and 1,059 in 2004-05 and every year after. It is difficult to tell whether the *Work Plan* projections are cumulative each year. If they are not, the total number of new carpools projected for 2001-02 through 2004-05 would be 2,823. Either way, the program has fallen short of that

projection. The level of funding expected for the program was more than twice what was actually provided. This undoubtedly had an impact on program effectiveness.

How does this compare to the RTP modal objectives?

A comparison to the RTP modal objectives is not appropriate because the participants in the CarpoolMatchNW website are self-selected and more motivated to use non-SOV modes than the general population.

To what extent does the program support the RTO objectives?

RTO Objective	Supportive?
Reduce drive-alone trips and encourage alternative modes	Yes. The program's primary objective is to reduce SOV commuting. However, a share of the new carpoolers are switching from other alternative modes.
Regional coordination and communication	Yes. The website is operated by the City of Portland, but allows and includes participants from anywhere. Through promotion via DriveLess/SaveMore, it reached a wider audience in 2005-06.
Include all trips, not just commute trips	Indirectly. The program focuses on commute trips, but now includes a one-trip trip component. Carpool riders may use other modes for mid-day trips, e.g. walking to lunch rather than driving because they don't have a car available. The program may also enable some riders to avoid owning an additional personal vehicle, which could affect non-commute trips.
Connections to other goals:	
2040 centers and corridors	Indirectly, to the extent that participants work and/or live in centers and corridors.
Transit-oriented development	Unclear, likely no measurable effect
TriMet transit investment	Unclear
Community health	Unclear
Air and water quality	Yes, to the extent that trips and VMT are reduced

Conclusions

The program met its 2005-06 objectives for the number of participants (registered users). The number of registered users has also increased by 38% since 2004-05. However, neither the participants' level of satisfaction nor prior commute mode was measured, which prevents a more comprehensive evaluation. This is largely because of the changes made to the web-based surveys, including removing questions about current commute modes and a level of satisfaction. Starting in Spring 2007, commute mode is asked of new CarpoolMatchNW registrants and some satisfaction data has been collected through the prize award program. The survey response rates also dropped for 2005-06.

Recommendations

- Revise the follow-up survey interface and forms to provide more and more accurate information. For example, there were several survey records that indicated that the person was still in a carpool, but traveled 0 miles and 0 days per week, and provided reasons for not being in a carpool; some of these records included a start date for the carpool. A survey that allows skip patterns based on answers to questions could help prevent this. In

addition, if someone is carpooling, 0 miles and 0 people would not be valid answers to the questions. These could be eliminated as options. Moreover, the default answer should be no answer, rather than 0 – requiring the respondent to click to provide an answer, rather than just leaving the field as is.

Additional questions could provide useful information on the use and quality of the service, including whether the person contacted any one on the list provided, whether person was satisfied with the quality and size of the list

Prior to making further changes to the survey, Metro and the City of Portland should evaluate the effectiveness of migrating to an on-line, commercially-available survey tool. Documentation provided by Metro indicates that changes to the current survey interface require City of Portland Bureau of Technology Services staff and management time. For example, adding three questions was estimated to take eight hours. Similar changes to on-line survey instruments are relatively quick and easy and could be done by CarpoolMatchNW staff with little time delay.

- Ask new users to indicate their current commute mode when they first register on the site. This information is necessary to estimate changes in mode share and new non-SOV users.

- Improve survey response rates through follow-up and incentives.

Appendix E: SMART/Wilsonville Travel Options Program

Program Background

SMART Options is the transportation demand management (TDM) arm of Wilsonville's SMART Transit and provides services to area employers to help their employees find the best way to get to work, whether it's by bus, carpool, vanpool or bicycling. SMART Option's boundaries are those of the Wilsonville city limits for the TDM outreach, with transit service provided to other areas in the region. SMART Options has provided a number of programs to employers, school children and residents of Wilsonville.

In 2005-2006 SMART TDM programs received $55,000 in CMAQ RTO core program funding. SMART also received a 2040 grant of $16,000 in 2004-05 and $5,728 in 2005-06 to implement the "Walk Smart" program over two years from 2004-2006.

Evaluation

Data Sources

The evaluation is based upon reports submitted by Wilsonville to Metro.

What activities were provided?

As noted in Table 21, over the 2005 - 06 program year many of the activities SMART provides have to do with encouragement and raising awareness of transportation and parking options in the area. On a regional coordination level, SMART established a partnership with the Metro region DriveLessSaveMore campaign and wrote newsletter articles. Also SMART staff worked closely with city planners to ensure that TDM provisions are included in planning efforts. New developments for 50+ employees are required to contact SMART staff as a development condition of approval to create a TDM worksite plan. Also SMART staff ensured the transportation system plan (TSP) and other planning efforts purport TDM measures, including Ped/Bike Plan adopted in 2006 and the Transit Master Plan update that is currently under review by City Council. Art on the Bus and Walk Smart are two programs SMART completed in 2004-05 and the efforts have continued throughout 2005 - 2006. Art on the Bus is a community event where middle school children compete to have their artwork painted on SMART buses; 250 students participated in 2005 and 200 middle-school students participated in 2006. The school outreach program was not developed in 2005-06 due to staff time restraints.

Walk Smart (funded from a Region 2040 grant) engaged employees, school children and seniors in walking to different activities. The program provides a pedometer and other promotional materials and asks participants to log the number of steps that they take for a year. The program's report included these highlights:

- As of December 2006, 972 participants logged a total of approximately 1.8 billion steps or the equivalent of 938,000 miles.

- SMART staff worked with City Departments (Planning, Natural Resources, Parks and Recreation) to share information to create a "Wilsonville Walking Map".

- Coordinator at Curves promoted Walk SMART to new members.

- 55 Walk SMART kits were distributed to the members of the Chamber of Commerce.

How does this compare to the *Strategic Plan Work Plan*

The services provided compare favorably with the *Work Plan* (Table 21). Most of the activities were accomplished, with some exceptions.

What was the level of participation in the activities?

See Table 21 for details. The employer outreach program worked with six employers.

By the end of 2006, 972 people had signed up for the Walk Smart program. This is a 37% increase, from 712 participants in March 2005.

What was the level of satisfaction with the activities?

The reports did not include measures of satisfaction. Anecdotally, SMART staff reports that program participants reported a high level of satisfaction.

To what extent did participants use travel options?

The program did not collect data on the impacts of the general TDM efforts. The TriMet employer database included four Wilsonville employers. For these sites, 80-93% of the commute trips were made driving alone.

The WalkSmart program did collect information from participants. As of December 31, 2006, the participants had reported walking 876,341,884 steps or the equivalent of 938,171 miles. The participants indicated that about 1% of these steps replaced car trips, for a reported reduction of 11,501 VMT. However, it is unclear how accurate this estimate is. The program manager questioned whether participants understood the form correctly and whether they always completed this portion of the form.

How does this compare to the work plan in the 5-year Strategic Plan?

The *Strategic Plan Work Plan* did not include specific trip or VMT reduction objectives for this program.

How does this compare to the RTP modal objectives?

There is no data to accurately assess whether the program is close to meeting the modal objectives from the RTP.

How does this compare to programs in other regions?

Not applicable.

Table 21: 2005 - 2006 SMART/Wilsonville Activities

	Objective	2005-06 Outputs & Outcomes
From 5-Year Strategic Plan		
General Outreach		
Design, produce, and distribute program materials, including brochures and flyers	Increase public awareness of TDM program. Distribute 1,000 per year. Target: General public/ employers	Achieved Goals
Walk to Lunch Event. Restaurants provide discounts for people who walk to lunch and are wearing a *Walk to Lunch* button. Additional publicity from press coverage	Employees and residents who walk to lunch. 250 participants per year. Target general public and employers for participation.	Did not host this event. Lack of staff time.
Booth at Clackamas County Fair. Primarily focused on promoting transit and CarpoolMatchNW, but also providing information on bicycling and walking, and connections to other transit systems (SMART, Canby Area Transit, TriMet, Ctran and Salem Area Transit)	Increase use of transit and CarpoolMatchNW. 75 additional bus riders and 50 additional carpool sign-ups. Target: General Public.	Provided 275 rides on the SMART trolley from Wilsonville to Canby as a form of transportation. Talked with over 400 people about SMART Options.
Write articles for Boones Ferry Messenger about TDM program activities, events, and opportunities.	Public awareness of employer efforts and TDM program. 12 articles per year. Target: General Public	Published 6 articles in 2005-06 and 6 in first 6 months of 2006.
Create and maintain SMART TDM Webpage with information on individual transportation options and employer programs	Provide general and employer TDM information and links to other services, such as CarpoolMatchNW. 50 hits per month.	Average hits per day to www.ridesmart.com: 1630. Average visits per day: 157. Average length of visit: 6.44 minutes Currently designing a new SMART website scheduled to launch in July 2007. This site will include SMART Options pages, Walk SMART pages and interactive survey links.
New resident welcome meetings.	Provide new residents with information on transportation alternatives before they get into the habit of driving alone. Four events per year, with 120 new residents attending.	Achieved Goals
Create new resident welcome packets to distribute to apartment managers.	Same as above. Distribute 250 packets per year.	100 packets per year in 2005-06. 2006: Distributed 200 packets through Chamber of Commerce, New resident welcome events and mailings.
Create informational displays for Chamber of Commerce, Library, and City Hall	Six displays per year. General public/ employers.	Goal not met due to budget and staff time constraints. Provided brochures and materials for them to display in their existing informational displays.
Walk Smart program - approved by RTO for $40k over 2 years FYs 2005 & 2006	Estimated 1500 participants 3 groups - Employees, Elders, middleschool children	972 participants

	Objective	2005-06 Outputs & Outcomes
Employer Outreach		
Contact employers by visiting the worksites and calling them to let them know about the TDM program.	150 personal contacts and 200 phone contacts per year.	50 contacts and 50 phone calls
Organize employer transportation meetings. Employers get together to discuss transportation issues that affect their worksites.	Gain a clear understanding of the transportation issues that concern employers. Create the opportunity for employers to work together on solutions. Four meetings per year with 25 employers participating.	Did not achieve goal due to budget and staff limitations.
Hold transportation fairs at worksites to provide information on all transportation alternatives.	12 per year, reaching 5,000 employees.	8 per year, reaching 3,500 employees
Assist employers in developing and implementing TDM plans for their worksites	6 TDM plans per year.	Goals met
Create and distribute employer information packets.	100 per year.	Goals met
Compile and create training and reference materials for transportation coordinators in Wilsonville.	50 per year.	Goals met
Promotion of regional and community events, such as Carfree & Carefree, Bike Commute Challenge, Earth Day etc.	500 employees per year participate in the events	Goals met
Guaranteed Ride Home program. Reach agreement with taxi company, print guidelines, distribute to employers.	Sign up 10 employers per year.	SMART offers GRH for those who use transit, but there is no official program as of yet 2006: Working on creating policy for an Emergency Ride Home Program.
SMART Employer of the year award program.	Reward one employer for outstanding efforts in their TDM program. Get additional publicity from media release.	Did not offer award
School Outreach		
Art on the Bus competition in the schools. Children create artwork that illustrates the importance of transportation options. The three winning art works are incorporated into a bus wrap.	Get children to think about transportation options by describing them in drawings. Create community awareness of transportation options via the traveling artwork on the bus. 150 elementary and middle school participants per year	250 students participated in 2005 and 200 students in 2006
Develop school outreach program based on existing successful programs and pilot programs.	Involve teachers and students in solving real-life transportation problems in the context of math, science, and other curricula. 500 students per year participate.	No program due to staff time restraints and budget.

	Objective	2005-06 Outputs & Outcomes
Planning and Coordination		
Ensure that TDM provisions are included in development conditions for new developments in Wilsonville.	All new developments in Wilsonville are required to support TDM at their worksites by posting information, submitting TDM plans, and providing adequate facilities for bicyclists, pedestrians, and transit.	Staff working with Planning department to create a TDM ordinance. New developments that will employ more than 50 employees at any single work site must contact SMART as a development condition of approval to create a TDM worksite plan.
Work with Wilsonville Planning staff to ensure that TDM is supported in the planning process.	Ensure that Transportation Systems Plan amendments, code amendments, and pedestrian/bike plans adequately support TDM.	Goals met. The Transit Master Plan update and Ped/Bike plan also supports TDM measures for Wilsonville. The Bike/Ped plan was adopted in FY06. Transit Master plan is currently under review by City Council.
Coordinate program activities with other regional groups, transit districts and jurisdictions.	Create a unified message, coordinate activities, and prevent unnecessary duplication of effort.	Goals met. New this year, SMART is an active partner with the Metro region DriveLess/SaveMore campaign.
Write articles for weekly "FYI" newsletter to the Wilsonville City Council.	Ensure that City Councilors are aware of TDM issues and activities. 30 articles per year.	15 articles per year.
Overall		
RTO funding	$89,700	$55,000 for general TDM program $5,728 for Walk Smart
Program impact	Not projected	
Cost/VMT reduced	Not projected	

To what extent does the program support the RTO objectives?

RTO Objective	Supportive?
Reduce drive-alone trips and encourage alternative modes	Yes.
Regional coordination and communication	Yes. Program manager coordinates with other TMAs and participates in regional programs.
Include all trips, not just commute trips	Yes. In particular, the WalkSmart program targets all trips. The outreach programs include seniors and school children, in addition to employees.
Connections to other goals:	
2040 centers and corridors	Wilsonville is a center.
Transit-oriented development	Unclear
TriMet transit investment	Will support future investment in Wilsonville-Beaverton commuter rail
Community health	Yes. The WalkSmart program focuses on physical activity.
Air and water quality	Yes, to the extent that trips and VMT are reduced

Conclusions

SMART completed nearly all of the tasks laid out in the work plan for the 2005-06 fiscal year. The program is well established in the community and has had some success with promotions like the Art on the Bus and Walk SMART programs. They have also had success with the employer outreach and coordinating with city transportation planning efforts and other regional programs. For the projects and programs not undertaken, lack of staff time was often attributed as one of the causes.

Recommendations

- Collect more data on the end outcomes of the programs, including employee survey data at sites where outreach is conducted.

Appendix F: Lloyd TMA

Project Background

The Lloyd TMA (LTMA) was formed in 1994 to manage parking and transportations issues for the Lloyd District. The LTMA's long-standing focus is the economic vitality and livability of the district. The area's high concentration of employment and shopping raised concerns from retailers about maintaining a parking supply for customers. The District, in partnership with the City of Portland, eliminated on-street free parking in 1997 by installing parking meters.

LTMA programs and membership have continued to grow over the last 12 years and include bicycling, walking and transit incentives to achieve the 2015 mode-split goals it set for itself. Most employment sites in the Lloyd District can easily be exempted from the State's ECO Rules through restricted parking ratios.[10] Nevertheless, LTMA still conducts annual surveys to member employers to determine mode splits, help TriMet establish the flat Universal Pass price (unique to LTMA), and gauge the success of their efforts.

The mission of the LTMA is to support and promote the economic vitality and livability of the Lloyd District through cooperative business supported programs promoting efficient, balanced transportation systems and land use patterns (LloydTMA Annual Report, 2007). Goals set by the LTMA Board for 2006 were:

- Increase employee use of transit to 32% of all commute trips (all businesses).
- Increase employee use of transit to 45% of all commute trips (Universal Pass members)
- Increase number of bicyclists to Lloyd District by 5% annually.
- Increase the number of pedestrian commuters to the Lloyd District by 3.3% annually.
- Maintain existing level of employee use of car/vanpooling as a commute option (10% commute mode split)
- Continue efforts to fund pedestrian safety and amenity improvements throughout Lloyd District's pedestrian environment.
- Increase employee and employer awareness of Lloyd District transportation options.
- Continue to develop an organization that effectively supports and advocates the long-term economic vitality and livability of the Lloyd District.

The Lloyd District is committed to attracting and locating nearly 17,000 net new employees (total 34,000) and 4,000 new housing units by the year 2015.

LTMA's longevity and success has helped it to diversify its funding sources. Funding sources include LTMA membership (via Business Improvement District), a share of parking meter revenues, TriMet Universal Pass sales commissions, and BETC Tax Credit Partnerships. The funds from the BETC Tax Credit program go to fund a "Transportation Opportunity Fund (TOF)" where the LTMA provides partial or full funding for various projects in the District. Some of the TOF projects slated for 2005 included: Interstate underpass improvements, improvements to pedestrian crossing and amenities, outreach and communications, transit tracker

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[10] ECO Rules OAR 340-242-0200 and OAR 340-242-0210
(http://www.deq.state.or.us/nwr/ECO/docs/RevisedRules.pdf)

expansion, wayfinding sponsorship program, TMA bike rack fund, future transit service enhancement plan, and Smart Card value-loading machine/software for Commuter Connection. (LloydTMA Annual Report, 2007).

LTMA received $24,750 in Metro RTO CMAQ monies for 2005-06 to augment existing transit, bicycling and pedestrian programs, in addition to $11,597 Region 2040 Initiatives to implement the Lloyd TMA/ Lloyd District pedestrian program.

Evaluation

Data Sources
The evaluation is based upon 2007 LTMA annual report (covers activities undertaken in 2006).

What services were provided?
LTMA activities, objectives and outcomes are displayed in Table 22.

How does this compare to the 5-year Strategic Plan Work Plan?
The LTMA achieved the objectives related to programs funded through the RTO grant (Table 22.)

Table 22: 2005-06 Lloyd Center TMA Activities

	Objective	2005-06 Outputs & Outcomes
Transit Increase employee use of transit to 32% of commute trips for all businesses and 45% for Universal Pass participants.	Work with TriMet to achieve new Universal Pass pricing	Successfully negotiated new Universal Annual Transit Pass Program (formally called Passport)
	Sell 5,000 Universal Pass passes to Lloyd District businesses	Sold 4,954 Universal Pass pasees; provided ongoing account support to 41 Universal Pass businesses
	Ensure continued employee access from Vancouver	
	Summarize trip data from 2006 Lloyd District employee survey	Developed and conducted new 2006 Lloyd District Employee Commute Choice Survey
Bicycling Increase number of bicyclists to the Lloyd District by 5% each year.	Increase the number of bike accessible sites in the Lloyd District	Purchased 20 bicycle pumps to distribute to Lloyd District businesses
	Increase employee awareness by hosting at least 10 bike events.	Held annual Bike Commute Day celebration and Bike Bash
	Develop education and encouragement campaign for Lloyd District commuters	Met with BTA and City of Portland to discuss expanding Bike Commute Day.
Pedestrian	Continue to plan and identify funding for I-5 underpass	$242,000 of $400,000 identified. Agreement w/PDOT for LTMA to manage project
	Wayfinding signage program	Scheduled installation Spring 2007
RTO funding	$25,000	$24,750

Program Impact	58 members
	8,075 employees
	52% non-SOV mode split
	
	3.8 million annual VMT reduction
		70 members
		9,000 employees
		58% non-SOV mode split
		  (Universal Pass employers)
		3,555,824 (estimated by
		  LTMA)

Cost/VMT reduced	$0.01	Not estimated

Note: The activities above are only those receiving partial funding from the Metro RTO program

What was the level of participation in the services?

The LTMA area includes about 650 businesses and 21,000 employees.[11] Seventy businesses are members of the TMA, representing approximately 9,000 employees (43%). Membership grew by one employer in 2006. About two-thirds of the members participate in the Universal Pass program.

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[11] Lloyd TMA Annual Report 2007.

What was the level of satisfaction with the services?

PSU CUS did not have data on levels of satisfaction with the services, either the employers or employees. However, the growth in membership indicates a high level of satisfaction.

To what extent did participants use travel options?

Over half of the commute trips made to employers that participate in the Universal Pass (formerly Passport) program are made in non-SOV modes (Table 23). This is a significant change from 1997, when an estimated 60% of commute trips were made in SOVs. Between 2003 and 2005 the share of trips made by most modes stayed about the same, though bicycling increased back to the level achieved in 2003. Carpooling declined, though the level of carpooling has shown little fluctuation over the past four years. The LTMA suspected that part of this may have been due to changing the survey from June to May.

The LTMA estimates that annual VMT was reduced by 3,555,824 over a baseline of 1997, which represents the removal of 934 vehicles from road and freeways during the peak commute hour every day.

Table 23: Commute Trip Mode Share for Lloyd TMA Employers

	% of weekly commute trips[a]					
Mode	2001	2003	2005	2006	Percentage point change over 2001	2015 Goals
Drive Alone	45.5%	42.5%	42.7%	42.4%	-3.1%	33%
Transit	36.0%	39.3%	39.1%	39.0%	3.0%	40%
Carpool/Vanpool	10.4%	10.5%	11.5%	10.5%	0.1%	10%
Walk	2.4%	1.8%	2.3%	2.0%	-0.4%	10%
Bicycle	3.7%	4.3%	3.3%	4.1%	0.4%	5%
Compressed work week	1.2%	0.9%	0.9%	1.1%	-0.1%	2%
Telecommute	0.7%	0.7%	0.8%	0.9%	0.2%	0%
Total	100.0%	100.0%	100.0%	100.0%		100%

aThe survey collects data on commute trips for each day for an entire week.
Source: Report submitted by LTMA to Metro and 2001 Annual Report (www.lloydtma.org)
Note: The survey includes employers participating in Universal Pass, not all TMA members.

How does this compare to the work plan in the 5-year Strategic Plan?

The non-SOV mode share for the Universal Pass employers (58%) was higher than the target in the Plan (52%). It is unclear what the mode share for other employers in the LTMA was in 2005-06.

How does this compare to the RTP modal objectives?

The *Regional Transportation Plan* sets modal targets for three categories of areas in the region. For regional centers, town centers, main streets, station communities and corridors the non-SOV modal target for all trips to and within those areas is 45-55%. The target for the central city is 60-

70%. The LTMA had a 58% non-SOV mode share for commute trips to Universal Pass employers.[12] This is close to the target for the central city and exceeds the target for regional centers.

To what extent does the program support the RTO objectives?

RTO Objective	Supportive?
Reduce drive-alone trips and encourage alternative modes	Yes.
Regional coordination and communication	Yes.
Include all trips, not just commute trips	Yes. The program focuses on commute trips to the center. However, the infrastructure improvements that are implemented by LTMA can affect all trips. In addition, Universal Pass users can use their passes for all types of trips.
Connections to other goals:	
2040 centers and corridors	Yes. The LTMA is located in a center.
Transit-oriented development	Yes.
TriMet transit investment	Yes. There are several MAX stations in and near the LTMA.
Community health	Yes. LTMA activities promote walking and bicycling. Employees using transit may walk to access transit, particularly within the Lloyd Center area.
Air and water quality	Yes, to the extent that trips and VMT are reduced

Conclusions

The Lloyd TMA accomplished its objectives for 2005-06 and has demonstrated a reduction in SOV use over time.

Recommendations

- Develop methods to measure outcomes beyond the Universal Pass employer surveys.

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[12] The worksites in the TriMet database indicate a 54% non-SOV mode share.

Appendix G: Swan Island TMA

Program Background

The Swan Island TMA (SITMA) was formed in June 2000, to manage parking and transportations issues for the Swan Island industrial area. The focus is on improving transportation options on Swan Island. The mission statement below was adopted in January 1998, by the Swan Island Business Association Transportation Committee, and continues to guide SITMA's activities:

> In order to facilitate the continuing growth and success of Swan Island and Mock's Landing businesses, the Transportation Committee works to improve the movement of people, products, services and freight in the most effective way by increasing the area's transportation options. (SITMA Annual Report, 2005)

According to the SITMA, businesses recognize that keeping the area's only access--Going Street--from becoming congested, is vital to the economic well being of Swan Island.

One of the major challenges for SITMA when presenting transportation options to island employees is that all employers currently provide free parking. While a change in this policy is not likely in the foreseeable future, the amount of land in this close-in finite industrial area given over to parking is significant and could hinder future business expansion. Recognizing these issues, the SITMA, the second oldest TMA in the Metro region, has continued to grow its outreach and programs.

SITMA received $24,750 in regional TMA funds and $12,500 from a Region 2040 grant to increase vanpools from Clark County, Washington.

Evaluation

Data Sources

The evaluation is based upon the report submitted to Metro, shuttle ridership data provided by SITMA, and data from the TriMet employer survey database.

What activities were provided?

As noted in Table 24, many of the activities SITMA provides have to do with encouragement and raising awareness of transportation and parking options in the area. On a regional coordination level, SITMA manager Lenny Anderson was elected to be the TMA representative on the RTO subcommittee. SITMA members utilized the CarpoolMatchNW service and worked with TriMet to increase frequency on the Rose Quarter shuttle and existing bus routes.

How does this compare to the Strategic Plan Work Plan for 2004-05?

The services provided compare favorably with the work plan (Table 24).

Table 24: Swan Island TMA 2004-06 Activities

	Objective	2004-05 Outputs & Outcomes	2005-06 Outputs & Outcomes
Transit Increase employee use of transit	Increase ridership on # 85 Swan Island Express	2004 – 380 rides per day 2005 – 450 rides per day	470 rides per day
	Increase ridership on # 72 Killingsworth from Interstate Max	80 trips per day to Swan Island	No information was provided
	Increase number of employers selling Universal Pass passes	2 employers offer Universal Pass to employees, 3 others offer transit subsidy	3 employers offer Universal Pass to employees, 3 others offer transit subsidy
	Double Rose Quarter shuttle riders	Service expanded, ridership avg. 400 per week (twice that in 2003)	No information was provided
Vanpools *Region 2040 Initiative*	Increase number of vanpools to/from Clark County	Increased vans from 3 to 5.	# of vanpools remained the same. (5 vanpools)
		Hosted "vanpool to lunch" event June 2005	
Bicycling/Pedestrian	Double bicycling/walking mode split	2005 – 4% An increase from 2001/02 (2%) but drop from 2004 (9%)	2% A decrease from 2005 (4%)
	Increased bike/ped access to Swan Island	Waud Bluff Trail – Bridge connection from University of Portland to Basin Drive in design.	New segment of the Willamette Greenway Trail as well as a new access trail opened
		Going RR overpass – better maintenance. More bridge replacement/improvements	Freightliner Access Map was developed, printed and posted at all locations.
		Met with Friends of North Portland Greenway	
Location Efficient Living	Encourage home ownership close to workplace	Employer van tour of North Portland in July 2005.	
RTO funding	$25,000 from TMA fund	$24,750 from TMA fund $12,500 from Region 2040 grant	$24,750 from TMA fund $12,500 from Region 2040 grant
Program Impact	15 members 7,000 employees 25% non-SOV mode split 1,000,000 annual VMT reduction	12 members 24% non-SOV mode split for 7 participating employers	?
Cost/VMT reduced	$0.23/VMT	Not estimated	Not estimated

What was the level of participation in the activities?

As of the end of 2006, there were 16 Swan Island employers in the TriMet Employer Outreach database, indicating that they are actively promoting non-SOV use.

What was the level of satisfaction with the activities?

Not measured.

To what extent did participants use travel options?

The share of commute trips made in SOVs declined from 2001-02 to 2005-07 at SITMA work sites that surveyed employees (Table 25). SITMA's mode split data are derived from ECO surveys, which in 2005 were completed by seven employers in the industrial area. In 2001-02,

1,875 employees were surveyed with 1,400 surveys returned for a 75% rate of return. In 2005-06, 876 employees were surveyed with 730 surveys returned for an 83% rate of return.

The VMT reduction from the vanpools is included in Appendix C: Regional Vanpool Program.

Table 25: Commute Trip Mode Share for Swan Island Worksites

Mode	% of weekly commute trips[a]			
	2001-02	**2004-05**	**2005-07**	**Percentage point change over 2001**
Drive Alone	78.5%	76.3%	73%	-5.5%
Transit	5.8%	6.6%	9%	3.2%
Carpool/Vanpool	11.3%	11.5%	15%	3.7%
Walk/Bike	1.9%	4.2%	2%	0.1%
Compressed work week	1.1%	1.4%	0%	-1.1%
Telecommute	1.3%	0.0%	0%	-1.3%
Total	100.0%	100.0%	100%	

[a]The survey collects data on commute trips for each day for an entire week.
Source: Report submitted by SITMA to Metro.

Average daily ridership for the 85 Swan Island Express bus route has increased steadily over the past three years. The average ridership in 2006 is 470 riders per day, which was increased from 450 riders in Fall 2005 and 380 rides in 2004. Average daily ridership on the Evening Shuttle increased since 2002 (Figure 6). Using the same methodology as for the vanpool shuttles, the estimated reduction in VMT in 2005 due to the Evening Shuttle was 81,900-179,800, not accounting for the shuttle miles. To the extent that the shuttle riders are accounted for in the employer surveys, this estimate overlaps with the reduction estimated based upon that data. Not all of the shuttle riders, however, work at the sites surveyed.
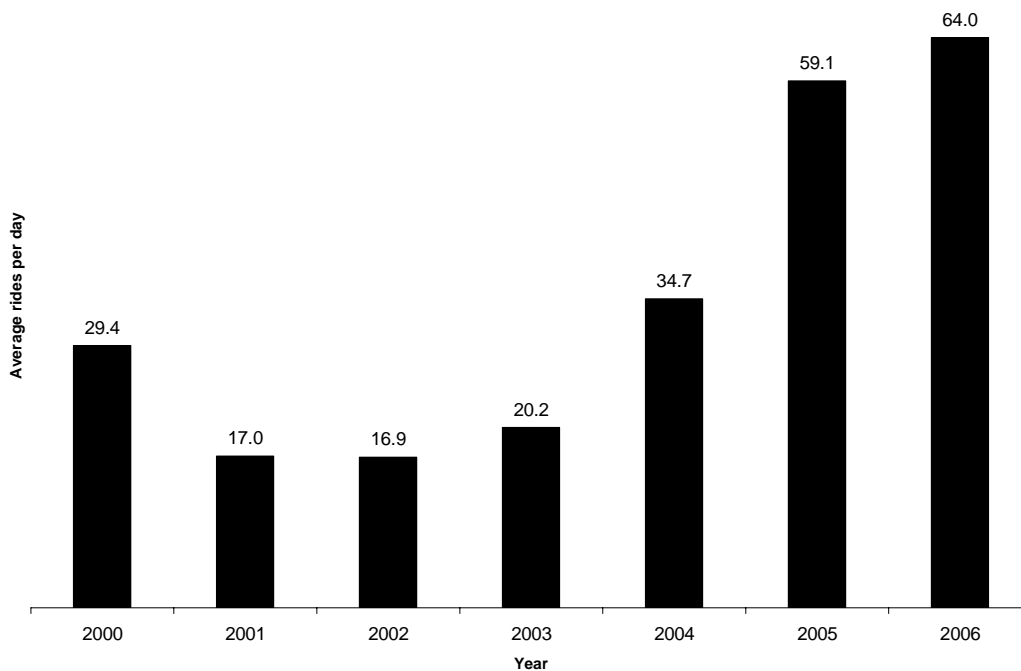
Figure 6: Swan Island TMA Evening Shuttle Ridership

Table 26: Estimated VMT Reduction for Swan Island Shuttle for 2005

Item used to calculate estimate	Source	Low	High
Commute trips and VMT reduced			
Average rides per day	Data from TMA	64.0	64.0
Length of commute trip made on transit	Metro travel model, as reported to TriMet	6.4 miles one-way 12.8 miles roundtrip	10.1 miles one-way 20.2 miles roundtrip
% of transit commute trips that would have been made driving alone instead of transit	Assumption	80%	100%
% of shuttle riders that use shuttle both ways (used to convert shuttle trips to transit trips)	Assumption	100% 2 shuttle trips = 1 transit trip	80% 1.8 shuttle trips = 1 transit trip
Annual trips reduced	Calculated from above	6,400	8,900
Shuttle trips and VMT added			
Shuttle trips per day		unknown	unknown
Round-trip shuttle miles		unknown	unknown
Estimated VMT reduction in 2005		**81,900** (does not account for shuttle miles)	**179,800** (does not account for shuttle miles)

Notes: Estimates of annual trip and VMT reduction rounded to nearest 100.

How does this compare to the work plan in the 5-year Strategic Plan?

The non-SOV mode share for commute trips to the seven surveyed sites was 27%, three percent below the 30% target in the *Strategic Plan Work Plan*. However, these results only represent a small portion of the employees on Swan Island. If the act of surveying indicates a higher level of support for commute trip reduction programs, the surveyed sites may have better non-SOV rates than the rest of Swan Island employers.

How does this compare to the RTP modal objectives?

The TriMet employer survey database included 16 work sites within the SITMA area. Of these, nearly two-thirds (62%) had a non-SOV mode share of less than 25% (Table 27).

Table 27: Distribution of Swan Island Worksites by Non-SOV Mode Share

Non-SOV mode share	% of worksites
45.0% & higher	0%
35% - 44.9%	19%
25% - 34.9%	19%
15% - 24.9%	31%
Under 15%	31%
n	16

Source: TriMet employer database.

To what extent does the program support the RTO objectives?

RTO Objective	Supportive?
Reduce drive-alone trips and encourage alternative modes	Yes.
Regional coordination and communication	Yes. The SITMA director works with other TMAs and the regional program.
Include all trips, not just commute trips	Limited. Swan Island is primarily an employment center.
Connections to other goals:	
2040 centers and corridors	Not applicable. Swan Island is not identified as a center or corridor.
Transit-oriented development	Unlikely.
TriMet transit investment	Yes. The SITMA is involved in shuttles connecting to TriMet service.
Community health	Yes, to the extent that participating employees choose to walk or bike.
Air and water quality	Yes, to the extent that trips and VMT are reduced

Conclusions

The Swan Island TMA accomplished most of its intended activities for 2005-06. The activities have helped decrease the share of commute trips made in SOVs, though there are still many employers that do not meet the 30% target. Ridership in the evening shuttle has increased slightly since 2005.

Recommendations

- Improve measurement of outcomes at sites working with SITMA that do not conduct regular employer surveys

Appendix H: Westside Transportation Alliance

Program Background

Founded in 1997, Westside Transportation Alliance (WTA) is a TMA supported by businesses, public agencies, and event sponsorship. The mission of the WTA is to work with an association of businesses and public agencies that value vibrant economic development supported by transportation and land use decisions that create a vital quality of life in Washington County, Oregon. The WTA offers workplace services and programs that help employees commute to work by transit, carpool, vanpool, walking and biking. WTA's boundaries include all of Washington County and some of the region's larger employers such as, Nike, Intel and Tektronix. WTA's executive director, Karen Frost was hired in January 2006. The previous executive director left in August 2005 and two of the WTA Board members managed the organization in the interim.

In the 2005-06 fiscal year WTA received $24,750 in RTO TMA funds and $24,576 from a Region 2040 grant for the Carefree Commuter Challenge.

Evaluation

Data Sources

The evaluation is based upon the quarterly reports submitted to Metro and data from the TriMet employer survey database.

What activities were provided?

As noted in Table 28, the most successful and measurable result from the 2005 - 06 program year was the Carefree Commuter Challenge. Metro has provided funding for WTA to help other TMAs in the region coordinate and stage the event region wide in 2006. Efforts to implement other programs in the *Strategic Plan Work Plan*, such as the expansion of TMAs in Washington County regional centers, were mixed. A reciprocal agreement was developed with the Hillsboro Chamber of Commerce, but a TMA in Washington Square was sidelined. The new executive director and Board participated in a strategic planning exercise and completed operations over the first quarter of FY 2006. Focus in the coming year will be on building membership and employer programs.

How does this compare to the Strategic Plan Work Plan for 2005-06?

WTA activities provided compared with the work plan had mixed results which can be attributed to the personnel changes at WTA in 2005 and perhaps overly optimistic objectives (Table 28).

Table 28: Westside Transportation Alliance Activities

	Objective	2004-05 Outputs & Outcomes	2005-06 Outputs & Outcomes
From 5-Year Strategic Plan			
Expand TMAs in Regional Centers			
Add a TMA representative to Washington Square	Created reciprocal membership with Hillsboro Chamber of Commerce	Delayed due to board turnover	Will not be pursuing this goal
Add a TMA representative to Hillsboro (planned for 2005-06)	Leverage regional center development	Created reciprocal membership with Hillsboro Chamber of Commerce	Acted as a lead partner with the Hillsboro 2020 Vision.
Ongoing WTA Activities and Programs			
Expand Membership Distribute outreach materials	15 new members - 3 years	Membership down form 31 in 2001to 28 in 2003 to 16 in 2005 Prepared and distributed brochure.	The membership remained the same (16 members).
Produce Bi-weekly newsflash for all ETCs	Reach 150 ETCs on record	Only used during Caerfree Commuter Challenge	?
Produce Bi-monthly newsletter	200 distribution	Latest two issues on website and sent via e-mail list of 110 ETCs.	?
Produce ETC T-Fair	150 ETCs on record	At least one fair conducted.	Attended at least one T-Fair held at a member organization
Carefree Commuter Challenge	Reduce VMT by 20,000 miles per year	The Carefree Commuter Challenge was held in 2005 as a regionwide competition. 68 companies and 2,000 employees participated. WTA estimated that the Challenge reduced 30,000 trips and 235,000 VMT.	The Carefree Commuter Challenge was held in 2006 as a regionwide competition. 112 companies and 53,500 employees participated. WTA estimated that the Challenge reduced 521,661 VMT.
Education Grant			
Develop Education program	Educate Washington County Employers on strategies of TDM and reduce VMT	No special projects or program were developed for this goal	Began research to create a TDM training curriculum
RTO funding	$24,750 RTO TMA fund $52,500 Region 2040	$24,750 from RTO TMA fund $35,653 from Region 2040 grant $12,245 in cash & in-kind donations for Carfree Commuter Challenge	$24,750 from RTO TMA fund $24,576 from Region 2040 grant
Program Impact	32 members 27,000+ employees Non-SOV mode split not measured Annual VMT reduction not measured	16 members WTA estimates that they reach 29,000 employees	16 members
Cost/VMT reduced	Not measured	Not estimated	Not estimated

What was the level of participation in the activities?

Participation rates in all programs were not measured. There were 16 member employers. The TriMet employer survey database includes 203 sites (165 sites were sites TriMet has contacted in the past three years) in Washington County. This indicates that less than 10% of the employers that are engaged in some trip reduction activities are members of WTA; however, WTA members may account for a higher percentage of employees, if larger employees are members, which is likely.

The 2006 Carfree Commute Challenge involved 112 employers and about 53,500 employees regionwide. This is a significant increase from 68 participated employers in 2005.

What was the level of satisfaction with the activities?

No data collected.

To what extent did participants use travel options?

Program impacts were not comprehensively measured during 2005-06. The WTA did not collect employer survey data. The data from the TriMet employer survey database for Washington County appears in Table 29.

WTA estimated that the Carefree Commuter Challenge involved 53,500 employees, reducing 521,661 VMT.

How does this compare to the work plan in the 5-year Strategic Plan?

The *Strategic Plan Work Plan* estimated that the Carefree Commuter Challenge would reduce 20,000 VMT each year. The event appears to have exceeded that target. The *Work Plan* did not have overall mode split or VMT reduction objectives.

How does this compare to the RTP modal objectives?

About 12% of the Washington County employers in the TriMet survey database meet the objective of 45% non-SOV use. This is a significant increase over the figure reported in the *2004-05 Program Evaluation*.

Table 29: Distribution of Washington County Worksites by Non-SOV Mode Share

Non-SOV mode share	% of worksites
45.0% & higher	12%
35% - 44.9%	14%
25% - 34.9%	12%
15% - 24.9%	30%
Under 15%	33%
N	203

Source: TriMet employer database.

To what extent does the program support the RTO objectives?

RTO Objective	Supportive?
Reduce drive-alone trips and encourage alternative modes	Yes. WTA encourages alternative modes through its website and events such as the Carefree Commuter Challenge (CCC) and employer fairs.
Regional coordination and communication	Yes. The CCC is regional. WTA staff attend regional RTO meetings and communicate regularly with other TMA directors
Include all trips, not just commute trips	Yes. In the past, the program has focused on commute trips. The WTA now brings this message in its outreach materials
Connections to other goals:	
2040 centers and corridors	Yes. Several centers and corridors are located within the WTA's area.
Transit-oriented development	Unclear.
TriMet transit investment	Yes. There are several MAX stations in the WTA's area.
Community health	Yes, to the extent that participating employees choose to walk or bike.
Air and water quality	Yes, to the extent that trips and VMT are reduced

Conclusions

Personnel turnover in 2005 contributed to a loss of focus for WTA. With the new executive director on board and an operations plan to focus efforts, WTA is poised to get back on track. Under WTA's guidance, the CCC event is growing in popularity as a way to promote and celebrate transportation options. This program appears to have exceeded its target to reduce VMT.

Recommendations

- Implement a comprehensive program to track activities (outputs) and outcomes.

- Use the TriMet employer survey database to target and track participation.

Appendix I: Troutdale Area TMA (TATMA)

Program Background

The TATMA was formed in April 2004, as a Division of the West Columbia Gorge Chamber of Commerce with regional CMAQ funding from the RTO program. Prior to TATMA's formation there was a feasibility study conducted over a 10-month period starting in September 2002. As a part of the feasibility study, the Stakeholder Working Group (SWG) identified five action items for the TATMA:

1. Improve and enhance linkages to Regional Transportation System/TDM

2. Mitigate or eliminate circulation impediments – physical barriers.

3. Mitigate or eliminate congestion impediments – internal and external accessibility

4. Establish an urban renewal district in Troutdale.

5. Establish a committed leadership group to set a consensus transportation vision for Troutdale and advocate for that vision.

The TATMA's mission statement developed during the feasibility study is "To develop an association that will increase the awareness of transportation issues in the Troutdale area, by area businesses and their employees."

Funding from the RTO TMA fund for the 2006-2006 fiscal year totaled $37,688.

Evaluation

According to the TATMA, it's role as an advocate for transportation improvements and options was perhaps best realized through their participation on the committee that worked to form a Troutdale Urban Renewal District (approved May 2006), which was a goal in the TMA feasibility study. Transportation-related projects included in the urban renewal plan provide for better connectivity from downtown to the outlet mall.

Data Sources

Baseline program goals were taken from the *Troutdale Area TMA Feasibility Study* and the current work plan. Additionally, quarterly reports were provided covering three quarters from July 16, 2005 to June 30, 2006.

Activities

The action items in the feasibility study served to inform the TATMA annual work plan, and guide activities. Table 30 illustrates the activities, objectives and outcomes for 2005 and 2006. Many of the services TATTMA provides have to do with encouragement and raising awareness of transportation and parking options in the Troutdale area.

How does this compare to the Strategic Plan Work Plan for 2005-2006?

The TATMA was not included in the *Strategic Plan Work Plan*. The activities performed compare favorably with the objectives outlined in the *Feasibility Study*.

Table 30: Troutdale Area TMA Activities

	Objective	2004-05 Outputs & Outcomes	2005-06 Outputs & Outcomes
Organization To develop an association that will increase the awareness of transportation issues in the Troutdale area, by area businesses and their employees.	Provide transportation advisory services	Served in transportation advisory capacity to committee for Urban Renewal District	Meeting with the TMA Stakeholder groups; working to organize a bicycle safety workshop
Transit To increase employer/employee awareness of existing services available to them through TriMet.	Become transit fluent	Worked with TriMet on express bus option (Max quicker), rode the two area buses	Discussing with the stakeholders group the possible of re-vamping the idea of a Troutdale trolley system
	Determine access and bus shelter needs	Performed bus shelter assessment made recommendations to TriMet	Performed bus shelter assessment made recommendations to TriMet
	Provide transit info	Brochure rack and transit info available at TATMA offices	Brochure rack and transit info available at TATMA offices
	Negotiate ability to sell bus passes	Project dropped - not enough current demand	
Bicycling To promote bicycling activities through Troutdale and the Columbia Gorge.	Promote bicycling in and through Troutdale and Columbia Gorge	Purchased bicycle helmets for bicycle rental shop. Businesses putting up racks	Involved in bicycle rentals with a local Troutdale business
General Business Outreach To increase the awareness of transportation options and programs	Develop brochure and logo	Logo	Developed a TMA Brochure
	Develop TATMA website by July 2006	Not yet available	
	Develop target employer list – meet with 4 businesses per month	Unknown	
	Plan and participate in Business, Industry Tourism showcase	Held in May 2005	Participated in the Aviation Tourism Showcase in May 2005

What was the level of participation in the activities?

As planned in the *Feasibility Study*, meetings with the Stakeholders Working Group (SWG) were held quarterly during 2005-06. TATMA staff participated in the development of the Troutdale Transportation System Plan, as part of the Technical Advisory Committee. Also TATMA started bicycle rentals with a local Troutdale business. TMA received funds for a helmet giveaway. TATMA worked with TriMet to identify stops for shelters and whether an express route to downtown was feasible. Other outreach efforts were successful but not measured, except as noted in Table 30.

What was the level of satisfaction with the activities?

Not measured.

To what extent did participants use travel options?

Not measured. Based upon the activities undertaken, there was likely little change in travel modes as a result in 2005-06.

How does this compare to the work plan in the 5-year Strategic Plan?

Not included in *Strategic Plan Work Plan*. *Feasibility Study* did not include objectives for participation in travel options.

How does this compare to the RTP modal objectives?

There is only one employer in the TriMet survey database in the Troutdale area. The TATMA likely has a long way to go to increase non-SOV mode share to 45%.

To what extent does the program support the RTO objectives?

RTO Objective	Supportive?
Reduce drive-alone trips and encourage alternative modes	Somewhat. The objectives for increasing travel options are modest and not quantified.
Regional coordination and communication	Unclear.
Include all trips, not just commute trips	Probably.
Connections to other goals:	
2040 centers and corridors	Yes. Troutdale is a center.
Transit-oriented development	Unlikely.
TriMet transit investment	Limited transit available.
Community health	Yes, to the extent that residents and employees choose to walk or bike in the future.
Air and water quality	Yes, to the extent that trips and VMT are reduced in the future

Conclusions

TATMA is the newest startup TMA in the region and has struggled somewhat with a learning curve. Due to the startup aspect of TATMA and the low density suburban land uses in far eastern Multnomah County, identifying measurable objectives is challenging. It is unclear from the information provided whether significant increases in activity occurred in 2005-06 compared to 2004-05. It is unlikely that any measurable reduction in non-SOV trips occurred as a result of the organization's activities. Metro staff indicates that the TATMA did not demonstrate any activities in the first half of the 2006-07 fiscal year (July through December 2006) and, therefore, did not receive funding. Metro has since worked with TATMA to develop a new work plan for 2007.

Recommendations

- Implement a comprehensive program to track activities (outputs) and outcomes.

- Develop specific outcome objectives. Ensure that TMA objectives are consistent with RTO objectives, to the extent that RTO funds are used.

Appendix J: Clackamas Regional Center TMA

Program Background

The Clackamas Regional Center Transportation Management Association (CRC-TMA) was started in February 2002 following a feasibility study and was funded with region's CMAQ TMA funds. The TMA was established to address the growing transportation and transit accessibility needs of the Clackamas Regional Center business community. The mission of the CRC-TMA is to provide education to increase the awareness of commute options and promote all forms of alternative transportation, thus decreasing the traffic congestion and providing reasonable access to the Clackamas Regional Center (CRC-TMA website). Wilda Parks, the Chamber CEO, had been acting director through 2005. Bruce Erickson was hired as the TMA director in early 2006, after starting as a contractor in fall 2005. However, he left the TMA in late 2006.

In 2005-06 the CRC-TMA received $24,750 from the RTO TMA fund.

Evaluation

Data Sources

The evaluation is based upon the report submitted to Metro.

What activities were provided?

As noted in Table 31, many of the services CRC-TMA provided have to do with encouragement and raising awareness of transportation and parking options in the area.

How does this compare to the Strategic Plan Work Plan for 2004-05?

The CRC-TMA accomplished many of the outreach activities in the Work Plan. However, the shuttle was discontinued and transportation fairs were not held as frequently as planned.

Table 31: Clackamas Regional Center TMA Activities for 2004-05

	Objective	2004-05 Outputs & Outcomes	2005-06 Outputs & Outcomes
From 5-Year Strategic Plan			
Administration Implementation			
Director, Clerical support	Office Space, work station, printing support	Ongoing	Ongoing
Regional Coordination			
Participate in regional TDM meetings	Achieve a *true* regional TDM program	Attended meetings	Attended meetings
Employer Programs			
Shuttle service	75-100 trips per day	Discontinued. Being re-evaluated	Discontinued in 2005
Develop online newsletter	Reach all 8,000 employees in service area	2005 edition online	Quarterly newsletter is printable from the website
Maintain website	Keep Current	Could use updating	Reconstructed the website
Monthly T-Fairs	12 per year	Quarterly	Quarterly Not sure
CarFree/Carefree Sponsorship	Participate in program expansion	Assisted in promotion	
Develop brochure	Mailed to 1,600 employers (?)	Completed	
Newsletter	Quarterly	Latest on website, Sept. 2002	Quarterly newsletter is printable from the website
Grow TMA membership	5% per year	Not reported	Not reported
Communication program	radio spot	Weekly 3 min radio spot at 6:57 am	TMA coordinator was interviewed on a live radio broadcast. Article written by TMA coordinator for the Oregonian about DriveLessSaveMore campaign.
RTO CMAQ funding	$24,750 RTO TMA fund	$24,750	$24,750
Program impact	20 members 4,000 employees No estimate for non-SOV mode split or VMT reduction	Not measured	Not measured
Cost/VMT reduced	Not estimated	Not measured	Not measured

What was the level of participation in the services?

According to the CRC-TMA, the transit fairs were well-attended and business recognition and support is up. One of the large employers in the area, Kaiser Sunnyside Medical Center joined the TMA. Transit Fairs were held as well as four showcases; two SPLASH! events, AM Business Connection and Business After Hours. However, because the new Director left without notice or concern, projects he was working on were not sustained or completed, including the project evaluation recommendations submitted by Portland State University.

What was the level of satisfaction with the services?

Six financial stakeholders invested nearly $30,000 into CRC-TMA,

To what extent did participants use travel options?

Not measured.

How does this compare to the work plan in the 5-year Strategic Plan?

Unknown.

How does this compare to the RTP modal objectives?

There were 38 worksites (of which, 36 worksites TriMet has contacted in the past three years) in the TriMet employer survey database that are within the boundaries of the CRC-TMA. Four of these sites (11%) met the non-SOV target of 45% according to their last survey (Table 32). However, for two of these sites the survey data was from 2002 or earlier and those results may no longer be true. Most sites (47%) had fewer than 15% of commute trips being made on non-SOV modes.

Table 32: Distribution of CRC-TMA Worksites by Non-SOV Mode Share

	% of worksites	
Non-SOV mode share	All surveys	Surveys since July 2004
45.0% & higher	11%	0%
35% - 44.9%	3%	4%
25% - 34.9%	13%	11%
15% - 24.9%	26%	32%
Under 15%	47%	54%
N	38	28

Source: TriMet employer database.

To what extent does the program support the RTO objectives?

RTO Objective	Supportive?
Reduce drive-alone trips and encourage alternative modes	Yes. However, the objectives for increasing travel options are not quantified.
Regional coordination and communication	TMA staff met with regional TMA directors and attended RTO meetings.
Include all trips, not just commute trips	The CRC-TMA would like to include programs that address non-work trips.
Connections to other goals:	
2040 centers and corridors	Yes. The TMA includes a center.
Transit-oriented development	Unclear.
TriMet transit investment	Future MAX stations will be located within the TMA. CRC-TMA is poised for the growth of the area by promoting transit and the new light rail line to be constructed along the I-205 corridor.
Community health	Yes, to the extent that residents and employees choose to walk or bike in the future.
Air and water quality	Yes, to the extent that trips and VMT are reduced in the future

Conclusions

As noted, CRC-TMA completed many of the tasks laid out in the work plan for 2005-06. The website was reconstructed, with a downloadable quarterly newsletter and an easier links to partners. Also a large employer joined the TMA. The TMA has established itself in the region and has had some success with transit fair promotions. They have also had success building business support and recognition.

Recommendations

- Implement a comprehensive program to track activities (outputs) and outcomes. This can include use of the TriMet employer surveys.

- Develop specific outcome objectives. Ensure that TMA objectives are consistent with RTO objectives, to the extent that RTO funds are used.

Appendix K: Gresham Regional Center TMA

Program Background

The Gresham Regional Center TMA (GRC-TMA) was formed and received its first three-year grant in August of 2001. It is managed by the Gresham Downtown Development Association (GDDA) who has committed to a local match and partners with the City of Gresham and TriMet. Kathy Everett, the executive director of the GDDA, has been with the program for over five years and also serves as the executive director of the GRC-TMA on a 50/50 time allocation.

The program fits well as a partner with the GDDA because the original impetus for forming the TMA was better management of parking for the economic development of the downtown. The GRC-TMA boundaries include the historic downtown, Gresham Town Fair, Gresham Square and Gresham Station which includes City Hall.

The mission of the GRC-TMA as reported on the website is "To bring together a coalition of local businesses, public agencies and citizens dedicated to improving access options for employees and customers of the Gresham Regional Center (GRC) and enhancing the GRC as the economic engine of East Multnomah County."

GRC-TMA is funded through the RTO program ($24,750 annually).

Evaluation

Data Sources

The evaluation is based upon the report submitted to Metro.

What activities were provided?

As noted in Table 33, over the 2005-2006 program year many of the activities GRC-TMA provides have to do with encouragement and raising awareness of transportation and parking options in the area. On a regional coordination level, GRC-TMA participated in TMA director meetings, the CarpoolMatchNW service, and distributed a TMA brochure to local businesses in the downtown.

TMA staff met with TriMet on a number of issues over the course of the year including possible development of a fareless square in the district, a shuttle to/from Gresham Station and the downtown, increased service and identifying access issues, and subsidy of transit passes for small businesses. Pedestrian pathways and sidewalk plans and projects were developed in conjunction with the city for at transit stations and along Main Street and other specified locations.

The TMA is partnering with the City of Gresham to work on a Transportation Growth Management grant, to outline specific design criteria and emphasize pedestrian connectivity it an update to the Downtown Plan. This effort aims to improve the pedestrian friendliness of the Regional Center, to reduce unnecessary vehicle trips, and focus pedestrian connections to light rail, Springwater Trail, and bus connections.

How does this compare to the Strategic Plan Work Plan for 2004-05?

The services provided are shown in Table 33.

Table 33: Gresham Regional Center TMA Activities for 2005-06

	Objective	2004-05 Outputs & Outcomes	2005-06 Outputs & Outcomes
Program Development			
Regional TDM coordination	Maintain	Would like meetings to be more often (monthly) with programmatic piece	Attend meetings; working with TriMet
Promote CarpoolMatchNW	Increase carpools by 10%	Not measured by TMA. 12 registrants with Gresham destinations added to CarpoolMatchNW in 2004-05. This would optimistically result in 1-2 new carpools.	Participate in Carpool program
Work to improve transit frequency /accessibility	Improve performance and efficiency of local transit	Working on downtown/center shuttle, inventoried access challenges	Working with TriMet to ensure safe and easily accessible transit stops, investigate new stops; investing the concept of "Fareless Square" for Regional Center
Coordinate w/ City, TriMet, local businesses	On a monthly basis	Director sits on city Transportation committee	Coordination between city, TriMet, TMA and businesses
TMA Business Climate survey development and report	Once a year	As part of GDDA efforts	Conducted baseline survey
Monthly meetings with TMA action committee	Increase number of monthly participants by 10%	Increased Board (GDDA) size from 7 to 11 – monthly meetings	Held monthly meetings
Strategic Planning Effort w/GDDA Board	Develop Three-year revolving work plan	Completed	Completed in 2004-05
Work with City, Town Fair and East Hill Church to develop access routes for pedestrians	Develop two access routes	Inventoried access challenges	On-going
Customer First program	Expand reach of program, to larger regional center by 10% per year	Used in new leases where City has land control	Conducted Parking lot survey
Develop education/awareness program to communicate alternative options	Increase local awareness of transportation options for 250 people	Distributed brochures throughout the TMA area.	Distributed brochures to 100 potential businesses
Develop a work plan and implementation strategy with the City to maintain downtown parking supplies	Assume operational and maintenance control of downtown public parking supply.	Performed inventory and survey of downtown parking	On-going
RTO funds	$24,750 RTO TMA	$24,750 RTO TMA	$24,750 RTO TMA
Program Impact	172 members 2,658 employees represented 19.8% non-SOV mode split 6,613 annual VMT reduction	Membership did not reach 172 Unlikely that other program impacts were achieved.	
Cost effectiveness	$3.26/VMT reduced	Not estimated	

What was the level of participation in the activities?

Monthly TMA action committee meetings were held and well attended. Membership in the Board (the GDDA serves as the TMA action committee) was increased from seven to eleven members. Participation in the bike events and projects funded through the 2040 CMAQ grant was high, according to the GRC-TMA. Other outreach efforts were successful according to the TMA, but they not measured, except as noted in Table 33.

What was the level of satisfaction with the activities?

Not measured.

To what extent did participants use travel options?

Not measured.

How does this compare to the work plan in the 5-year Strategic Plan?

Though data was not collected by GRC-TMA on commute travel, it is unlikely that the program impacts anticipated in the *Strategic Plan Work Plan* were achieved. The *Plan* projected 172 members, a level that was not achieved.

How does this compare to the RTP modal objectives?

There were only seven work sites in the TriMet employer survey database that are within the TMA's boundaries. Of these, one site had a non-SOV mode share of 29% and the remaining had a 25% or lower.

To what extent does the program support the RTO objectives?

RTO Objective	Supportive?
Reduce drive-alone trips and encourage alternative modes	Yes, to some extent. GRC-TMA encourages alternative modes through the distribution of brochures, events and identification of need capital improvements for sidewalks and transit access. Unclear whether the Customer First promotes non-SOV modes. It could reduce short auto trips if customers can park more centrally. However, this has not be demonstrated.
Regional coordination and communication	Yes. GRC-TMA meets regularly with TriMet and the City.
Include all trips, not just commute trips	Yes, to some extent. 2040 bike project included all trips.
Connections to other goals:	
2040 centers and corridors	Yes. The TMA covers a center.
Transit-oriented development	Yes.
TriMet transit investment	Yes. MAX operates within the TMA.
Community health	Yes, to the extent that residents and employees choose to walk or bike in the future. The Region 2040 grant project focused on bicycling and children.
Air and water quality	Yes, to the extent that trips and VMT are reduced in the future

Conclusions

As noted, GRC-TMA completed many of the tasks laid out in the work plan for the 2005-06 fiscal year. The TMA feels that it has established itself in the community and has had some success with promotions like the Kids Bike Parade, other bicycle projects for encouraging bicycle use, and the Customer First program. However, it is unclear how well the Customer First program promotes non-SOV options. Overall, the GRC-TMA compares favorably with other startup TMAs in the region. However, GRC-TMA is only two years younger than Swan Island TMA, and while they have done a good job raising awareness of TDM programs, GRC-TMA could develop better ways to measure results.

Recommendations

In response to the *2004-05 Program Evaluation* recommendations, the Gresham Regional Center Transportation Management Association is currently working with Metro and the City of Gresham to conduct a baseline survey of employees and employers in the Regional Center. They expect to distribute the survey in mid-2007. The GRC-TMA is now collecting data from participants at events sponsored by the TMA. In addition, in modifying the TMA board from the GDDA board to a larger group of stakeholders, the TMA has included two positions, which must be filled by large employers within the Regional Center. This is an effort to engage and work with large employers on transit access.

- Implement a comprehensive program to track activities (outputs) and outcomes. This can include use of the TriMet employer surveys.

- Develop specific outcome objectives. Ensure that TMA objectives are consistent with RTO objectives, to the extent that RTO funds are used.

- Increase efforts to work with large employers with good transit access.