7-1-2010

# Regional Travel Options 2007-08 Program Evaluation

Jennifer Dill
*Portland State University*, jdill@pdx.edu

Stephan Brown
*Portland State University*



## Citation Details

Jennifer Dill, Regional Travel Options 2007-08 Program Evaluation. Prepared for Metro, Portland OR. July 1, 2010.

# Regional Travel Options
# 2007-08 Program Evaluation

***Final Report***

July 1, 2010

Prepared for: Metro
RTO Subcommittee
Pam Peck, RTO
Caleb Winter, RTO

Prepared by: Jennifer Dill, Ph.D.
Stephan Brown, M.A.
Center for Urban Studies
Portland State University

# Table of Contents

# List of Tables

# List of Figures

# Executive Summary

## *Backgound*

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. The program complements other strategies, including land use policies and infrastructure investment.

## *Findings*

At the regional level, highlights for 2007 and 2008 include:

- 59% of adults in the region recalled hearing, seeing, or reading the Drive Less/Save More message,.[1] which was disseminated through television and radio ads, radio traffic report sponsorships, billboards, bus ads, website, and e-newsletter. The public funding was supplemented with over $1 million in donated advertising and sponsor contributions and nearly $1.5 million worth in earned media coverage (e.g. news reports on activities).
- 28% of adults in the region stated that they had taken an action as a result of seeing, hearing, or reading about Drive Less/Save More, with most indicating that they had trip chained or combined trips. Between 11% and 14% said they had walked, carpooled, or taken transit more.
- Drive Less/Save More booths at 127 events, reaching 5,200 people each year 2,800 people signed commitments to reduce drive alone trips at Drive Less/Save More booths at those events. The share of people contacted who made a commitment increased to 48% in 2008.
- Over 1,100 worksites have transportation programs
- Over 15,500 Bike There! maps sold
- Production of the Walk There! guide and distribution of 34,000 printed copies, along with a web version
- By the end of 2008, over 8,000 people were registered with CarpoolMatchNW.org to find a carpool or vanpool partner for their regular commute. Over 3,000 people registered in 2008, more than twice that in any previous year. 286 people commuting to and/or from the Oregon Metro region said that they joined a carpool or vanpool as a result of the CarpoolMatchNW.org website. These commuters reduced about 1.27 million vehicle miles over two years. 208 people commuting in other regions also said they formed pools through the website.

[1] Note that this is higher than the 37% of people who recalled *both* the DL/SM message and "anything about reducing car trips."

- An increase in the number of vanpools from 18 in 2006 to 30 in 2008. In 2008, at least 280 people rode in a Metro vanpool each day and the average daily vanpool ridership per van increased over 2006. Most vanpool riders (76%) indicated that they drove alone to work before joining the van, resulting in over 2 million vehicle miles traveled reduced in 2008

The TMAs working in the Portland Metropolitan Region played an important role in advocating for and supporting travel options. They vary in their organization and program priorities, and this diversity should be kept in mind when making generalizations about TMAs as a group. Nevertheless, an examination of findings compiled from reports, surveys, and interviews reveals some themes about what makes TMAs successful and why that carries implications for TMAs and Metro's RTO program as a whole.

The most comprehensive data available for this evaluation come from commute surveys of employees at work sites that participate in outreach programs offered by TriMet. All of the RTO evaluations have used these data as a benchmark for overall progress, though the data only captures commute travel. The 2008 data reflect the commute patterns of about 120,000 employees commuting to 549 worksites. The long-term trend is positive, with the share of work trips made by modes other than single-occupant vehicles (SOVs) generally increasing since 1996 Figure 3. However, **the data for 2007 and 2008 show a decline since 2006 in the share of work trips made on transit. Increases in bicycling and walking, compressed work weeks, and telecommuting helped offset that decline. The share of trips made in carpools and vanpools has remained about the same for the past four years, and is still lower than 1996.**

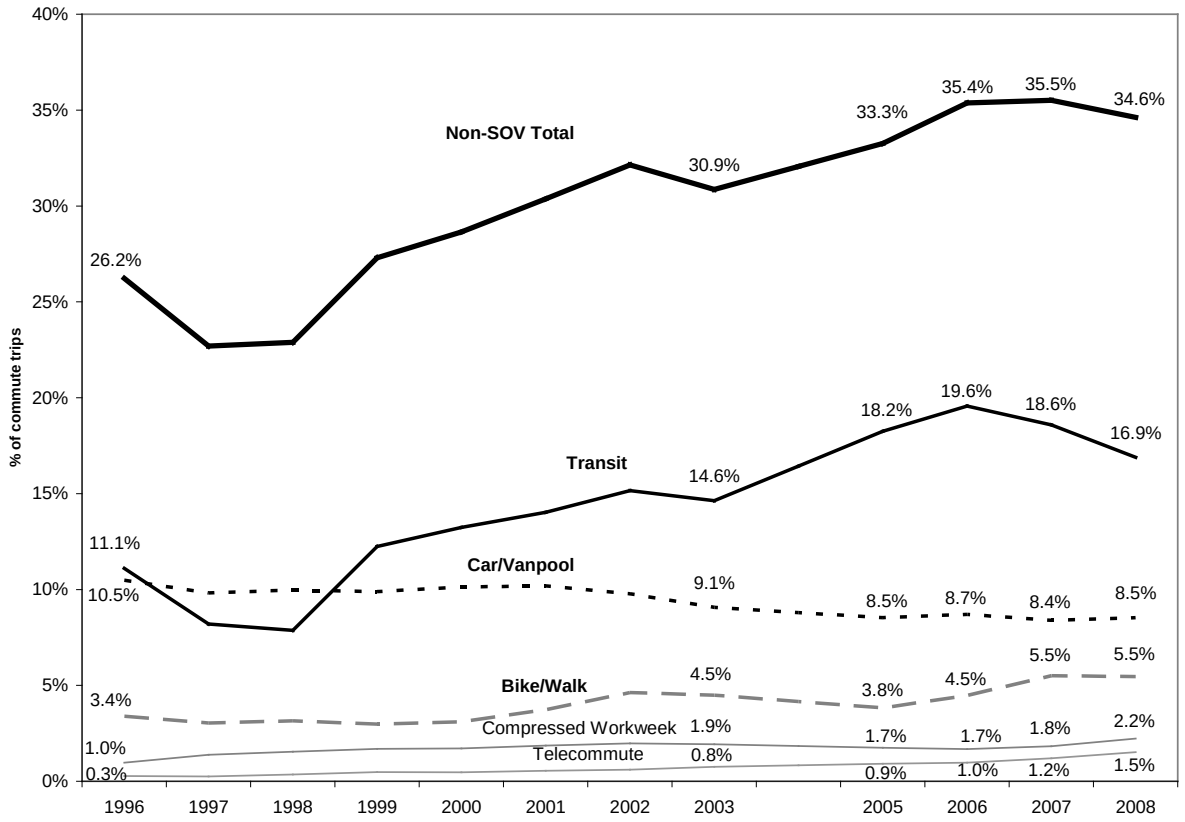



**Figure 1: Non-SOV Commute Trips at worksites participating in the TriMet Employer Outreach program (1996-2008)**

Sources: 1996-2003 figures are from TriMet and were included in the 2003 RTO Report. 2005-2008 figures calculated using original employer survey data from TriMet, using rolling two year average, since most sites survey once every two years.

The decline in transit mode share was unexpected, given the increases in TriMet ridership over this time period. A closer examination of the data revealed that **data from a single very large employer affected the findings significantly**. There appear to be unusual circumstances that explain the high transit use for that single year. To explore how this site's data affected the overall trends, its 2005 trip data was adjusted using the site's mode shares from its 2007 survey. It appears that the site's spike in transit use explained at least one percentage point of the transit mode share for 2005 and 2006. **Without the site's anomalous 2005 data, there is still a drop in transit use in 2008. However, the decline is not as large, and the rate is about the same as in 2005.**

The 2008 decline in transit use may still raise eyebrows, given the spike in gas prices in the second half of that year. However, because the figures present a two-year rolling average and most surveys are conducted in the spring, only about 15% of the surveys for the 2008 data were conducted July through December 2008. In addition, TriMet fares increased several times between 2006 and 2008, which may have affected ridership.

**Making the adjustment for the single employer's anomalous data also results in a different finding on the recent trend on overall non-SOV use – an increase in the total share of non-SOV work trips since 2005, though a slight decline between 2007 and 2008**. This trend can be explained largely by increases in walking and bicycling, telecommuting, and compressed work week.

A comparison of the employee survey data with Census data **indicated that the employer outreach and supporting RTO programs may be increasing transit use at participating employers, but are not positively affecting carpooling rates.** The evaluation also compared sites that worked with TriMet to those who had not, but who had submitted employee survey data to DEQ to comply with the ECO rules. **Worksites participating in TriMet's outreach program reduced the number of drive alone trips over their baseline year by a larger amount than non-participants – 6.1 percentage points versus 3.8 percentage points.** This represents an overall reduction in the number of private vehicle commute trips of 8.5% for participants and 4.8% for non-participants.[2] This indicates that the program may be effective at reducing drive alone trips above what would happen with just the ECO rules.

A key performance measure used by the Metro RTO program is vehicle miles reduced (VMR). This report includes estimates of VMR for some individual programs when adequate data was available to make such a calculation. However, for most programs that was not the case. Nevertheless, an attempt to develop an overall estimate of VMR was made, with a low estimate of 18.9 million VMR and a high estimate of 29.6 million VMR annually. This estimate may be somewhat conservative and is lower than what individual program managers estimated for a number of reasons explained in the report. The cost effectiveness of individual programs or program areas ranged from $0.01-0.12 per VMR.

## *Challenges and Opportunities*

Despite the many positive outputs and outcomes of the RTO program, there are some challenges that must be addressed if the program is going to reach the goals set forth in the Final Draft 2035 RTP. The *Draft Plan* includes non-drive alone modal targets of 60-70% in the central city, 45-55% in regional centers, town centers, main streets, station communities, corridors, and passenger intermodal facilities, and 40-45% in most other areas.[3] The challenges to meeting those targets related to the RTO program include the following:

- **Rates of carpooling/vanpooling are significantly lower than a decade ago and are not showing signs of increasing.** While the RTO program is providing a tool to enable people to find ridesharing partners and has provided incentives to increase participation, the region lacks a key piece of infrastructure that leads to higher rates of pooling in other regions – an HOV network that leads to significant time savings

[2] To avoid counting changes in worksite size, the estimate assumes that the total number of trips to the worksite is the same in the baseline as it is in the most recent follow-up survey.
[3] See the *Draft 2035 Regional Transportation Plan*, March 2010, http://library.oregonmetro.gov/files//03_22_10_2035_rtp_final_web.pdf

for carpools and vanpools. Without such infrastructure, more effective incentives and other programs are necessary to increase ridesharing rates.

- **While drive alone commuting is still lower at worksites now than compared to baseline years, there are signs that the improvements of past years are not continuing, that the rates are stagnant.** This may indicate that the RTO program, along with other investments, have succeeded in shifting the "low hanging fruit" to non-SOV modes. **Additional increases may require more investment and/or creative strategies.** This is particularly evident outside of the central core area, where SOV rates are far higher than RTP targets. Research consistently shows that the availability of abundant free parking is one of the major factors supporting people's decision to drive alone to work. The RTO program has not previously focused on parking management strategies, such as parking pricing and parking cash-out. Research from other states has shown these programs to be effective in a number of settings. Parking cash-out should be seriously considered in areas outside of downtown and the Lloyd Center, where parking is currently free.

- **The RTO program is shifting to include programs that target trips other than commuting to/from work. This will require methods of measuring outcomes other than the employee commute surveys.** One option is to conduct a regional random phone survey with the specific objective of measuring outcomes of the RTO program. In addition, there may be opportunities to measure some outcomes with the household activity survey Metro expects to start later in 2010. However, unless this survey is conducted on a regular basis (e.g. annually or every two years), it could not be relied upon for measuring progress.

- **The evaluation of several TMA programs was hampered by the lack of data on participation rates and outcomes.** In some cases staff turnover and competing priorities of host organizations appear to reduce the effectiveness of travel options investments.

- **The overlapping nature of the RTO program makes calculating the cost-effectiveness of the program difficult.** This is true with respect to both outputs and outcomes. A regional survey would measure overall outcomes, thus helping to account for the additive value of the programs.

- **Metro is currently partnering with the Washington Department of Transportation on a new online ridematching system that provides several opportunities.** In addition to improvements that may increase the effectiveness of the RTO carpool programs, the system may allow for better accounting of program benefits. For example, if the system used a database of employment sites that was linked to the TriMet employer outreach program and survey data, this would allow evaluators to examine the effects of the program that may overlap with employer programs. Moreover, the employer outreach programs could use the system to better track their own effectiveness and to target locations for additional marketing.

# 1. Introduction

## *Background*

Metro's 2040 Growth Concept sets forth a long-range growth management strategy that encourages growth within existing centers and corridors, along with some expansion of the urban growth boundary. The future success of the plan relies on reducing private motor vehicle travel by reducing the number and length of trips. This will be done, in part, by increasing the share of trips made using 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. The program complements other strategies, including land use policies and infrastructure investment.

In addition to policies contained in the 2040 Growth Concept and Regional Transportation Plan (RTP), the RTO Program is governed by a strategic plan. In January 2004, the Metro Council adopted the first such plan, *Regional Travel Options Program 5-Year Strategic Plan*. A new five-year plan was adopted in March 2008, the *2008-2013 Strategic Plan*. The RTO program receives funding through the Regional Flexible Funding process that includes the Metropolitan Transportation Improvement Program (MTIP), primarily from Congestion Management and Air Quality (CMAQ) funds.

Both strategic plans place an emphasis on evaluation of the program to demonstrate results. This evaluation covers the calendar years of 2007 and 2008. It is the third RTO evaluation conducted by Portland State University's Center for Urban Studies (CUS). In 2006, PSU CUS conducted a comprehensive evaluation of all RTO programs for FY2005 (July 2004 – June 2005). A follow-up evaluation covered FY2006 and the first six months of FY2007 (July – December 2006). In 2004, TriMet and Metro conducted an evaluation that covered 2003.

## *What is included in this Evaluation*

This evaluation covers two calendar years – January 2007 through December 2008 – and includes the following RTO programs:

**RTO Core Program**

Collaborative Marketing
- Drive Less/Save More direct outreach
- Drive Less/Save More advertising (ODOT funding)
- Bike There! map
- Walk There! guidebook

Rideshare program
- CarpoolMatchNW.org
- Vanpool Operations

TriMet Employer Program

Wilsonville SMART TDM program

**Transportation Management Association (TMA) Program**
Clackamas Regional Center TMA
Gresham Regional Center TMA
Lloyd TMA
Swan Island TMA
TMA feasibility study: South Waterfront
Westside Transportation Alliance (WTA)

**Travel Options Grants**
Bicycle Transportation Alliance (BTA) Bike Commute Challenge
City of Lake Oswego Carsharing Study
City of Milwaukie SmartTrips
Clackamas County Bike It! Map
Gresham TMA Bike Program
Portland State University Long-term Bike Parking
Swan Island TMA Trip Not Taken
Swan Island Vanpool Program
WTA Carefree Commuter Challenge
WTA Transportation Coordinator Training

Metro also uses RTO funds to manage and evaluate the RTO program, including administering grants and managing the RTO Subcommittee.

## Table 1: 2007 and 2008 RTO Projects and Expenditures

| Organization | RTO funds | Percent | Local Matching Funds | Total Expenditures |
|---|---|---|---|---|
| **RTO Core Program** | **$2,282,500** | **46.7%** | **$351,000** | **$2,633,500** |
| Metro Collaborative Marketing - Bike There! map | $70,600 | 1.4% | $8,100 | $78,700 |
| Metro Collaborative Marketing - Sponsorships | $5,200 | 0.1% | $600 | $5,800 |
| Metro Collaborative Marketing - Walk There! guidebook | $100,700 | 2.1% | $50,000 | $150,700 |
| Metro Collaborative Marketing - Drive Less/Save More outreach | $126,900 | 2.6% | $14,500 | $141,400 |
| Metro Collaborative Marketing coordination | $126,400 | 2.6% | $14,500 | $140,900 |
| Metro Program Management - Regional evaluation | $121,800 | 2.5% | $13,900 | $135,700 |
| Metro Program Management - RTO Subcommittee management/strategic planning | $180,500 | 3.7% | $20,700 | $201,200 |
| Metro Program Management - RTO and TMA Grants Admin | $80,200 | 1.6% | $9,200 | $89,400 |
| Metro Rideshare - CarpoolMatchNW.org | $53,500 | 1.1% | $6,100 | $59,600 |
| Metro Rideshare - Employer Outreach | $164,300 | 3.4% | $18,800 | $183,100 |
| Metro Rideshare - VanPool Operations | $360,200 | 7.4% | $90,100 | $450,300 |
| Oregon Dept. of Energy Telework Outreach | $7,600 | 0.2% | $3,300 | $10,900 |
| TriMet Employer Program | $734,000 | 15.0% | $84,000 | $818,000 |
| Wilsonville SMART TDM Program | $150,600 | 3.1% | $17,200 | $167,800 |
| **DriveLess/SaveMore Marketing Campaign (ODOT funds)** | **$1,934,200** | **39.6%** | **$1,154,300*** | **$3,088,500** |
| **TMA Program** | **$344,700** | **7.1%** | **$132,600** | **$477,300** |
| Clackamas Regional Center TMA | $64,900 | 1.3% | $36,900 | $101,800 |
| Lloyd TMA | $62,400 | 1.3% | $18,400 | $80,800 |
| Gresham Regional Center TMA | $60,300 | 1.2% | $26,300 | $86,600 |
| Westside Transportation Alliance (WTA) | $62,400 | 1.3% | $18,400 | $80,800 |
| Swan Island TMA | $61,000 | 1.2% | $30,100 | $91,100 |
| Troutdale Area TMA | $21,600 | 0.4% | $2,500 | $24,100 |
| TMA feasibility study: South Waterfront | $12,100 | 0.2% | $- | $12,100 |
| **Travel Options Grants** | **$322,700** | **6.6%** | **$355,600** | **$678,300** |
| BTA Bike Commute Challenge | $39,700 | 0.8% | $5,700 | $45,400 |
| City of Lake Oswego Carsharing Study | $5,000 | 0.1% | $600 | $5,600 |
| City of Milwaukie SmartTrips | $63,300 | 1.3% | $274,400 | $337,700 |
| City of Portland/CarpoolMatchNW.org | $49,400 | 1.0% | $- | $49,400 |
| Clackamas County Bike It! Map | $35,200 | 0.7% | $17,900 | $53,100 |
| Gresham TMA Bike Program | $5,600 | 0.1% | $1,700 | $7,300 |
| PSU long-term bike parking | $- | 0.0% | $- | $- |
| Swan Island TMA Trip Not Taken | $28,500 | 0.6% | $6,200 | $34,700 |
| WTA Carefree Commuter Challenge | $39,900 | 0.8% | $42,100 | $82,000 |
| WTA Transportation Coordinator Training | $56,100 | 1.1% | $7,000 | $63,100 |
| **TOTAL** | **$4,884,100** | **100%** | **$808,300** | **$6,877,600** |

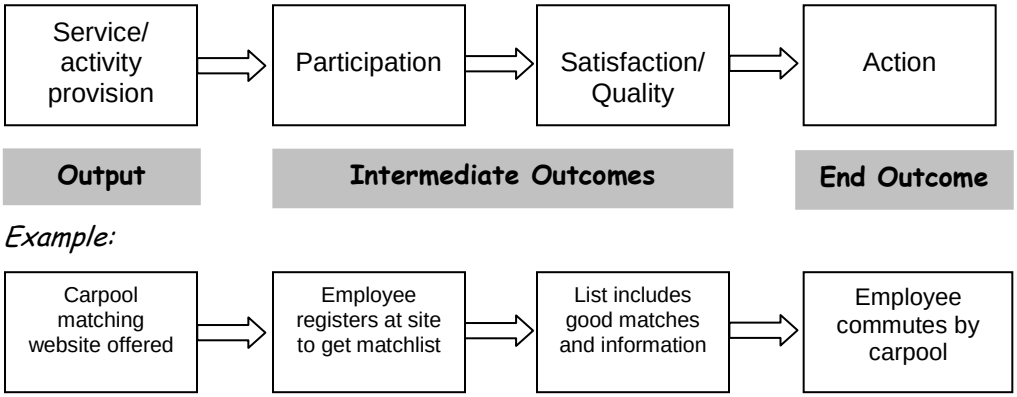
* Includes the value of private contributions to the Drive Less/Save More campaign from area media outlets that donated print, radio and television advertising.

Source: Dollar amounts provided by Metro RTO staff. Figures rounded to nearest $100.

## *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/quality, 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* dated 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**




There are several reasons it is useful to evaluate both outputs and outcomes and to distinguish between these four steps:

1. The end outcomes of the RTO programs often overlap, making it difficult to distinguish the outcomes of a single program.
2. Several of the programs are short-term or small-scale and may not have the capacity to measure outcomes accurately.
3. 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 either to the intended objectives, outputs, or outcomes, to a previous point in time, to an accepted standard, and/or to other comparable programs. The two most recent evaluations by PSU evaluated programs against work plans and objectives from the *RTO 5-Year Strategic Plan*. However, the evaluation found that the objectives in the *RTO 5-Year Strategic Plan*, particularly the expected outcomes, were often unrealistic, unclear, or based on higher levels of funding. Moreover, the plan did not include specific objectives for the final two years of the plan, 2007 and 2008. Recognizing the limitations of the plan, Metro worked with members of the RTO Subcommittee to develop the *2008-2013 Strategic Plan*, which was adopted in March 2008. While that plan only covers a portion of

the time period of this evaluation, its goals and objectives are more relevant than the previous plan when looking toward the future. Therefore, this evaluation focuses on the new strategic plan.

For each RTO program, the evaluation is organized into sections concerning program outputs and program outcomes. "Outputs" refers in this evaluation to the activities, services provided, and participation and satisfaction or quality levels in the various TMA programs and grant projects funded by RTO. Those sections answer the following questions:

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?

"Outcomes" refers to travel behavior, as measured by Single Occupancy Vehicle ("SOV")/non-SOV mode splits and/or reductions in Vehicle Miles Traveled (VMT). The primary question answered is:

To what extent did participants use travel options?

TMAs and grant projects were also evaluated measuring outputs and outcomes against goals set forth in their contracts with Metro during the evaluation period. Although Wilsonville-SMART and its Travel Options program is technically not a TMA, it shares enough characteristics with TMAs that it was evaluated using the same method.

Measures of intermediate outcomes concerning levels of satisfaction with program activities and services were often not measured due to a lack of available data, although these data would provide a critical link in understanding which program activities and services translate to changes in travel behavior and why. It is an area that should be tracked more closely by TMAs and RTO partners.

The evaluation is based upon three main forms of information. First were written documents, including contracts and intergovernmental agreements, quarterly and annual reports, memos, and other relevant documents submitted to Metro by funding recipients or to Metro management by Metro staff. Second, representatives of TMAs and Region 2040 grant recipients were interviewed to collect supplemental information and to provide a context for interpreting the data. Finally, several datasets were available for the analysis. One major dataset included the results from employee surveys submitted to TriMet, Oregon's Department of Environmental Quality (DEQ) Lloyd TMA, Westside Transportation Alliance TMA, or Wilsonville SMART as part of the Employee Commute Options (ECO) rule requirement or voluntarily. These data were used in previous evaluations. In addition, original survey data was available for several individual programs, including CarpoolMatchNW.org ridematching service, Walk There! guide, Bike There! map, and the Drive Less/Save More advertising campaign and outreach. These sources are explained in more detail when the data are presented.

## *Organization of the Report*

Each RTO program listed in Table 1 was evaluated separately. The next section of the evaluation report provides highlights from all of the findings and recommendations. The following sections provide the full evaluation of each individual program.

# 2. Findings and Challenges: Highlights

## *Findings*

### What services were provided?

The RTO program provides services aimed at reducing SOV trips at three broad levels. At the regional level, Metro staff direct the Collaborative Marketing program (including Drive Less/Save More), CarpoolMatchNW.org, and vanpool services, while both Metro and TriMet both provide services to employers. At a sub-regional level, the City of Wilsonville/SMART and five transportation management associations (TMAs) provide programs that target smaller geographic areas. Most of the programs at both the regional and sub-regional level are continuing activities that have been part of the program in some form for several years and are expected to continue. The third level includes Travel Options grants, which provide funding for specific, targeted programs that are sometimes only offered once. Grant recipients include TMAs, as well as other organizations.

At the regional level, highlights of the services provided for 2007 and 2008 include:

- Drive Less/Save More booths at 127 events
- Drive Less/Save More television and radio ads, radio traffic report sponsorships, billboards, bus ads, website, and e-newsletter
- Over $1 million in donated advertising and sponsor contributions and nearly $1.5 million worth in earned media coverage (e.g. news reports on activities) between February 2006 and December 2008
- Over 15,500 Bike There! maps sold
- Production of the Walk There! guide and distribution of 34,000 printed copies, along with a web version
- An increase in the number of vanpools from 18 in 2006 to 30 in 2008
- Carpool matching services through the free website, CarpoolMatchNW.org

The TMAs working in the Portland Metropolitan Region played an important role in advocating for and supporting travel options. They vary in their organization and program priorities, and this diversity should be kept in mind when making generalizations about TMAs as a group. Nevertheless, an examination of findings compiled from reports, surveys, and interviews reveals some themes about what makes TMAs successful and why that carries implications for TMAs and Metro's RTO program as a whole.

Many of the "success stories" included instances where a TMA (either alone or with a partner) creatively combined program, media, or funding elements to achieve a result greater than the sum of the inputs. For instance, both City of Wilsonville/SMART and WTA "piggybacked" on the media interest surrounding the WES launch to get their messages out not only about travel options but also about their organizations. Similarly, providing a web

hyperlink on WTA's Carefree Commuter Challenge website to the Drive Less Save More campaign website helped generate thousands of extra hits. Other TMAs have shown a similar inventiveness, particularly in leveraging funds or in-kind support with community partners and existing programs like the Oregon Department of Energy's Business Energy Tax Credits (BETC).

A number of TMA representatives commented in interviews that the RTO program would generate even more efficiencies if there were an "internal clearinghouse" of sorts that organized and shared, in a more systematic way, information about resources, capacities, and opportunities among the RTO partners. To this end, there is better coordination and cooperation among RTO partners now that the program is under a single organizational umbrella (Metro). Metro also was praised by a number of TMA representatives for including the RTO partners in developing goals, running meetings, and in providing administrative support in general. TMAs consistently reported that Metro staff were professional and responsive to their needs, answering questions and assisting as needed, for example, in compiling statistics.

### What was the level of participation?

Levels of participation for nearly all of the RTO programs were measured. Highlights for 2007 and 2008 include:

- 5,200 people each year were reached at Drive Less/Save More booths at events. The number of contacts *per event* increased in both 2007 and 2008.
- 59% of adults in the region recalled hearing, seeing, or reading the Drive Less/Save More message.[4]
- Over 1,100 worksites have transportation programs, including about 780 that used TriMet's employer outreach services, an increase over previous years.
- 924 worksites offered some type of transit pass sales program to employees.
- In 2008, at least 280 people rode in a Metro vanpool each day and the average daily vanpool ridership per van increased over 2006.
- By the end of 2008, over 8,000 people were registered with CarpoolMatchNW.org to find a carpool or vanpool partner for their regular commute. Over 3,000 people registered in 2008, more than twice that in any previous year. In addition, about 2,100 people were registered to find a match for a single trip.

### What was the level of satisfaction?

Few of the RTO programs directly measure satisfaction or quality. However, there are several indications that participants in certain programs are getting the information or services they needed in 2007 and 2008, including:

[4] Note that this is higher than the 37% of people who recalled *both* the DL/SM message and "anything about reducing car trips."

- Most (83%) of the surveyed users of the Bike There! map understood the color scheme showing bike suitability and nearly all found it to be an important feature of the map
- Many users of the Bike There! map and Walk There! guide provided positive feedback in the surveys of the products, with positive comments outnumbering negative feedback
- Very few CarpoolMatchNW.org registrants ask to be removed from the database or are purged due to bad contact information

## To what extent did participants use travel options?

### Overall trends in using travel options for commuting

The most comprehensive data available for this evaluation come from commute surveys of employees at work sites. All of the RTO evaluations have used these data as a benchmark for overall progress, though the data only captures commute travel. The 2008 data reflect the commute patterns of about 120,000 employees commuting to 549 worksites that worked with TriMet.[5] The long-term trend is positive, with the share of work trips made by modes other than single-occupant vehicles (SOVs) generally increasing since 1996 Figure 3. However, **the data for 2007 and 2008 show a decline since 2006 in the share of work trips made on transit. Increases in bicycling and walking, compressed work weeks, and telecommuting helped offset that decline, resulting in an overall non-SOV share of 34.6% in 2008, compared to 35.4% in 2006. The share of trips made in carpools and vanpools has remained about the same for the past four years, and is still lower than 1996.**

[5] Note that this is a subset of all of the data, to be consistent with data available for earlier years. Data from worksites not working with TriMet is not included here because it was not in earlier evaluations.

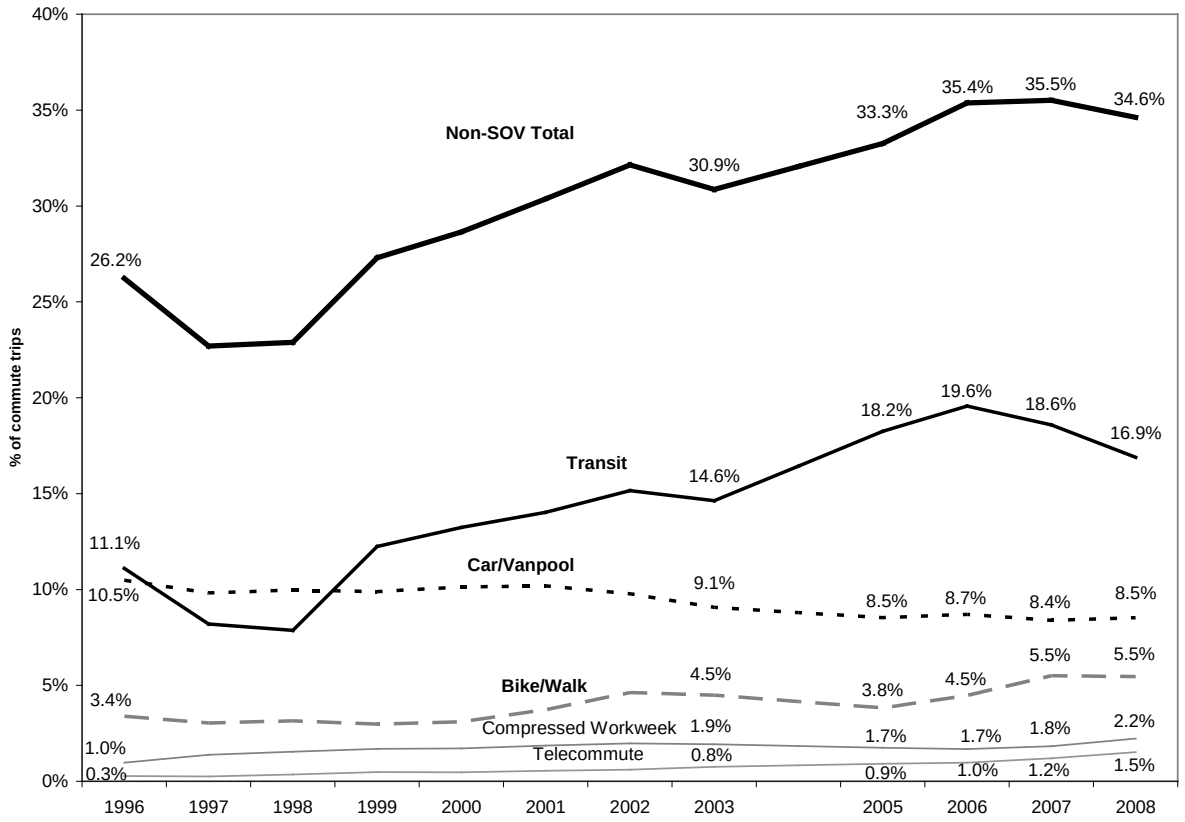



**Figure 3: Non-SOV Commute Trips at worksites participating in the TriMet Employer Outreach program (1996-2008)**

Sources: 1996-2003 figures are from TriMet and were included in the 2003 RTO Report. 2005-2008 figures calculated using original employer survey data from TriMet, using rolling two year average, since most sites survey once every two years.

The decline in transit mode share was unexpected, given the increases in TriMet ridership over this time period. A closer examination of the data revealed that **data from a single very large employer affected the findings significantly**. That employer's transit mode share was at least 25 percentage points higher in 2005 than in any other year, including 2007. Since employers only conduct surveys every two years, Figure 3 displays a two-year rolling average. Therefore, that employer's unusually high transit use in 2005 affected the data displayed for both 2005 and 2006. There appear to be unusual circumstances that explain the high transit use for that single year. To explore how this site's data affected the overall trends, its 2005 trip data was adjusted using the site's mode shares from its 2007 survey. This presents a scenario where the site's mode share was more stable over time. The results are shown in Figure 4. It appears that the site's spike in transit use explained at least one percentage point of the transit mode share for 2005 and 2006. Without the site's anomalous 2005 data, there is still a drop in transit use in 2008. However, the decline is not as large, and the rate is about the same as in 2005.

The 2008 decline in transit use may still raise eyebrows, given the spike in gas prices in the second half of that year. However, because the figures present a two-year rolling average

and most surveys are conducted in the spring, only about 15% of the surveys for the 2008 data were conducted July through December 2008. In addition, TriMet fares increased several times between 2006 and 2008, which may have affected ridership.

**Making the adjustment for the single employer's anomalous data also results in a different finding on the recent trend on overall non-SOV use – an increase in the total share of non-SOV work trips since 2005, though a slight decline between 2007 and 2008**. This trend can be explained largely by increases in walking and bicycling, telecommuting, and compressed work week.

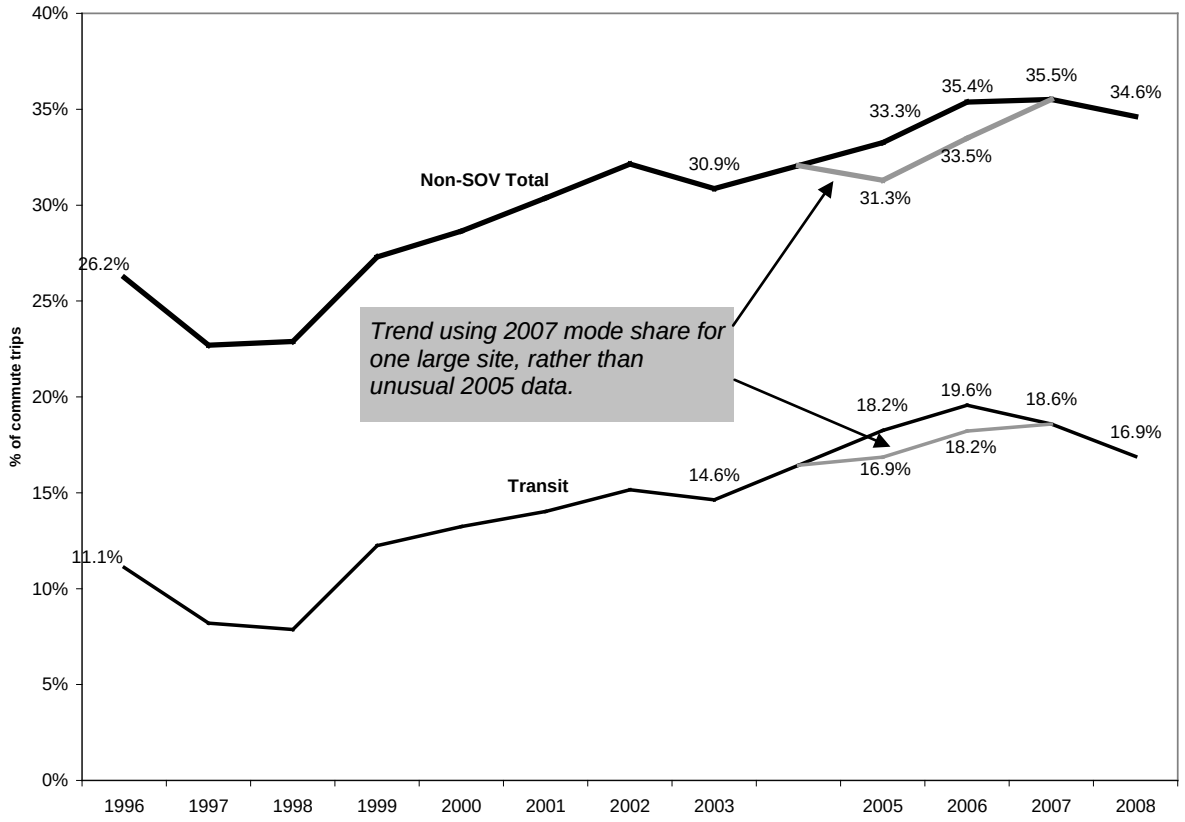



**Figure 4: Effect of a Single Site on Transit Mode Share (1996-2006)**

The U.S. Census is now conducting an 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. However, the annual ACS sample is smaller than for the decennial long-form. Therefore, the Census Bureau is releasing both annual and three-year ACS data. The three-year data has a smaller margin of error and should be more accurate. The 2005-2007 and 2008 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 worksite 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 commute data are from a sample of all workers 16 and older. The employee worksite data shown here only include people employed at work sites participating in TriMet programs that require surveys (e.g. Universal Pass). These sites tend to be larger.
- The ACS data available now are based on where people live and includes Vancouver, WA, while the employee worksite data is based on where people work and does not include Vancouver, WA work sites.
- The ACS is conducted year-round, while the employee worksite surveys are more often conducted in the spring and early summer. This difference may affect seasonal modes, such as walking and bicycling.
- ECO surveys generally exclude part-time employees and regular volunteers, whereas these employees likely answer the ACS question.

Despite these differences, a comparison to the recent 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 described 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, 2005-07 ACS and 2008 ACS and employee worksite survey data for 2000, 2006-07, and 2007-08 (2-year rolling averages), omitting modes not consistent between the two surveys. There are several notable differences in the mode shares between the Census and the employee worksite survey data. **Overall, these data indicate that the employer outreach and supporting RTO programs may be increasing transit use at participating employers, but are not positively affecting carpooling rates.** The employee surveys show much higher levels of transit use, 18% in 2006-2007 and 18% for 2007-08 versus 7% for the 2005-07 ACS data and 8% for the 2008 ACS. Some of this difference is likely due to the effectiveness of the employer outreach program for which the employee data is gathered (primarily TriMet, but also Wilsonsville SMART, TMA programs). In contrast, levels of carpooling are lower among the employee survey respondents. This may reflect the fact that the employee survey data are primarily from employers that are working with TriMet's outreach program. Those worksites are likely to have better transit access than other employers. Worksites with poorer transit options may have higher rates of carpooling, as employees who want or need an alternative to driving alone turn to ridesharing rather than transit.

**Table 2: Comparison of Census and Employee Survey Commute Data**

| | Census Data (share of workers) | | | | |
|---|---|---|---|---|---|
| | **2000 Census** | **2005-07 ACS** | **% Change over 2000** | **2008 ACS** | **% Change over 2000** |
| Drive alone | 77% | 77% | 0% | 75% | -3% |
| Carpool | 12% | 11% | -5% | 11% | -9% |
| Transit | 7% | 7% | -1% | 8% | +21% |
| Walk & Bike | 4% | 5% | +24% | 6% | +59% |
| Total | 100% | 100% | | 100% | |
| | **Employee Worksite Data (share of trips)** | | | | |
| | **1999 & 2000** | **2006 & 2007** | **% Change over 2000** | **2007 & 2008** | **% Change over 2000** |
| Drive alone | 73% | 66% | -9% | 68% | -7% |
| Carpool | 10% | 9% | -16% | 9% | -14% |
| Transit | 14% | 20% | +43% | 18% | +31% |
| Walk & Bike | 3% | 5% | +80% | 6% | +79% |
| Total | 100.0% | 100% | | 100% | |

Notes: Percentages are shown rounded to nearest whole number, though percentage changes were calculated based upon non-rounded number.
For this analysis, taxicab, work at home, and other modes are excluded from the Census and ACS data. The 1999-2000 Employee Worksite data are from follow-up surveys, the same two-year rolling average data used in Figure 3, except for the exclusion of telecommuting and compressed work week, since those modes are not captured the same way in the Census and ACS data. Therefore, the numbers are different than shown in Figure 3.

It is also useful to look at the changes since 2000. In both sets of data (Census and employee worksites), the share of people driving alone went down, but the drop was larger for the employee worksite data. The Census showed a slight decline in the share of workers commuting by transit in 2005-07, but an increase in 2008. The employee worksite data show a larger increase over 2000 (31% vs. 21%). Both datasets show an increase in walking and bicycling, and the increase is larger among the employees at participating worksites. Both datasets show a decline in carpooling rates, though the decline is sharper among the employees at the surveyed worksites. The differences in *changes* in mode shares cannot 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 positive influence on rates of transit use, walking and bicycling for commuting**. **The programs do not appear to be helping offset the historic decline in carpooling.**

A third comparison using the employee survey data reinforces these findings. The evaluation compared sites that worked with TriMet to those who had not, but who had submitted employee survey data to DEQ to comply with the ECO rules. **Worksites participating in TriMet's outreach program reduced the number of drive alone trips over their baseline year by a larger amount than non-participants – 6.1 percentage points versus 3.8 percentage points.** This represents an overall reduction in the number

of private vehicle commute trips of 8.5% for participants and 4.8% for non-participants.[6] This indicates that the program may be effective at reducing drive alone trips above what would happen with just the ECO rules. However, it should also be noted that worksites were not randomly selected to be participants or non-participants, as would be desired in an experiment testing the program's effectiveness. Employers that work with TriMet are a self-selected group. The baseline survey data indicate that these employers had higher rates of transit use to start with – 12.8% versus 4.9%. This makes sense, since employers with good transit access are more likely to offer pass programs to employees and, therefore, work with TriMet. This also helps explain why the share of trips made on transit went up 3.8 percentage points among participants, but only 0.9 percentage points among non-participants. In contrast, the share of work trips made by carpool or vanpool went up among non-participants, but down among participants. However, bicycling and walking went up at participating worksites and down very slightly at non-participating sites.

Finally, the employee survey database includes 642 worksites with survey data from 2007 or 2008.[7] Of those, 549 work with TriMet. The analysis up to this point only included worksites working with TriMet. That is because data from sites that did not work with TriMet, but who submitted survey data to DEQ, were not available for the evaluations conducted before 2005. Therefore, to maintain consistency in the data, the long-term trend analysis shown in Figure 3 was limited to those 549 sites (for 2008). However, it is reasonable to assume that all 642 sites can take advantage of the RTO employer services program in some way, whether through TriMet, Wilsonville/SMART, a TMA, or directly through Metro RTO staff. Of the 93 sites that did *not* work with TriMet, 46 are within a TMA area or Wilsonville/SMART. The remaining 47 worksites could be taking advantage of the employer outreach provided directly by Metro. The commute data for all 642 sites are shown in Table 3. **At these 642 sites, the share of work trips made driving alone fell by 6.3 percentage points, while transit use, walking/bicycling, compressed work weeks, and telecommuting increased.** The rate of carpooling fell slightly. The estimated annual VMT reduction from these 642 worksites is between 34,917,000 and 36,308,000. However, this figure likely overstates the effect of the RTO program for reasons that are explained below. This estimate used the change in mode shares in Table 3 applied to the current number of employees, and the following assumptions, consistent with the *2004-05 Program Evaluation*:

- Average one-way commute distance of 8.45 miles (based upon Metro 1994/95 Household Activity Survey)
- Same mode used to travel to work (from survey) was used to travel home
- 251 (low) to 261 (high) work days per year
- Survey non-respondents commute the same as respondents

[6] To avoid counting changes in worksite size, the estimate assumes that the total number of trips to the worksite is the same in the baseline as it is in the most recent follow-up survey.
[7] Note that 10 sites are included with survey data from January-March 2009. None of these sites had survey data from 2007 or 2008. Their mode share in early 2009 likely reflects what happened in 2008.

**Table 3: 2007-08 Commute Trip Mode Share for All Worksites**

| | % of weekday commute trips[a] | | |
|---|---|---|---|
| Mode | Baseline survey[b] | 2007-08 survey[c] | 2007-08 Percentage point change over baseline |
| Drive Alone | 72.8% | 66.5% | -6.3% |
| Transit | 12.1% | 15.7% | 3.6% |
| Carpool/Vanpool | 9.6% | 8.8% | -0.8% |
| Walk/Bike | 3.7% | 5.3% | 1.6% |
| Compressed work week | 1.5% | 2.3% | 0.8% |
| Telecommute | 0.3% | 1.4% | 1.1% |
| Total | 100.0% | 100.0% | |
| # work sites | 642 | 642 | |

[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 a site average.
[b] Baseline survey years vary between worksites.
[b] Includes 10 sites with survey data from January-March 2009 because 2007 or 2008 data were not available.

Because the estimate of reduction in VMT includes worksites in the TMA areas, as well as those taking advantage of the RTO employer outreach programs, it may be used as an estimate of the results from all of the employer-related RTO activities combined. However, it is difficult to develop a cost-effectiveness figure from the VMT reduction because it is unclear what portion of TMA funding goes towards employer programs. **If all of the expenditures associated with the TriMet and Metro employer outreach activities listed in Table 1, along with 75% of the TMA expenditures were included, the cost per vehicle mile reduced would be $0.02. However, this calculation assumes that all of the VMR from the 642 sites can be attributed to RTO programs. This is unlikely.** Some of the improvement is due to factors such as improved transit service, higher gas prices, and other factors. Unfortunately, it is impossible to accurately estimate what portion of the reduction is a direct result of the RTO programs. The numbers in Table 2 comparing Census data to the work sites, and the comparison of worksites participating in TriMet's programs compared to those that do not, indicate that the reduction in drive alone trips is perhaps 40-60% higher at sites affected by the program. **If 40-60% of the VMR is attributed to the RTO employer programs, this would result in an estimate of 13,967,000 to 21,785,000 annual miles reduced, for a cost-effectiveness of $0.03 to $0.05 per mile.**

### Shifts to non-SOV trips for individual programs

Shifts to non-SOV trips are not as well-documented for other RTO programs. Highlights for 2007 and 2008 include:

- 2,800 people signed commitments to reduce drive alone trips at Drive Less/Save More booths at events. The share of people contacted who made a commitment increased to 48% in 2008.
- 28% of adults in the region stated that they had taken an action as a result of seeing, hearing, or reading about Drive Less/Save More, with most indicating that they had trip chained or combined trips. Between 11% and 14% said they had walked, carpooled, or taken transit more.
- Most vanpool riders (76%) indicated that they drove alone to work before joining the van, resulting in over 2 million vehicle miles traveled reduced in 2008
- 286 people commuting to and/or from the Oregon Metro region said that they joined a carpool or vanpool as a result of the CarpoolMatchNW.org website. These commuters reduced about 1.27 million vehicle miles over two years. 208 people commuting in other regions also said they formed pools through the website.
- SmartTrips Milwaukie showed a reduction in drive alone trips of at least 3%, though there was not a clear or large increase in transit or non-motorized modes.

### How does this compare to other TDM programs nationally?

Ideally, we would be able to compare Metro's RTO program with similar programs in other metropolitan areas. Unfortunately, such comparisons are difficult for a number of reasons. First of all, few regions perform comprehensive evaluations of their programs. Secondly, programs differ in scope. Finally, evaluation methodologies differ.

A recent evaluation of the Commuter Connections program in the Washington DC region illustrates this difficulty.[8] The evaluation provided estimates of VMT reduced for a regional program that included five elements, including employer outreach and mass marketing, but also telework, guaranteed ride home, and electronic information kiosks. Because the employer program is voluntary, very few employers had collected post-program survey data. Therefore, the benefits were estimated using a computer model developed by the U.S. Environmental Protection Agency (COMMUTER Model) rather than actual performance. A survey of the program's Commuter Operations Center (COC) found that 25-31% of respondents switched to and remained with an alternative mode. The COC provides ridematching, as well as information about transit, HOV lanes, walking, bicycling, and other options. Data were not available on placement rates for the ridematching portion of the COC program. Moreover, a subsequent report[9] revealed that only 25% of the people using the service were primarily driving alone to work before accessing the service. This

[8] LDA Consulting, *Transportation Emission Reduction Measure (TERM) Analysis Report FY 2006-2008*, Prepared for Metropolitan Washington Council of Governments, January 27, 2009. http://www.mwcog.org/commuter2/pdf/2008%20TERM%20Analysis%20FINAL%20Report%20012709.pdf

[9] LDA Consulting, *Fiscal year 2009 Applicant Database Annual Placement Survey Report*, Prepared for for Metropolitan Washington Council of Governments, May 19, 2009. http://www.mwcog.org/commuter2/pdf/FY09%20Placement%20Rate%20Survey%20FINAL%20Report%20051909.pdf

"baseline" is not comparable to the Portland region. Regarding the mass marketing program, a survey of commuters found that 35% recalled the message. This may be lower than the percent responding to a survey about the Drive Less/Save More campaign (see page 24), though the differences in survey methods and wording make direct comparisons difficult.

Data from the State of Washington's Commute Trip Reduction program show a decrease in the share of commute trips made driving alone between 1994 and 2008, though most of the decline occurred between 1994 and 1998.[10] Rates among all participating employers have remained at about 65-67% since then. The Portland region's trend (Figure 3) is more positive.

Several national surveys of TMAs have been conducted over the years.[11] In 2003, one survey found the median budget for TMAs was over $200,000. The median TMA had 25 corporate members. In 1998 the average TMA had a total of 3.1 employees, including two full-time employees, along with part-time and contract employees. These numbers seem comparable to the Lloyd TMA, but higher than the other TMAs operating in the region.

### What is the overall reduction in vehicle miles traveled?

A key performance measure used by the Metro RTO program is vehicle miles reduced (VMR). This report includes estimates of VMR for some individual programs when adequate data was available to make such a calculation. However, for most programs that was not the case. Nevertheless, an attempt to develop an overall estimate of VMR was made and appears in Table 4. This estimate may be somewhat conservative and is lower than what individual program managers estimated for a number of reasons:

- The estimate for employer programs only assumes that 40-60% of the VMR reduced at the sites surveyed is attributable to the RTO program. It is assumed that the rest would have occurred without the program, e.g. because of the transit service provided, changes in gas prices, ECO rules, etc.
- Some VMR estimates made by program managers were reduced using some simple assumptions to try to account for the likelihood that the measured benefits were not all attributable to the program itself. For example, in the case of SmartTrips Milwaukie, an increase in gas prices likely had some effect. However, no good data existed to help make these adjustments, and a conservative, best professional judgment was used. All assumptions are explained in the text for each program.
- No estimate of the effectives of the regional Drive Less/Save More was included. Given the fact that this program overlaps with every other RTO program, discerning its separate effects, particularly with the survey data available, was too difficult.

On the other hand, this estimate does not attempt to account for the overlap between the employer programs, CarpoolMatchNW.org and the Vanpool subsidy program.

---

[10] Washington State Commute Trip Reduction Board*, Interim Report to the Washington State Legislature*, 2007.

[11] Eric Ferguson, "Transportation Management Associations: A Reappraisal," *Journal of Public Transportation*, Vol. 10, No. 4, pp. 1-26, 2007.

**Table 4: Conservative Estimate of Overall Annual Reduction in Vehicle Miles Traveled**

| | Low | High | Cost-effectiveness (per VMR) |
|---|---|---|---|
| Employer-focused, year-round programs<br>*Includes TMAs, TriMet and Metro Employer Outreach, Wilsonville SMART programs* | 13,966,800 | 21,784,800 | $0.03-0.05 |
| CarpoolMatchNW | 1,266,900 | 2,137,200 | $0.02-0.04 |
| Vanpool Operations | 1,574,850 | 1,574,850 | $0.11 |
| BTA Bicycle Commute Challenge | 161,900 | 269,800 | $0.07-0.12 |
| City of Milwaukie SmartTrips | 1,665,000 | 3,330,000 | $0.01-0.02 |
| WTA Carefree Commuter Challenge | 278,700 | 557,400 | $0.04-0.07 |
| Collaborative marketing<br>*Includes Drive Less/Save More outreach and advertising, BikeThere! and WalkThere! maps* | Unknown, but likely positive and significant | | |
| Other Travel Options Grants<br>*Includes Clackamas County Bike It! Map, Gresham TMA Bike Program, Swan Island Trip Not Taken, and WTA Transportation Coordinator Training* | Unknown, but likely positive | | |
| Other Programs<br>*Includes Lake Oswego Carsharing Study, PSU Long-Term Bike Parking* | No benefits during 2007-08 | | |
| Program oversight and administration | No direct benefits | | |
| Total | 18,914,000 | 29,654,000 | |

## *Challenges and Opportunities*

Despite the many positive outputs and outcomes of the RTO program, there are some challenges that must be addressed if the program is going to reach the goals set forth in the Final Draft 2035 RTP. The *Draft Plan* includes non-drive alone modal targets of 60-70% in the central city, 45-55% in regional centers, town centers, main streets, station communities, corridors, and passenger intermodal facilities, and 40-45% in most other areas.[12] The challenges to meeting those targets related to the RTO program include the following:

- Rates of carpooling/vanpooling are significantly lower than a decade ago and are not showing signs of increasing. While the RTO program is providing a tool to enable people to find ridesharing partners and has provided incentives to increase participation, the region lacks a key piece of infrastructure that leads to higher rates of pooling in other regions – an HOV network that leads to significant time savings

[12] See the *Draft 2035 Regional Transportation Plan*, March 2010, http://library.oregonmetro.gov/files//03_22_10_2035_rtp_final_web.pdf

for carpools and vanpools. Without such infrastructure, more effective incentives and other programs are necessary to increase ridesharing rates.

- While drive alone commuting is still lower at worksites now than compared to baseline years, there are signs that the improvements of past years are not continuing, that the rates are stagnant. This may indicate that the RTO program, along with other investments, have succeeded in shifting the "low hanging fruit" to non-SOV modes. Additional increases may require more investment and/or creative strategies. This is particularly evident outside of the central core area, where SOV rates are far higher than RTP targets. Research consistently shows that the availability of abundant free parking is one of the major factors supporting people's decision to drive alone to work. The RTO program has not previously focused on parking management strategies, such as parking pricing and parking cash-out. Research from other states has shown these programs to be effective in a number of settings. Parking cash-out should be seriously considered in areas outside of downtown and the Lloyd Center, where parking is currently free.

- The RTO program is shifting to include programs that target trips other than commuting to/from work. This will require methods of measuring outcomes other than the employee commute surveys. One option is to conduct a regional random phone survey with the specific objective of measuring outcomes of the RTO program. In addition, there may be opportunities to measure some outcomes with the household activity survey Metro expects to start later in 2010. However, unless this survey is conducted on a regular basis (e.g. annually or every two years), it could not be relied upon for measuring progress.

- The evaluation of several TMA programs was hampered by the lack of data on participation rates and outcomes. In some cases staff turnover and competing priorities of host organizations appear to reduce the effectiveness of travel options investments.

- The overlapping nature of the RTO program makes calculating the cost-effectiveness of the program difficult. This is true with respect to both outputs and outcomes. A regional survey would measure overall outcomes, thus helping to account for the additive value of the programs.

- Metro is currently partnering with the Washington Department of Transportation on a new online ridematching system. In addition to improvements that may increase the effectiveness of the RTO carpool programs, the system may allow for better accounting of program benefits. For example, if the system used a database of employment sites that was linked to the TriMet employer outreach program and survey data, this would allow evaluators to examine the effects of the program that may overlap with employer programs. Moreover, the employer outreach programs could use the system to better track their own effectiveness and to target locations for additional marketing.

# 3. Collaborative Marketing

## *Program Background*

Both strategic plans place importance on collaborative marketing. The 2004 *Strategic Plan* Work Plan laid the groundwork for the effort (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 *2008-2013 Strategic Plan* established a goal to "continue a regional collaborative marketing campaign to increase awareness and use of travel options and reduce drive-alone car trips" (p. 16). The first objective for this goal is to "continue a broad-based travel options marketing campaign that invites people to think about how they travel around the region" (p. 16). The primary strategy to implement that objective is the Drive Less/Save More Campaign (DL/SM).

Funding for the DL/SM Campaign comes from two primary sources: the region's MTIP and ODOT. The MTIP funds (including local required match) are used by Metro staff on complementary direct outreach activities, including staffing events to reach people in person. During 2007 and 2008, $141,400 was spent by Metro on these activities. An additional $140,900 was spent on coordinating all of the collaborative marketing activities, including the Bike There! map and Walk There! guide. The ODOT funds are used for advertising, including television, radio, and print media. For calendar years 2007 and 2008, the total amount of ODOT funds expended was $1.934 million.

## *Evaluation: Direct Outreach Activities*

### What activities were provided?

Over the two years, Metro staff attended 127 events , including 57 farmer's markets, 19 concerts, and 51 other events (Table 5). Examples of other events included the Portland Auto Show, Cinco de Mayo, Living Green Expo, Trail Blazers games, Blues Festival, arts festivals, and other local festivals.

### What was the level of participation?

The interim outcomes from the public events are shown in Table 5. In both 2007 and 2008, approximately 5,200 people were reached at the events. Because fewer events were targeted in 2008, the number of people reached per event increased from 72 to 95. This is also an increase over 2006, when 49 people were reached at each event, on average. This likely reflects a maturation of the program – that RTO staff are choosing to attend events where they will be more successful at reaching the intended audience and/or they are

more effective at attracting attendees at each event. The share of estimated attendees reached increased from 2% in 2006 to 5% in 2007, but dropped to 3% in 2008. However, given the inherent inaccuracies in estimating attendance at events, these fluctuations should not be given too much weight.

**Table 5: Drive Less/Save More Direct Outreach Campaign Outputs and Outcomes**

| | 2006 | 2007 | 2008 |
|---|---|---|---|
| MTIP Expenditures[a] | $132,500 | $80,900 | $60,500 |
| Events (farmer's markets, concerts, etc.) | 105 | 72 | 55 |
| Estimated attendance at events | 284,000 | 103,000 | 167,000 |
| Contacts made at events (estimates) | 5,100 | 5,200 | 5,200 |
| % of attendees reached | 2% | 5% | 3% |
| Contacts per event | 49 | 72 | 95 |
| Materials distributed (notepads, decals, information) | 12,200 | 13,000 | 7,200 |
| Materials per contact | 2.4 | 2.5 | 1.4 |
| Signed commitments to change travel behavior | 2,000 | 1,300 | 2,500 |
| Share of contacts making a commitment | 39% | 25% | 48% |
| % of commitments from residents of Portland/Vancouver metropolitan region | 92% | 92% | 91% |

[a] Expenditures by calendar year estimated based upon fiscal year reporting.
Source: Data reported by Metro staff.

### What was the level of satisfaction?

On average, each person contacted took between one and three pieces of promotional or informational material, such as notepads, decals, or brochures. Picking up materials probably indicates some level of satisfaction with the information and message. No other direct measures of satisfaction were undertaken.

### To what extent did participants use travel options?

In 2007, approximately 1,300 of the people contacted signed a commitment to change travel behavior, representing about 25% of everyone contacted. In 2008, nearly half (48%) of those contacted signed a commitment, for a total of 2,500. This represents a significant increase. The pledge cards asked people to indicate what activity they would undertake to reduce driving. Those results are shown in Figure 5 for 2006, 2007, and 2008. Trip chaining is the most popular activity to which people are willing to commit, followed by walking, transit, bicycling, and ridesharing (carpool or vanpool). One noticeable change over the three years of the program is the increased interest in walking and bicycling in 2008. This may be due to the release of the Walk There! guide, which came out in the spring of 2008. It may also reflect an increased focus more generally on promoting walking and bicycling for health. This theme is showing up more in the news media, as well as advertising campaigns for Kaiser Permanente. Other public agency activities, including the City of Portland's Sunday Parkways project and marketing efforts, and investment in infrastructure throughout the region, may also be contributing to an increased interest in walking and bicycling.

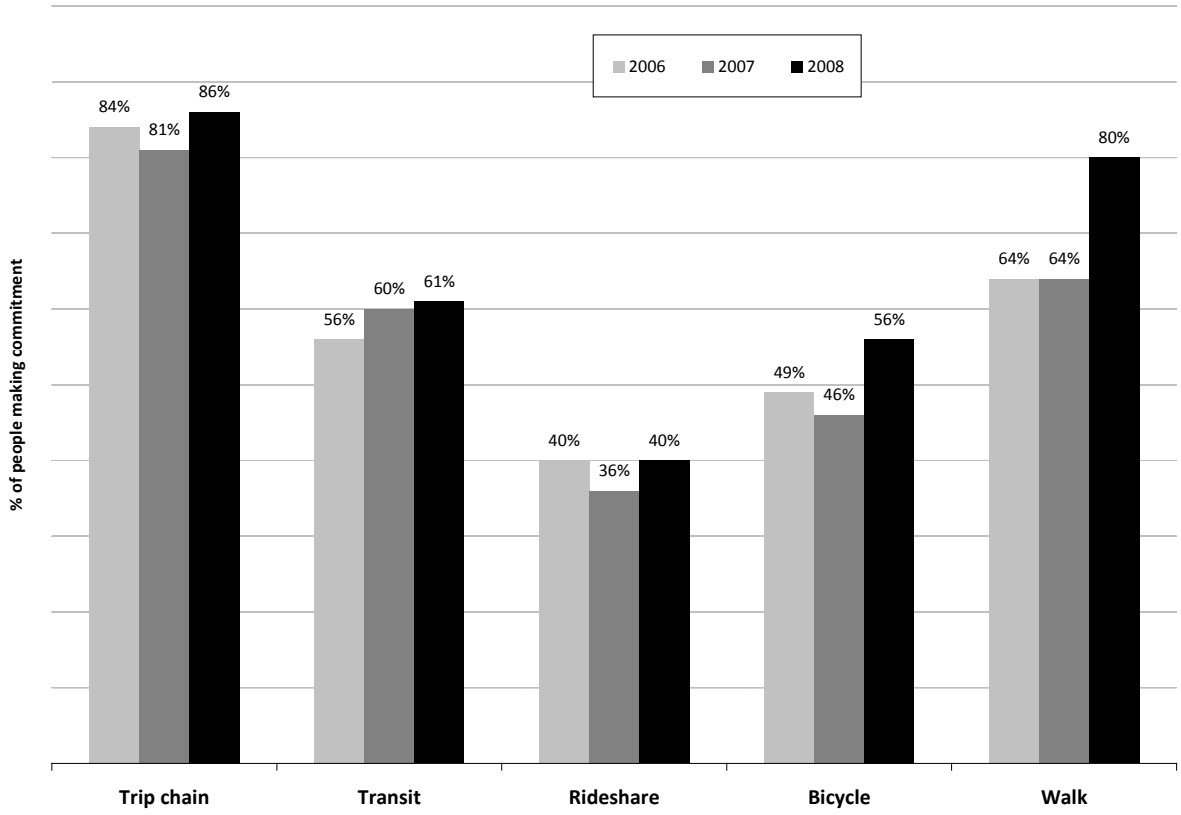



**Figure 5: DL/SM Commitments to Change Travel Behavior, by Activity**

The fact that ridesharing is the least popular activity likely reflects the difficulty in switching to carpooling or vanpooling – an activity that requires finding other people who need to travel between the same origin and destination at the same time. For many people that is a bigger obstacle than, for example, finding out what bus to take or a safe bicycle route. The fact that interest in ridesharing has not increased among the people reached at these events over the three years of the marketing program indicates that the program's messages related to ridesharing are not overcoming those obstacles for most people. This may reflect, in part, the context of the events, which are occurring outside of a person's work environment. A person standing at a DL/SM booth at a farmer's market on the weekend may find it difficult to see how he or she might carpool to work. In contrast, a similar outreach activity held at the person's worksite may yield a higher interest in carpooling or vanpooling. For example, the staff at the booth may be able to provide information about how many people work there and live near the person, making carpooling seem more feasible. These types of marketing efforts are undertaken through the employer outreach programs, TMAs, and CarpoolMatchNW.org. A more thorough evaluation of the RTO ridesharing efforts appears in the sections on the CarpoolMatchNW.org and Vanpool programs.

## *Evaluation: DL/SM Advertising*

### What activities were provided?

The advertising portion of the DL/SM campaign included television and radio ads, radio traffic report sponsorships, billboards, and bus ads. There is also a campaign website and e-newsletter. These efforts were coordinated by a consulting firm, Pac/West. In addition, Metro and Pac/West work to develop sponsorships and partnership with businesses, government agencies, and other groups. These efforts lead to additional advertising, such as display banners, distribution of materials, and links on websites. Examples of these partnerships include the following:

- The restaurant chain Burgerville distributed DL/SM information to approximately 15,000 drive thru customers in April 2007.
- Pioneer Organics promoted DL/SM at 40 events in 2007.
- Portland Community College distributed materials along with their parking materials.
- DL/SM was included in the Mazamas club newsletter, reaching about 3,000 members.
- A Thanksgiving partnership with New Seasons Market provided tips and techniques for reducing holiday-related trips in 2007 and included newspaper ads.
- REI participated in a promotion to Drive Less/Celebrate More during the 2007 holiday season.
- Lamb's Thriftway promoted DL/SM to customers through in-store promotions and newspaper ads.
- The City of Oregon City hung DL/SM banners on street lamp poles and put decals on City vehicles.

Between February 2006 and December 2008, the program garnered over $510,000 in donated advertising and over $411,000 in sponsor contributions through efforts such as the ones listed above.

In 2007 and 2008 the campaign sponsored a family challenge, where three suburban families competed against themselves to reduce driving. KGW television sponsored the challenge and covered in on their newscasts and website. It was also featured in a newspaper insert in the *Portland Tribune* and its community newspapers in 2007 and other media outlets.

Through events such as the family challenge, the DL/SM campaign generated coverage in print and broadcast news outlets. Using the PRTrak media analysis tool, Metro and

PacWest estimated that this coverage was worth $1,437,440 over the three years of the program (2006 through 2008).

In 2007, the campaign earned the Hermes Creative Expenditures Award from the Association of Marketing and Communications Professionals, recognizing outstanding achievement and innovation.

### What was the level of participation?

In the case of advertising, participation can be measured by the number or share of people reached by the message and the number or share that remember and understand the message. Based upon the types and amounts of advertising, PacWest estimated that the DL/SM television ads reached 97% of adults in the region. In January 2009 Moore Information conducted a random phone survey of 404 adults in the Metro area to assess the effectiveness of the campaign. A similar survey was conducted in June 2007. The January 2009 data were provided for this analysis. Unless otherwise stated, the numbers presented from the 2009 survey were generated by PSU CUS directly from the survey data provided, and not from the Moore Information reports on the survey.

Just over half of the respondents (52%) stated that they had seen, read, or heard something about reducing car trips in the past six months, yet a higher share, 59%, stated that they had seen, read, or heard something about "Drive Less/Save More" in the past six months. There was some, but not perfect, consistency in people's responses to these two questions; 38% of the respondents said yes to both questions and 23% said no to both questions (Table 6). However, 21% of the respondents did not remember seeing, reading, or hearing something about reducing car trips, but did remember Drive Less/Save More. Moore Information and Metro felt that the best measure is of people who recalled both the message behind the campaign as well as the "Drive Less/Save More" tag line, which is 38% of the respondents.

**Table 6: Respondents Recall of Drive Less/Save More**

| Saw, read, or heard something about *reducing car trips* in the past 6 months (asked first) | Saw, read, or heard something about "*Drive Less. Save More*" in the past 6 months (asked second) | % of respondents |
|---|---|---|
| Yes | **Yes** | **38%** |
| No | No | 23% |
| No | **Yes** | **21%** |
| Yes | No | 12% |
| Yes | Don't know | 2% |
| No or don't know | No or don't know | 3% |
| Don't know | **Yes** | **1%** |
| n = 404 | | 100% |

Note: Figures are rounded. Figures in bold highlight the respondents who recalled DL/SM.

Almost half (48%) of all the adults surveyed had heard about DL/SM through the "news media," including tv, radio, and newspaper (Table 7). This could mean that the news

coverage of events such as the family challenge was the most effective outreach medium. However, some respondents may have considered advertising in newspapers or on television as "news media" in their response. The DL/SM television ads were the next most common way people had heard or seen the DL/SM message; 41% of all respondents, or 70% of those that heard the message, heard it through a tv ad. Radio and newspaper were the next most common ways for people to have received the message.

**Table 7: Where Respondents Saw, Read, or Heard about DL/SM**

| Saw, read, or heard about DL/SM on…[a] | % of all respondents | % of respondents who recalled Drive Less/Save More |
|---|---|---|
| News media, such as tv, radio, and newspaper | 48% | 80% |
| Television ads | 41% | 70% |
| Radio ads | 24% | 40% |
| Newspaper ads | 21% | 35% |
| Word of mouth, friends | 19% | 32% |
| Website, online | 8% | 13% |
| Booth at community event | 6% | 11% |
| E-mail | 4% | 7% |
| Could not recall specific media | n.a. | 8% |
| N | 404 | 239 |

[a] Only asked of respondents who had recalled seeing, hearing, or reading about Drive Less/Save More.

For those Metro residents that recalled the DL/SM message, most received it through more than one source. Only 10% of the respondents remembered seeing/hearing/reading it via a single source, and 8% could not recall any of the sources, leaving 82% that saw/read/heard it from two or more sources. The use of various media is important in reaching a broad audience. For example, of those that received the message through a website, 44% had *not* heard it through a television ad. Of those that received the message via e-mail, 47% had not heard it through a television ad.

Looking at major demographic categories, there were no significant differences in *whether or not* a group recalled the DL/SM message and only a handful of differences in *how* people heard the DL/SM message:

- Younger adults (18-34) were the most likely to have received the message at a booth.
- Non-college graduates were more likely to have heard the message in a television ad or the news media.
- People with children were more likely to have heard a radio ad.
- Residents of Washington County were most likely to have heard the message through the news media.

### What was the level of satisfaction?

Survey respondents were not asked to rate or judge the quality of the ads or messages they had seen, read, or heard. Some of the survey data provides indirect ways of measuring satisfaction with the campaign more broadly. Respondents were asked what they thought the major theme or message was. About 90% of the respondents responded with something consistent with the campaign, such as reducing trips, saving money, reducing emissions, taking transit, etc. This indicates that the message was understood by nearly all of those recalling it. The first part of the survey asked respondents more general questions about transportation and reducing car trips. A large share, 62%, had said that they had thought about taking fewer single person car trips in the past six month, and 79% thought it was very or fairly important for people to reduce the number of single person car trips. These figures indicate that a majority of the region's residents support the primary objective behind the DL/SM campaign.

### To what extent did participants use travel options?

Of the respondents who had recalled the DL/SM message, 44% said that they thought about reducing car trips as a result, and 15% said that they sought information about reducing trips as a result (Table 8). More importantly, 47% said that they had taken action to reduce car trips. This represents 28% of all adults surveyed in the region. If you only the respondents who recalled *both* hearing something about reducing car trips and hearing something about DL/SM, then only 19% of those surveyed took action. This is a more conservative approach. The most common action was to combine trips or trip chain; 26% of all respondents said that they had done this in response to hearing the DL/SM message. About equal shares of respondents (11% to 14%) started to or increased their walking, transit, or carpooling and/or shopped from home.

**Table 8: Actions Taken by Respondents Who Saw, Read, or Heard about DL/SM**

| Actions taken as a result of seeing/reading/hearing DL/SM[a] | % of all respondents | % of respondents who recalled Drive Less/Save More |
|---|---|---|
| Thought about reducing car trips | 26% | 44% |
| Sought information about reducing car trips | 9% | 15% |
| Plan to take action to reduce car trips in the future | 14% | 24% |
| Did not take action and do not plan to take action to reduce car trips in the future | 14% | 24% |
| Took actions to reduce car trips | 28% | 47% |
| Combined trips, trip chained | 26% | *93%*[b] |
| Started/increased walking | 14% | *49%* |
| Started/increased using transit | 13% | *46%* |
| Shopped from home | 11% | *40%* |
| Started/increased carpooling | 11% | *39%* |
| Started/increased bicycling | 7% | *24%* |
| Worked from home | 5% | *19%* |
| n | 404 | 239 |

[a] Only asked of respondents who had recalled seeing, hearing, or reading about Drive Less/Save More.
[b] % of those who took action.

Whether people received the DL/SM message through the news media, television ads, radio ads, or newspaper ads does not appear to have a significant effect on whether or not they took action (Table 9). Notably, 75% of the 32 respondents who had seen/read/heard the message on a website had taken action. However, this may not necessarily indicate that the web is the most effective medium. Rather, it may indicate that people who decide to take action are using the web to find information (e.g. bus schedules, bike maps, etc.) and in the process see DL/SM messages. In addition, the number of respondents seeing the message on the web (32) is small, reducing the accuracy of drawing conclusions from the data.

**Table 9: Where Respondents Saw, Read, or Heard about DL/SM and Whether They Took Action to Reduce Trips**

| % respondents who received DL/SM message through this medium… | …and who took action to reduce car trips | n |
|---|---|---|
| News media, such as tv, radio, and newspaper | 50% | 192 |
| Television ads | 48% | 166 |
| Radio ads | 53% | 96 |
| Newspaper ads | 55% | 83 |
| Word of mouth, friends | 58% | 77 |
| Website, online | 75% | 32 |
| Booth at community event | 64% | 25 |
| E-mail | 65% | 17 |
| Could not recall specific media | 22% | 18 |

[a] Only asked of respondents who had recalled seeing, hearing, or reading about Drive Less/Save More.

Looking at major demographic categories, including gender, age, college education, income, marital status, and having children, there were no significant differences in whether or not respondents who had heard the DL/SM message took action. However, there were some significant differences in the types of actions taken.[13] Of those who heard the DL/SM message and took actions to reduce driving:

- Younger adults (18-34) were the least likely to have trip chained – 81% compared to 97% of action-taking respondents age 35-64 and 88% of those 65 and older.
- The lowest income respondents were also least likely to have trip chained – 79% compared to all (100%) of the respondents with higher incomes.
- College graduates were more likely to work at home.
- Married adults were more likely to have trip chained.
- Unmarried adults were more likely to have increased transit use – 60% did so compared to 36% of married adults.
- Married adults were more likely to have shopped online from at home.
- Men were more likely to have increased their bicycling – 33% versus 16% of women who took action.
- Residents of Multnomah County were the most likely to increase transit use (61%) or walking (63%), compared to 52% and 42% of Washington County residents and 8% and 27% of Clackamas County residents who took action, respectively.
- Residents of Clackamas County were the most likely to shop at home – 58% did so compared to 26% of Multnomah County residents and 49% of Washington county residents that took action.

## *Evaluation: Bike There! Map*

### What activities were provided?

Metro's RTO program produces the Bike There! map, which indicates bike facilities and rates streets for bicycling that are shared with motorists. The map is sold in area bike shops and other retail outlets, as well as Metro's website. The map was updated in 2007.

In spring 2007, Metro launched an on-line survey to assess response to the map. The survey was posted on the Metro website. Because there are no records kept of who purchases the maps (except on-line sales), it was not possible to solicit survey responses from all or a sample of map owners. The survey was completed by people who were visiting the Metro website for various reasons, including purchasing the map on-line. Therefore, the data do not represent all map users. However, 136 people did complete the

[13] Statistically significant at a probability level of <0.05.

survey between May 2007 and May 2009 and their responses can help assess the map's usefulness.

### What was the level of participation?

Metro sold 8,045 Bike There! maps in 2007 and 7,552 in 2008, for a total of 15,597 maps. According to the 2005-2007 ACS data, there were approximately 755,000 households in the Portland metropolitan region (excluding the city of Vancouver). If no more than one map was sold to a single household and all of the maps were sold to residents of the Oregon part of the region, the two-year sales figure would cover about two percent of all households.

### What was the level of satisfaction?

The map is sold for $6, though some employers and other organizations may purchase maps and distribute them for free. Nearly two-thirds of the respondents had purchased their map. The basic fact that people purchase the map indicates some level of satisfaction. Not surprisingly, 63% of the survey respondents preferred a printed map, while 27% preferred an on-line map or web-based tool. Of those that responded to the question (n=99), 83% indicated clearly that the color scheme used to differentiate the suitability of routes for bicycling made sense. Nearly all of the respondents (97%) thought this feature was important. The survey offered a place for general comments, which elicited some general praise and suggestions for improvement for the map:

- That the map is tear-resistant and waterproof is a big plus for the map.
- Nice map.
- Love ByCycle and the Bike There integration with google maps!
- Keep up the good work i love the map
- I really enjoy using the map, thanks!
- I love the map. I keep going back to the bike shop to pick up another because I have either lost one, loaned one, or overused one. So now I have one for home, one for the car, and one for the office.
- I love the map, and I use it all the time.
- I love the map!
- i love that it is tear and water proof!
- I like that this is a good map of the region with cycling information overlayed. If it became simplified or TOO cycling-specific, it would lose value.
- i like having your printed map to carry with me on rides, but if you had a good online interface, i'd use it almost daily as i'm new to the area. bycycle.org isn't very good. you could do something better.
- Great map!
- A smaller, possibly more succinct and less detailed map would be nice if it folded into a size smaller than a standard postcard (4x6 or so).

### To what extent did participants use travel options?

Based upon the on-line survey of map users, it does appear that the map is meeting its objectives. Specific findings from the survey include the following:

- The map is being used to plan trips that typically occur by motor vehicle. Only 15% of the respondents use the map primarily for planning recreational or fitness rides. Twenty-four percent used it most recently to plan a route to work or school and 12% used it most recently to plan a route for shopping or entertainment. Only 7.5% of the respondents indicated that they were unlikely to ever bicycle to work, while 84% agreed that biking was a good way to take care of errands close to home. About two-thirds (65%) of the respondents have a car available most days.

- The map is being used to plan relatively long trips; 42% of the respondents typically were using the map to plan for bike trips that were 5-9 miles in length and 13% were typically planning shorter trips and 37% were planning trips 10 miles or longer.

- Just over half (51%) of the respondents were men and 44% were women, with the remainder not answering the question. This distribution is slightly different from the share of people who bicycle regularly for transportation. A 2005 random phone survey conducted by PSU found that only 28% of the regular, year-round utilitarian cyclists in the region were women. This may indicate that the map is a useful tool for women who are trying to start or increase their cycling. However, it may also indicate that women are more willing to complete the survey.

- The map appears to be reaching one target audience – new residents. Only 2% of the survey respondents did not live in the region, while 12% had lived in the region for less than two years. In the DL/SM random survey of adults in the region, only 4.5% of the respondents had lived in the region for less than two years. This difference may indicate that the map is being used disproportionately by new residents. This is consistent with the RTO strategy to reach new residents and people who relocate.

For many bicyclists, having a map, such as the Bike There! map, is an essential tool. However, it is unlikely to be the only thing that determines whether a person decides to bicycle instead of driving – it an information tool that complements other strategies, including providing bicycle-specific infrastructure. Therefore, it is not possible to assign specific trip reduction benefits to the map.

## *Evaluation: Walk There! Guide*

### What activities were provided?

Building upon the popularity of the Bike There! map, the Metro RTO program produced the Walk There! guide in 2008, after a year of development. Kaiser Permanente contributed $50,000 for the guide, in addition to Metro's $187,200 in MTIP funds. The guide includes descriptions and maps for 50 walks in the region. A kick-off event for the guide was held in June 2008, and six other walking events were held throughout the region.

### What was the level of participation?

Metro, Kaiser, and other partners distributed approximately 34,000 printed copies of the guide in 2008. The guide is also posted on the Metro website. More than 250 people attended the events, and Metro estimated that media coverage of the events was valued at $119,700.

### What was the level of satisfaction?

To help evaluate the effectiveness of the guide, Metro collected email addresses of people receiving it. RTO staff sent an on-line survey about the guide to 2,852 email addresses in October 2008. Nearly one-quarter (23%) responded (n=651).

The survey indicates a high level of satisfaction with the guide. Nearly two-thirds (62%) of the respondents indicated that they had taken a walk in the guidebook, with 30% taking more than three of the walks. Most of the respondents (67%) said that they discovered a park, open space, or natural area by using the guide and 59% said that they discovered a trail or path with the guide. Ten percent of the respondents had emailed a walk from the guide to a friend and 36% had encouraged a friend to visit the Walk There! website. When asked if they would purchase a copy of the next edition of the guide for $11.95, 32% said they would purchase one for themselves.

Only 2% of the respondents indicated that the route directions in the guide were confusing or incorrect, while 42% said they were "always clear and easy to understand" and 41% said there were "usually straight forward, nothing remarkable." The survey elicited the following examples of positive comments, in addition to several suggestions for improvements:

- I think the book is GREAT and adds to the ability of common folks to get out and get moving. Thanks for doing this....
- I have used it to remind me that I have quit walking, which used to be my passion. … I intend to do all of these walks using the book, within the next 12 months.
- It's so comprehensive already, I can't think of anything to add to it or improve it. I just hope Metro is able to update, publicize, and distribute it periodically and continue publishing it long into the future!
- Love the book! I feel safer to know I am on a specific route, with a specific and different way back, especially if I am walking alone. THANKS!!
- Details in Walk There help in finding appropriate walk challenges for all ages and abilities...I love it....it's awesome! I can't tell you the number of people I've told about this wonderful book. I'm a fitness individual and am always watching for ways to get people off their bottoms and move!
- This is a wonderful book. The collaboration with Kaiser Permanente is a good idea.
- I did read through walks near my home and felt excited by how much the guidebook could teach me along the walks.
- Overall I like this guide very much and commend you on this effort. A neighbor and I started choosing one walk from the book to do every week until we complete them all.
- As a real estate agent working with relocating clients, I have used the guidebook to talk about our rich neighborhood history. Great book and just the perfect size.

- Size is easy to carry (mentioned by 16 respondents)
- Great Guidebook. Several paths around Portland that I had forgotten about or that were new to me. Great especially with kids/family
- This was perfect timing for my family. We really got out there and enjoyed trails we found. My 7 year old son, said he loved the time we were spending together!
- It was wonderful; while walking we met many people who asked about the guide
- Great Idea! (mentioned by 18 respondents)
- Keep up the good work (mentioned by 4 respondents)

### To what extent did participants use travel options?

One-third of the respondents said that they are walking more often since receiving the guidebook, while 66% said they were walking about the same frequency. Of those walking more, 56% said they make at least one extra walking trip each week;

One primary objective of the guide was to increase levels of walking for transportation purposes. The guide appears to be meeting this objective to some extent. About two-thirds of the survey respondents (67%) said that their most common walking destination was fitness/exercise or leisure/recreation/strolling and 9% were mainly walking their dog. This is consistent with the finding that 59% of the respondents were most likely to do the "Nature in Neighborhoods" walks, which explore parks, trails, and scenic places. However, 11% did walk most often for shopping or errands, 4% to work or school, 5% to transit, and 3% for entertaining, dining, or visiting friends/family. It should also be noted that the survey question asked about the person's "most common" purpose or destination. People who walk mainly for exercise or strolling may also occasionally walk for transportation purposes. In addition, the guide may encourage people to *start* walking more for recreation or scenic purposes. That might lead to walking more for transportation purposes. Over one-third (35%) of the respondents said that they discovered a grocery store, restaurant or café on one of the guide's walks that they had not previously been aware of, while 13% discovered another type of store, 5% discovered a way to get to or from work, and 4% discovered a way to walk to lunch from work.

Over half of the respondents (55%) indicated that they drove alone or carpooled to the starting point for the most recent walk that they took from the guide, while 29% walked, 12% took transit, and 4% biked.

# 4. 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.

For this evaluation, TriMet provided a copy of its employer database, which includes employee commute survey data.

## *Evaluation*

### What services were provided?

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 free or lower cost annual transit passes to employees, subsidized by the employer.

TriMet provided a wide range of outreach services to over 1,000 employers in 2007 and 2008. Activities also targeted 505 employers adjacent to the Westside Express Service (WES) commuter rail which opened in February 2009.

### What was the level of participation?

There were 689 worksites that were active with TriMet in 2006 or later that conducted at least one employee commute survey in 2005 or later.[14] Those 687 sites had about 144,400 ECO-eligible employees[15] and about 155,400 total employees. Of those sites, 315 (46%) offer a Universal Pass and 190 have some other type of transit pass sales or distribution on site.

All sizes of employers are participating in the program. Nearly one-third (32%) of the sites have 50 or fewer employees, which was below the ECO threshold prior to 2007 (Table 10). However, these sites only represent three percent of the ECO-eligible employees. Nearly

---

[14] Because sites falling under ECO rules requirements are only required to survey employees every other year, sites that were active in 2006 could be considered active for 2007. A site was determined to be "active" if there had been at least one contact between TriMet and the site, as indicated in the "memo count" field in the employer database, or if their survey results were processed by TriMet.

[15] 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)

half of the ECO-eligible employees are at the 53 worksites with 500 or more employees. The distribution is similar to previous years.

**Table 10: Size of Worksites Participating in TriMet's Employer Outreach Program**

| # ECO-eligible employees | # sites | | # ECO-eligible employees | | |
|---|---|---|---|---|---|
| | **#** | **%** | **Total #** | **%** | **Cumulative %** |
| 50 or fewer | 223 | 32% | 4,554 | 3% | 3% |
| 51-99 | 113 | 16% | 8,257 | 6% | 9% |
| 100-199 | 166 | 24% | 24,170 | 17% | 26% |
| 200-499 | 132 | 19% | 39,020 | 27% | 53% |
| 500+ | 53 | 8% | 68,383 | 47% | 100% |
| Total | 687 | | 136,634 | | |

## What was the level of satisfaction?

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

## To what extent did participants use travel options?

About 34% of the commute trips made by ECO-eligible employees to the worksites surveyed were made in non-single occupant vehicle (non-SOV) modes (Table 11). The share of trips made driving alone was 66.0%, compared to 72.2% in the baseline surveys.[16] The use of transit, walking/bicycling, compressed work week, and telecommuting went up, while the share of trips made in carpools and vanpools fell. The increases in walking/bicycling, compressed work week, and telecommuting were larger than in the recent past, though the increase in transit use was smaller.

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

**Table 11: Commute Trip Mode Share for TriMet Employer Outreach Participant Worksites**

| | % of weekday commute trips[a] | | | | |
|---|---|---|---|---|---|
| | Most Recent Change | | | Previous Changes | |
| Mode | Baseline survey | Most recent survey[b] | Percentage point change over baseline | 2004-05 change over baseline[c] | 2006-07 change over baseline[c] |
| Drive Alone | 72.2% | 66.0% | -6.1 | -5.9 | -5.2 |
| Transit | 12.8 | 16.6 | +3.8 | +5.6 | +4.9 |
| Carpool/Vanpool | 9.4 | 8.7 | -0.8 | -1.0 | -1.0 |
| Walk/Bike | 4.0 | 5.2 | +1.2 | +0.2 | +0.3 |
| Compressed work week | 1.3 | 2.1 | +0.8 | +0.3 | +0.2 |
| Telecommute | 0.3 | 1.4 | +1.1 | +0.5 | +0.8 |
| Total | 100.0% | 100.0% | | | |
| # work sites | 687[d] | 687[d] | | 814 | 767 |

[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 a site average.
[b] Includes surveys conducted in 2005, 2006, 2007, 2008 or January-March 2009.
[c] Note that the baseline is different for the 2004-05 and 2006-07 data, because the set of employers included differs.
[d] Note that the total number of worksites is higher than in previous tables because this includes worksites where the most recent survey conducted was in 2005 and 2006, rather than just 2007 or later. This more liberal criteria for inclusion is consistent with the analysis done for 2004-05 and 2006-07.

One way to evaluate the effectiveness of a program is to compare participants in the program with non-participants. Several employers survey their employees to comply with the DEQ ECO rules, but do not use TriMet's employer program services. These employers can be considered non-participants. Metro obtained survey data from such sites and provided it to PSU for this evaluation. There were 115 sites that were not active with TriMet and had survey data analyzed by DEQ in 2005 or more recently. There were a small number of employers that were not active with TriMet and had their survey data analyzed by a TMA. These employers were not included in the non-participant group because they are likely receiving services similar to TriMet's through their TMA. The results of the comparison between TriMet program participants and non-participants are shown in Table 12.

Worksites participating in TriMet's outreach program reduced the number of drive alone trips by a larger amount than non-participants – 6.1 percentage points versus 3.8 percentage points. This represents an overall reduction in the number of private vehicle commute trips of 8.5% for participants and 4.8% for non-participants.[17] This indicates that

[17] To avoid counting changes in worksite size, the estimate assumes that the total number of trips to the worksite is the same in the baseline as it is in the most recent follow-up survey.

the program may be effective at reducing drive alone trips above what would happen with just the ECO rules. However, it should also be noted that worksites were not randomly selected to be participants or non-participants, as would be desired in an experiment testing the program's effectiveness. Employers that work with TriMet are a self-selected group. The baseline survey data indicate that these employers had higher rates of transit use to start with – 12.8% versus 4.9%. This makes sense, since employers with good transit access are more likely to offer pass programs to employees and, therefore, work with TriMet. This also helps explain why the share of trips made on transit went up 3.8 percentage points among participants, but only 0.9 percentage points among non-participants. In contrast, the share of work trips made by carpool or vanpool went up among non-participants, but down among participants. However, bicycling and walking went up at participating worksites and down very slightly at non-participating sites.

**Table 12: Commute Trip Mode Share for TriMet Employer Outreach Participant vs. Non-Participant Worksites**

| | % of weekday commute trips[a] | | | | | |
|---|---|---|---|---|---|---|
| | Participating Sites in TriMet's program | | | Non-participants | | |
| Mode | Baseline survey | Most recent survey[b] | Percentage point change over baseline | Baseline survey | Most recent survey[b] | Percentage point change over baseline |
| Drive Alone | 72.2% | 66.0% | -6.1 | 79.5% | 75.7% | -3.8 |
| Transit | 12.8 | 16.6 | +3.8 | 4.9% | 5.8% | +0.9 |
| Carpool/Vanpool | 9.4 | 8.7 | -0.8 | 9.6% | 10.6% | +1.0 |
| Walk/Bike | 4.0 | 5.2 | +1.2 | 4.5% | 4.4% | -0.1 |
| Compressed work week | 1.3 | 2.1 | +0.8 | 1.3% | 3.0% | +1.7 |
| Telecommute | 0.3 | 1.4 | +1.1 | 0.2% | 0.5% | +0.3 |
| Total | 100.0% | 100.0% | | 100.0% | 100.0% | |
| # work sites | 687 | 687 | | 115 | 115 | |

[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 a site average.
[b] Includes surveys conducted in 2005, 2006, 2007, 2008, or January-March 2009.

Most of the sites experienced an increase in transit use and a decline in drive alone rates compared with their baseline data. Overall, 70% of the worksites experienced a decrease in the share of work trips made driving alone, while 67% saw an increase in share of trips made on transit (Figure 6). 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 largest sites were also more likely to see an increase in carpooling and bicycling/walking.

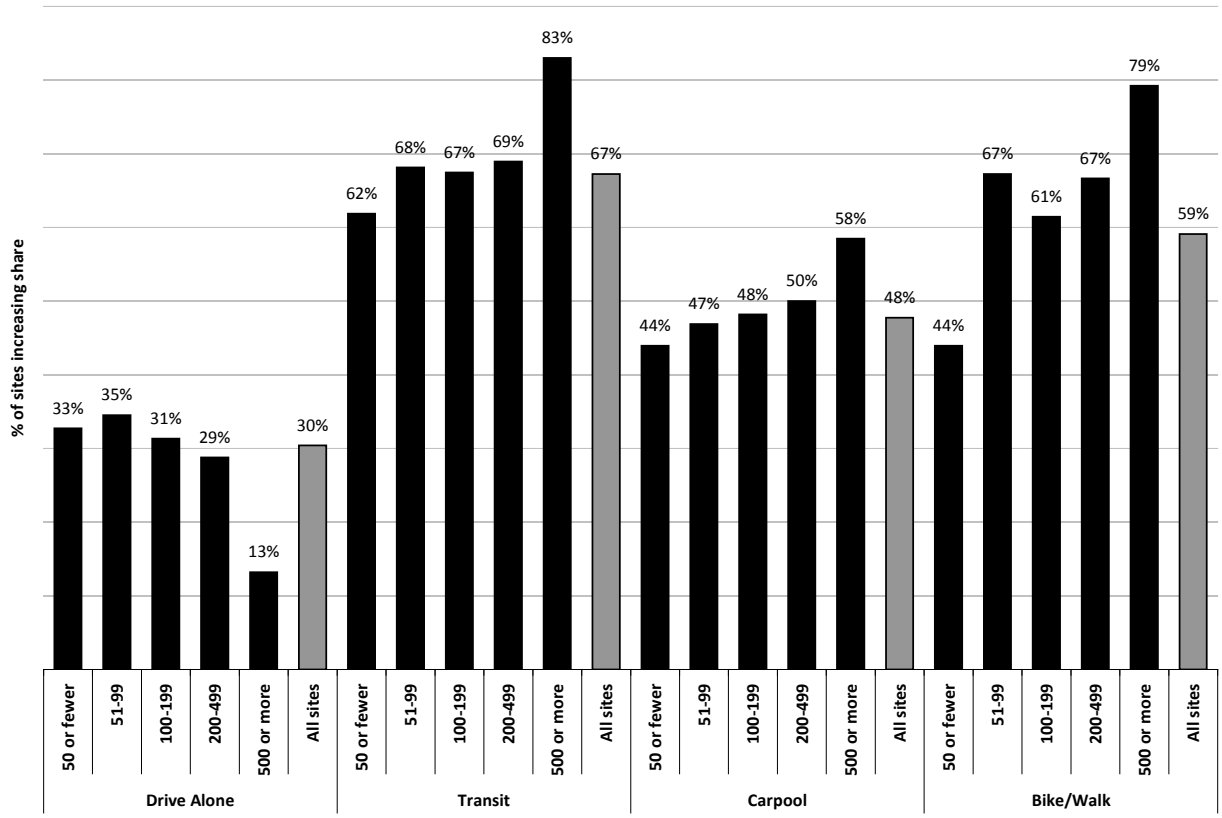



**Figure 6: Share of TriMet Participating Worksites that Increased Share of Trips over Baseline, by Size of Site**

## 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. These targets were included in the recent update the Plan submitted to and approved by the federal government (*2035 Regional Transportation Plan*). 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% by 2040. The target for the central city is 60-70%. For other areas the target is 40-45%. Over one-quarter of the worksites (28%) already meet the non-SOV modal target of 55% (Table 13). However, this is largely due to sites in downtown and the Lloyd District area. Only 19% of the sites outside of those two areas have a non-SOV mode share above 40%. However, many worksites are making progress in the right direction; 68% of those sites have reduced the share of employees driving alone to their worksites since their first baseline survey.

**Table 13: Distribution of TriMet Employer Outreach Participant Worksites by Non-SOV Mode Share**

| Non-SOV mode share | % of worksites | % of worksites in downtown Portland | % of worksites in Lloyd District[a] | % of other worksites |
|---|---|---|---|---|
| Over 55.0% | 28% | 81% | 67% | 8% |
| >45% - 55% | 7% | 10% | 10% | 6% |
| >40% - 45% | 5% | 3% | 10% | 5% |
| >30% - 40% | 13% | 4% | 10% | 16% |
| >20% - 30% | 18% | 1% | 4% | 24% |
| 20% and lower | 29% | 1% | 0% | 41% |
| Total | 100% | 100% | 100% | 100% |
| N | 687 | 146 | 51 | 490 |

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

## *Conclusions and Recommendations*

The Employer Outreach Program continues to show higher rates of non-SOV commuting in the region compared to baseline levels. Employers with survey data showed increases in transit, walking, bicycling, compressed work week, and telecommuting. However, there was a decline in car/vanpooling. Moreover, the improvements in transit use over the baseline were smaller than in previous years, indicating that the effects of the programs may be declining. Additional increases may require more investment and/or creative strategies. This is particularly evident outside of the central core area, where SOV rates are far higher than RTP targets. Research consistently shows that the availability of abundant free parking is one of the major factors supporting people's decision to drive alone to work. The RTO program has not previously focused on parking management strategies, such as parking pricing and parking cash-out. Research from other states has shown these programs to be effective in a number of settings. Parking cash-out should be seriously considered in areas outside of downtown and the Lloyd Center, where parking is currently free.

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 8.5% compared to their baseline surveys, trips fell by 4.8% 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. On the other hand, TriMet fare increases over the time period may have negatively affected transit rates.

This year's analysis of the employer database, particularly an attempt to explain the decline in transit use, raised questions about the completeness and accuracy of the information on

program participation. For example, it was unclear how to tell for sure whether an employer had dropped a transit pass program. RTO staff should explore how these data are maintained and whether the collection process could be improved to make future evaluations more useful. Since the first draft of this evaluation, TriMet has indicated that they are starting to make changes in how these data are tracked. In addition, the surveys combine walking and bicycling into a single category. The characteristics of these modes and their participants are very different and should be tracked separately.

Finally, it was unclear how to assess the employer outreach services provided directly by Metro. Integrating data on these efforts with the TriMet database may help address this problem.

# 5. Regional Vanpool Program

## *Program Background*

Historically 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 no longer part of the RTO program. TriMet continued to run the (traditional) regional vanpool program under contract from Metro in the 2005-06 fiscal year. The program is now run by Metro.

Metro provided a spreadsheet with data on each vanpool, including operating dates, ridership, roundtrip mileage, and costs.

## *Evaluation*

### What services were provided?

There were 16 vanpools operating at the beginning of 2007. By the end of 2008, there were 30 vanpools. This is an increase over the 18 vanpools since 2006.

### What was the level of participation?

Throughout the two-year period, each vanpool carried an average of 6.0 to 7.6 riders per day. In 16 of the 24 months average daily ridership was at least 7.0 riders per day. This is higher than the 2006 average of 6.5. It appears that RTO has succeeded in increasing ridership per van, which was a recommendation from previous evaluations.

### What was the level of satisfaction?

There is no data on the direct level of satisfaction with the vanpool services. However, the riders pay for about half of the cost of the service. This indicates some level of satisfaction, or the riders would seek other options. In an RTO survey of riders, 79% of the 76 respondents indicated that saving money on gas was one of their top three reasons for vanpooling. Other top reasons were less stress than driving (43%), helping the environment (32%), and reducing traffic congestion (26%). These figures indicate good levels of satisfaction.

### To what extent did participants use travel options?

Each day they operated in 2007, the vanpools had about 185 total riders. In 2008 the number rose to 288. Based upon a survey of riders, Metro estimated that 76% of the vanpool riders were driving alone before joining the van. Using this information, along with the vanpool's ridership and travel distance, RTO staff developed estimates of the vehicle

miles of travel (VMT) reduced each month. The summary figures for 2007 and 2008 appear in Table 14. In 2007, Metro covered about 47% of the vanpool costs; in 2008 the subsidy was 48%. The remainder of the cost is paid by the riders. The cost effectiveness of the program in 2007 was $0.12 per vehicle mile reduced. That improved to $0.09 per mile in 2008. The improvement is due to a shift in the program to vans that traveled longer distances and an increase in ridership. This is a significant improvement over the 2006 cost-effectiveness estimate of $0.16 to $0.19 per mile reduced.

**Table 14: Vanpool Statistics and VMT Reduction Estimate**

| | 2007 | 2008 |
|---|---|---|
| Number of vanpools operating per month | 15 - 23 | 26 - 31 |
| Average daily ridership | 6.9 – 7.5 | 6.0 – 7.6 |
| Average daily roundtrip miles per van | 41 – 56 | 51 - 61 |
| Total passenger miles | 1,504,100 | 2,727,500 |
| Total VMT reduced[a] | 1,076,800 | 2,072,900 |
| Metro subsidy | $128,200 | $189,700 |
| Cost per VMT reduced | $0.12 | $0.09 |

[a] Adjusted down from total passenger miles by Metro RTO staff based upon survey data indicating share of riders that previously drove alone to work, which was 76% overall. Drivers are not included in calculation.

## *Conclusions and Recommendations*

The vanpool program improved its performance in 2007 and 2008, directly addressing the concerns raised in previous evaluations. The program expanded in size, focused on longer-distance trips, and increased the number of riders per van. In addition, the subsidy amount for both years was less than 50%, a recommendation made by Siegel Consulting in its Vanpool Program Financial Assessment Study submitted to Metro in December 2006.

The 2004-05 evaluation included data from other regions in the country showing much larger vanpool programs. One significant limitation for the program in this region is the lack of high occupancy vehicle (HOV) lanes. Regions with large and successful vanpool programs include Los Angeles and Houston, which have extensive HOV networks on the freeway system. These lanes allow vanpool riders to save time, which for some riders is just as or more important than saving money. Only 20% of the Portland area vanpool riders surveyed said that saving time was a reason for vanpooling. In addition, commute distances in other large regions are typically longer, which can affect the attractiveness of vanpooling. Despite these limitations, the program does provide a service for large worksites and employment centers that are not well-served by transit in a more cost-effective manner than fixed-route transit service.

# 6. CarpoolMatchNW.org

## *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 regular commute or one-time trip needs (e.g. destinations, travel times, smoking preferences, etc.), then receive information to help match them up with riders and/or drivers. 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 Bureau of Transportation (PBOT) continues to operate the website. Initially, customer service for the program was provided by a staff person at TriMet. That responsibility was shifted to PBOT and then moved to Metro in 2006-07. In 2007 and 2008, the RTO program included $49,400 in funding for PBOT to maintain the software and database and $59,600 (including match) for RTO staff to manage and promote the program.

This evaluation uses the data provided by participants at the time they register and when they respond to surveys sent 15 to 30 days after registration and every six months after that. Unless otherwise noted, any data presented below regarding registrants of the CarpoolMatchNW.org website is from an analysis of this database, including registrants through December 2008. The evaluation also focuses on participants that registered to rideshare on a regular basis, rather than a one-time trip. Of the active participants in 2007 and 2008, 23% (1,931) completed at least one survey in 2006 or later.

## *Evaluation*

### What services were provided?

The CarpoolMatchNW.org site continued to provide matching services for residents throughout the Pacific Northwest and was promoted directly to employers and through the Collaborative Marketing program, TriMet and SMART employer programs, and TMAs. RTO staff used the data to identify large concentrations of employees and employers for targeted marketing, and provided geo-coded maps of employee home addresses for several employers to help increase interest in ridesharing. During the two-year period, three specific incentive programs were offered to increase participation in carpooling and vanpooling through the website. The site received positive media coverage in a front-page article in the Sunday *Oregonian* newspaper in April 2008. Pac/West used PRtrak to estimate that this coverage was worth $387,400.

Over the two-year period, the site was enhanced to include better vanpool information and better feedback survey information. RTO staff also provided customer service for the site via telephone and email. In addition, inactive registrants are purged from the database on a regular basis. Several of these changes address issues raised in previous RTO program evaluations.

## What was the level of participation?

The number of people registering on the CarpoolMatchNW.org site for long-term ridesharing options continued to grow in 2007 and 2008. In 2007 there were a total of 5,186 active participants. In 2008 that number grew to 8,130. The number of people registering in 2008 was more than twice that in any previous year. In addition, there were over 2,000 people that registered to find a carpool for a single trip. The number of new registrants for long-term ridesharing increased significantly in spring and summer months of 2008 (Figure 7). The database is relatively large, compared to other metropolitan areas. A national survey of TDM programs found that nearly half of the programs had fewer than 2,500 people in their databases, and more than half of the matching databases in large metropolitan areas were under 7,500 people.[18]

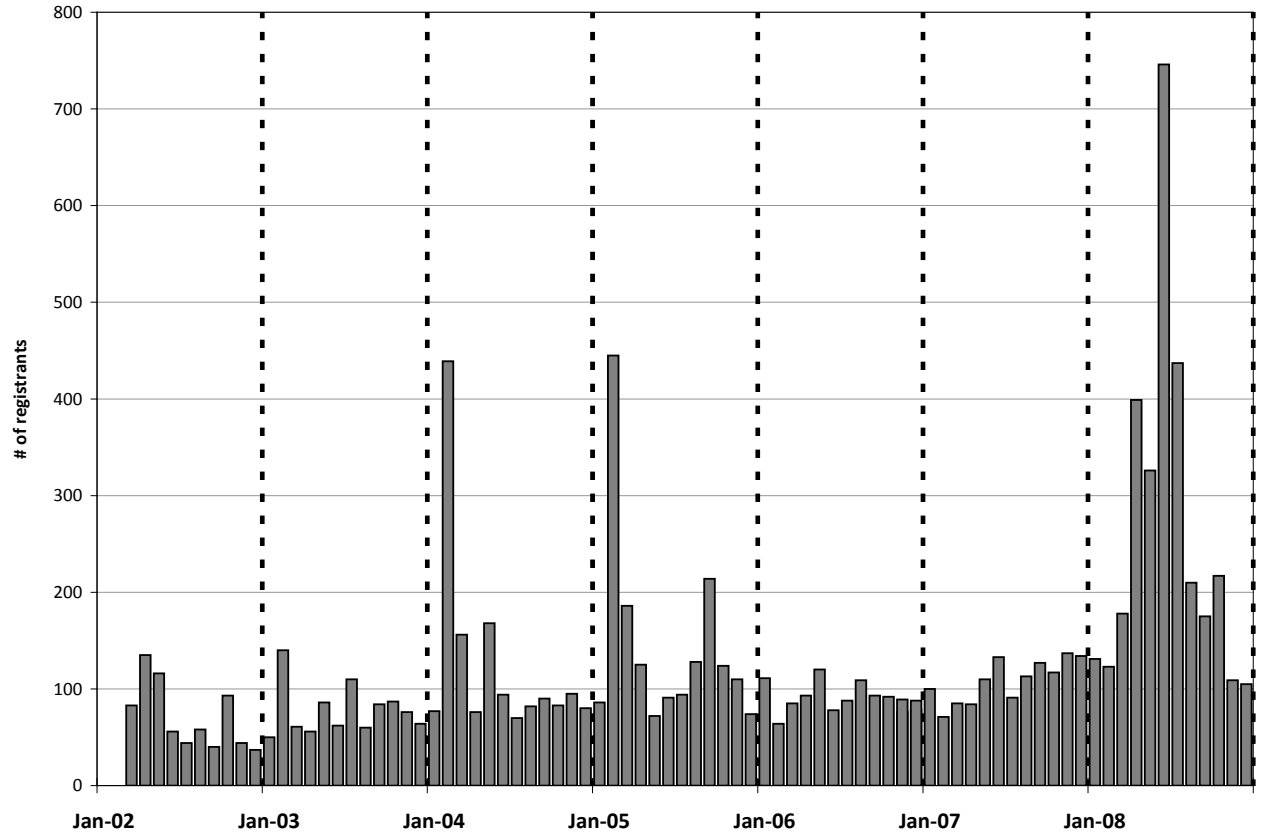



**Figure 7: New Registrants on CarpoolMatchNW.org Website by Month**

The site is promoted and used in areas outside of the Metro area. Of the 8,130 active participants in 2008, 66% (5,401) had a commute that either started or ended within the

[18] David Ungemah and Casey Dusza, "A Transportation Demand Management (TDM) Benchmark: Results from the 2008 TDM Program Survey," Paper #09-2174 presented at the Annual Meeting of the Transportation Research Board, January 2009, Washington, DC.

Metro region, 10% (806) had a commute that was entirely within the state of Washington, and 24% (1,923) had a commute that started and ended outside of the Metro area, with at least one of those points within Oregon. The number of registrants by year and location of commute is shown in Figure 8. The site is promoted by travel options programs in Salem and Medford. In addition, Metro's advertising efforts reach residents of Washington, particularly Vancouver. It should be noted, however, that some of the Washington participants are traveling completely outside of the Southwest/Vancouver area.

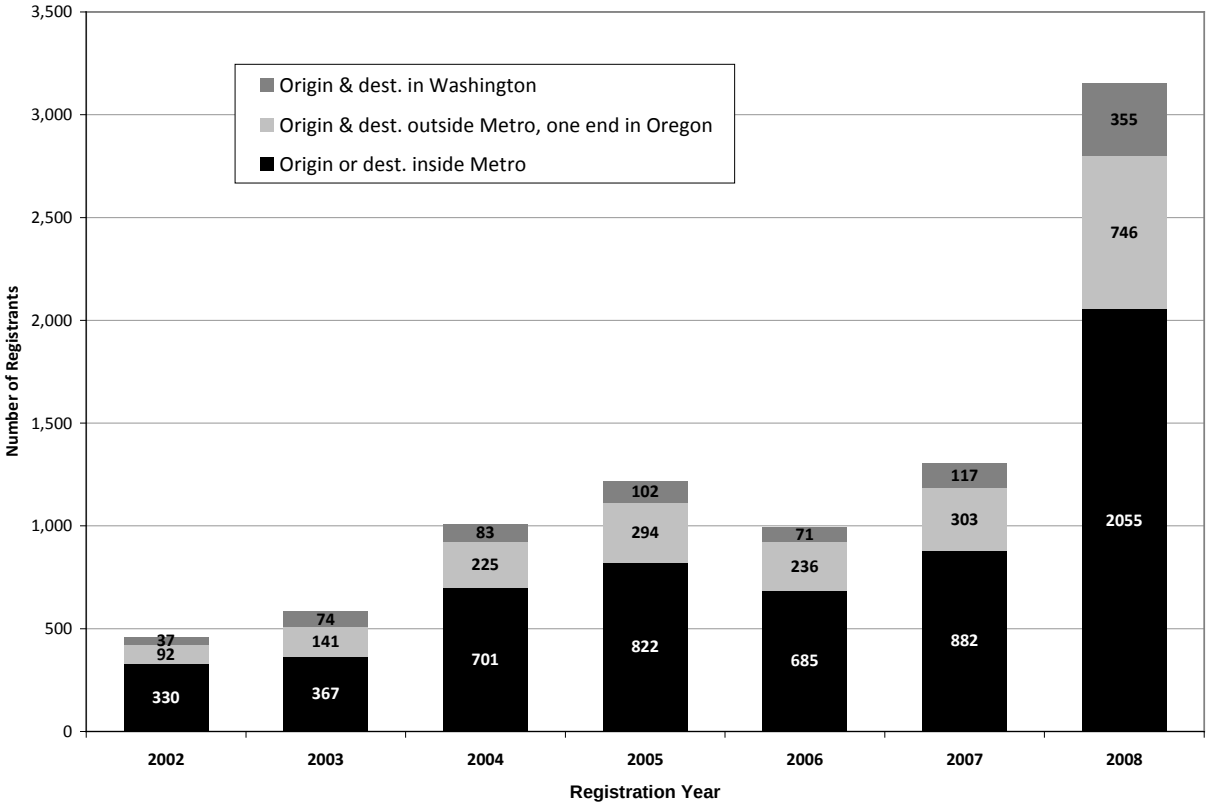



**Figure 8: Commute Location of CarpoolMatchNW.org Participants by Registration Year**

## What was the level of satisfaction?

The follow-up surveys do not specifically ask participants' opinions on the quality of the service. However, there are several other ways to assess satisfaction. Of the 5,186 active participants in 2007, only 3% were not participating in 2008. These registrants either asked to be removed from the database or their email contact was no longer valid and they were purged. Of those who responded to a follow-up survey and were active in 2007 or 2008, 85% said that they would continue to look for a carpool partner through the site. These figures indicate a high level of satisfaction with the service.

## To what extent did participants use travel options?

Overall, 26% of the survey respondents indicated that they were in a carpool or vanpool formed at CarpoolMatchNW.org. That is nearly 500 carpools, 286 of which started and/or

ended in the Oregon Metro area (Table 15). The response rate to the survey (23%) was slightly higher than in previous evaluations. However, given the relatively low rates, the responses may be biased towards people who were more interested in forming a carpool and those that succeeded. Rates of forming carpools among the entire database are likely lower.

**Table 15: CarpoolMatchNW.org Registrants that Formed Carpools/Vanpools**

| | Are you in a carpool or vanpool formed at CarpoolMatchNW.org? | |
|---|---|---|
| **Location of Commute** | **Percent** | **Number** |
| Origin and/or destination within Metro | 24% | 286 |
| Origin and destination outside of Metro, with one end in Oregon | 26% | 124 |
| Origin and destination in Washington | 32% | 83 |
| Total (n=1,932) | 26% | 493 |

Note: Includes survey responses from 2006, 2007, and 2008 for participants that were active in 2007 and/or 2008.

It is unclear how this "placement rate" compares to other programs nationally. The 2008 survey conducted by Ungemah and Dusza (see footnote 18) found that over one-third of the programs did not track placement rates and that less than 30% of programs in large area reported a placement rate higher than 20%. However, it is unclear how the surveyed programs calculate placement rates, in particular how survey responses are adjusted to account for non-response bias. A random phone survey of participants in Atlanta's 1-87-RIDEFIND ridematching and information service found that 14.3% of the respondents joined or created a new carpool and 1.1% added another person to an existing carpool. An additional 4.5% joined, created, or added to a vanpool.[19] However, because the service also provides information on transit, walking, bicycling, and telework, the figures are not directly comparable to CarpoolMatchNW.org. It should also be noted that the few evaluations found that did try to estimate a placement rate were based upon random phone surveys of people accessing the service. These surveys could be more accurate or less biased than the email-based survey method used by CarpoolMatchNW.org.

Of the 286 people who indicated that they had formed a carpool or vanpool traveling in the Metro region through the site, 63% said that they had previously been driving alone to work (Table 16). This is higher than the 50% rate found in the 2004-05 evaluation.

[19] Center for Transportation and the Environment, *2004 Atlanta Regional Commission 1-87-RIDEFIND Placement Survey Findings*, Final Draft.
http://www.tdmframework.org/reports/files/2004RSRpt_FinalDrft.pdf

**Table 16: Previous Commute Mode of CarpoolMatchNW.org Participants Who Formed Carpools**

| Previous Commute Mode | Survey respondents with commutes to or from Oregon Metro region who formed carpools/vanpool via CarpoolMatchNW.org |
|---|---|
| Drive Alone | 63% |
| No answer | 19% |
| Public transit | 6% |
| Carpool/Vanpool | 5% |
| Did not make trip | 5% |
| Bike/Walk | <1% |
| Other | 2% |
| Telecommute | 1% |
| Total respondents (n) | 286 |

Note: Includes survey responses from 2006, 2007, and 2008 for participants that were active in 2007 and/or 2008.

The typical carpool/vanpool formed through CarpoolMatchNW.org has two or three people and travels about 36 miles round trip at least four days a week (Table 17). This is significantly longer than the average commute distance for the region (8.45 miles), as estimated from the 1994/95 Household Activity Survey. While some respondents might overestimate their commute distance, it is also likely that people registering with CarpoolMatchNW.org have particularly long commutes, which is a motivation to carpool or vanpool. The size of carpools is larger than indicated in previous evaluations. This is probably due in large part to an improvement in the question wording. The previous version of the survey led several respondents to enter zero, thus bringing down the average.

**Table 17: Characteristics of Oregon Metro area Car/Vanpools formed through CarpoolMatchNW.org**

| | Survey respondents with commutes to/from Oregon Metro region |
|---|---|
| Average number of people in pool, including self | 2.9 |
| Median number of people in pool, including self | 2.0 |
| Average number of days per week ridesharing | 3.8 |
| Median number of days per week ridesharing | 4.0 |
| Average roundtrip distance of carpool/vanpool (mile) | 44 |
| Median roundtrip distance of carpool/vanpool (mile) | 36 |
| | n=286 |

Note: Includes survey responses from 2006, 2007, and 2008 for participants that were active in 2007 and/or 2008.

The estimated number of vehicle miles reduced due to the car/vanpools formed through people registering with CarpoolMatchNW.org in 2007 and 2008 is shown in Table 18. The estimate is based solely on the number of carpools formed by people responding to the survey. Non-respondents may have formed carpools, which would increase the estimate. The cost-effectiveness of the program is significantly better than in previous evaluations. This is primarily because of a much larger number of carpools formed by survey respondents. In the evaluation of the 2005-06 fiscal year, only 229 people responded over a three-year period that they had formed a carpool, compared to 494 in this evaluation. In addition, the annual cost is slightly lower than in 2005-06.

**Table 18: Estimated VMT Reduction for CarpoolMatchNW.org in 2005-06**

| Data | Oregon Metro pools | Pools in other parts of Oregon | Pools in Washington |
|---|---|---|---|
| Number of carpools/vanpools formed | 286 | 124 | 84 |
| Roundtrip distance (median from survey) | 36 | 34 | 25 |
| Number of people (median from survey) | 2 | 2 | 2 |
| Number of days per week (mean from survey) | 3.8 | 3.9 | 3.9 |
| % shifting from driving alone (from survey) | 63% | 66% | 72% |
| VMT reduced over 2007 and 2008 | 1,266,900 | 560,800 | 309,500 |
| MTIP funding (including local match) | $108,932 (two years) | | |
| Cost per VMT reduced | $0.09 per mile if only Oregon Metro pools included<br>$0.05 per mile if all pools included | | |

Note: Assumes that carpools formed operated for an average of 52 weeks during the two-year period, to account for carpools formed midway through the two years.

## *Conclusions and Recommendations*

The CarpoolMatchNW.org program improved by many measures, including the number of people participating and the number of carpools formed. However, as indicated in other sections of the report, the overall level of carpooling to work sites with surveys has not increased. This indicates that new approaches may be necessary.

Metro RTO staff are working with the State of Washington to implement a new on-line ridesharing website. In addition to improvements that may increase the effectiveness of the RTO carpool programs, the system may allow for better accounting of program benefits. For example, if the system used a database of employment sites that was linked to the TriMet employer outreach program and survey data, this would allow evaluators to examine the effects of the program that may overlap with employer programs. Moreover, the employer outreach programs could use the system to better track their own effectiveness and to target locations for additional marketing.

# 7. TMA Program and Wilsonville/SMART Travel Options Program

## *Evaluation Structure*

During 2007 and 2008 the RTO program provided funding to the City of Wilsonville to implement a travel options program, as well as six TMAs: Lloyd TMA, Swan Island TMA, Westside Transportation Alliance, Gresham Regional Center TMA, Clackamas Regional Center TMA, and Troutdale TMA. This report includes an evaluation of all of these programs except the Troutdale TMA, for which funding was discontinued in June 2008.

The tables in each evaluation section are organized to facilitate comparison of output goals and their target measures, as stipulated in contracts and IGAs, with actual outputs for the corresponding periods. Since contracts follow Metro's fiscal calendar and the evaluation follows two calendar years, the comparison is not straightforward. The tables are also organized to allow an examination of how program goals evolve over time. Changes in goals may reflect shifts in program priority, but a pattern of inconsistency, particularly over several years, may also indicate problems in strategic planning. Finally, the tables are organized to help detect problems in contracting and reporting.

Output goals were selected which were concrete enough to enable measurement and evaluation, such as: membership recruitment, participation levels, travel options service provisions/improvements, and production and distribution of collateral materials. As a result, much of the critical work around relationship-building (including meetings), education and outreach, communications, research, other marketing, administration, and planning activities were not included in the tables. To document the important work that TMAs do in these areas, these contributions are described in the Background section. Finally, it should be noted that if a goal was specified in at least 1 of the 3 fiscal years during the evaluation period (i.e., FY 2006-07, FY 2007-08, or FY 2008-09), then it was included in the table.

Several terms used in the tables describing outputs and outcomes require explanation:

- "No goal specified" means that either no goal was given that fiscal year for the output category or the stated goal was not sufficiently specific to enable evaluation. It does not necessarily mean that some aspects of the output or outcome goal are not specified elsewhere or even that there should have been one specified for that year. Goals can, and do change from year to year, although a pattern of lack of specificity may indicate a problem in contracting or contracting requirements or both.

- "Actual outputs" were reported in relation to stated output goals; in some cases, intermediate measures of progress were used.

- "Cannot be determined" means that progress toward the stated goal cannot be meaningfully assessed from the information available. There may be different reasons for this. In some cases, no progress was made in the output. In other cases, it is due either to incomplete reporting or incomplete reporting requirements or both.

- "N/A" was reported either if there were no goals specified under the output goal category for that calendar year or if the goal was reached in another fiscal year.

Table 19 identifies the range of output goals in the TMA contracts. If the TMA specified a goal in a given category in at least one of the three fiscal years between 2006 and 2008, then that cell is checked.

**Table 19: Comparison of TMAs with respect to contracted Output Goal Categories**

| Output Goal Category | Clackamas | Gresham | Lloyd | Swan Island | WTA |
|---|---|---|---|---|---|
| Biking | X | X | X | | X |
| BTA Bike Commute Challenge | X | X | | X | X |
| Carpool service | | | X | X | X |
| CarpoolMatchNW.org | X | X | X | | X |
| Collateral materials distributed | | X | X | | X |
| Collateral materials produced | X | X | X | | |
| Drive Less Save More | X | X | | X | X |
| Employers with travel options programs (# of) | X | | | X | X |
| Participating TMA members (# of) | X | | | X | X |
| Parking | | X | | | |
| Transit service | X | X | X | X | |
| Transit support | X | X | X | X | X |
| Traveler information tools | | | | | X |
| TriMet pass program | X | X | X | X | X |
| Vanpool service | | | X | X | X |
| Walking | | X | X | | |
| WTA Carefree Commuter Challenge | X | | | | X* |

*Note that WTA conducts this activity as part of an RTO grant, not their TMA grant.

Table 20 compares the output goal categories with respect to their coverage of RTO Objectives. Linking the two tables enables an indirect comparison of how TMAs covered RTO Objectives in their contracts.

**Table 20: Comparison of Output Goal Categories with respect to RTO Objectives**

| | 2008-2013 RTO Objectives | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Output Goal Category** | **1.1 Regional collaborative marketing** | **1.2 Develop and provide travel options services** | **1.3 RTO partner marketing activities** | **2.1 Employer & commuter travel options services** | **2.2 Coordination of RTO employer outreach** | **3.1 Web-based traveler information tools** | **3.2 Maps and collateral materials** | **4.1 Leverage downtowns and centers** | **5.1 Apply appropriate measures and report findings** |
| Biking | | X | | | | | | | X |
| BTA Bike Commute Challenge | X | | X | X | X | | | | |
| Carpool service | | X | | X | | | | | |
| CarpoolMatchNW.org | X | | X | X | X | | | | |
| Collateral materials distributed | X | | X | X | X | | X | | |
| Collateral materials produced | | | | | | | X | | |
| Drive Less Save More | X | | | X | | | | | |
| Employers with travel options programs (# of) | X | X | X | X | X | | | | |
| Participating TMA members (# of) | X | X | X | X | X | X | X | X | X |
| Parking | | X | | X | | | | | |
| Transit service | | X | | | | | | | X |
| Transit support | | | X | | X | | | | |
| Traveler information tools | | X | | X | | X | | | |
| TriMet Pass Program | | X | | X | | | | | |
| Vanpool service | | X | | X | | | | | |
| Walking | | X | X | X | | | | | |
| WTA Carefree Commuter Challenge | X | X | X | X | X | | | | |

## *SMART/Wilsonville Travel Options Program*

### What services were provided? What was the level of participation?

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. Much of the effort was around moving the SMART transit hub to the WES commuter rail station to coincide with its launch in the fall of 2008 and in raising awareness about the service changes to the wider community. Wilsonville's SMART Options tied this launch into its awareness campaigns ranging from the WES grand opening to op-ed articles and press releases to targeted mailings.

2007 and 2008 was also a period of internal change at SMART-Wilsonville. SMART's administrative offices relocated to North Wilsonville. In addition, an interim director was hired and a TDM outreach coordinator was hired at half-time in early 2008. The office relocation naturally disrupted program work for a period of time while the personnel changes brought with them challenges in clarifying roles and responsibilities internally as well as in coordinating with RTO and community partners. Despite these challenges, SMART Options continues to focus much of its outreach to employers, in part by encouraging their participation in the Business Energy Tax Credit (BETC) program. It is also active in community outreach ranging from Earth Day events to the "SMART ART on the Bus" contest and launched a new SMART website with more space dedicated to travel options topics. Another highlight was advocating for and helping to realize bicycle and pedestrian improvements on Boeckman Road overpass. The SMART Options program continues to provide important research service that improves understanding of travel behavior which may inform program work. SMART Options added questions to the existing Wilsonville ECO survey covering employee travel behavior and mode choice and is exploring offering geocoding services to employers interested in expanding site-specific travel options programs. Finally, while the Walk SMART grant project has since been folded into the core program, SMART Options continues to serve as a conduit for collecting and referring participants' feedback on Wilsonville's walkability and related safety and infrastructure concerns to the City Planning Division.

Table 21 compares the activities, services provided, and program participation levels which the Wilsonville-SMART Travel Options program accomplished in 2007 and 2008 with their corresponding output goals for the contracted periods. The preponderance of "no goal specified" largely reflects a shift in output targets and/or work-planning requirements, beginning in FY 2008-09. Where progress can be evaluated with respect to output goals, Wilsonville's SMART Travel Options program was generally successful in meeting many of its objectives. Some activities related to transit planning and service may have been slowed due to the new SMART Transit Master Plan, which was adopted in August 2008. That plan is now providing clear guidance on transit activities, including redesigning bus routes to meet WES trains, expanding service, and relocating the SMART hub. These changes are expected to improve service and ridership.

## Table 21: Wilsonville/SMART Output Goals and Actual Outputs for 2007 and 2008

| Output Category | FY 2006-07 Contract | FY 2007-08 Contract | FY 2008-10 Contract | Actual Output CY 2007 | Actual Output CY 2008 |
|---|---|---|---|---|---|
| **Bike** | No goal specified | No goal specified | Collaborate with local high school and ODOT to design pedestrian and bicycle improvements for Interstate 5 exit 283 underpass | N/A | Cannot be determined |
| **Community Outreach** | No goal specified | No goal specified | Send 2 mass mailings to approx. 7,000 households providing TO info | N/A | 1 mass mailing completed |
| | No goal specified | No goal specified | Send 2 mass mailings targeting approx. 200 new residents each | N/A | 1 targeted mass mailing |
| | No goal specified | No goal specified | Visit 6 schools and sign up 200 additional students in Walk SMART | N/A | Visits completed; sign-ups scheduled for 2009 |
| **Employer Outreach** | No goal specified | No goal specified | Staff meet 1-on1 with Wilsonville's 10 largest employers | N/A | Completed |
| | No goal specified | No goal specified | Conduct 126 phone interviews with employers of 20 or more employees | N/A | Completed |
| | No goal specified | No goal specified | Invite all 900 Wilsonville employers to open houses and other events | N/A | Completed |
| | No goal specified | No goal specified | Target outreach to approx. 1,000 new employees, including welcoming letters customized to worksites | N/A | Completed |
| | No goal specified | No goal specified | Assist at least 5 employers with ECO surveys and TDM plans | N/A | Completed |
| **SMART transit support** | Assess future system demands due to Villebois development and WES as well as general commercial and industrial development; develop a multi-modal strategy creating coordinated travel options | Assess future system demands due to Villebois development and WES as well as general commercial and industrial development; develop a multi-modal strategy creating coordinated travel options | Partners with employers and community to improve signage at 5 bus stop shelters/year | Cannot be determined | Cannot be determined |
| **Transit service** | Develop a Transit Master Plan that identifies specific strategies for smart growth of the transit system and efficient coordination with neighboring systems | No goal specified | No goal specified | Transit Master Plan developed and presented to Wilsonville City Council | Transit Master Plan was formally adopted |
| **Walk SMART** | No goal specified | No goal specified | Visit 10 employment sites and staff tables at 3 wellness fairs; sign up additional 150 participants/year | N/A | Visited 3 employment sites; 132 participants |
| **Walking** | No goal specified | No goal specified | Collaborate with local high school and ODOT to design pedestrian and bicycle improvements for Interstate 5 exit 283 underpass | N/A | Cannot be determined |

### What was the level of satisfaction with the activities?

No data were available to assess this measure appropriately. However, SMART Options reports that the average duration of Walk SMART participation was 6 months. In addition, SMART keeps track of both positive and constructive comments through the employee surveys that can be used to improve their programs and service.

### To what extent did participants use travel options?

Wilsonville's SMART Travel Options reported that their Walk SMART program reduced VMT by 1,898 miles over 2007 and 2008. SMART also anticipated a 20% increase in transit ridership for FY 2008-09. While monthly ridership fluctuates (particularly in the holiday months of November and December), the overall trend in 2007 and 2008 was positive (Figure 9). In CY 2007, there were an estimated 270,183 unlinked passenger trips. In CY 2008, there were an estimated 291,008 unlinked passenger trips. This amounts to a 7.7% increase in ridership.

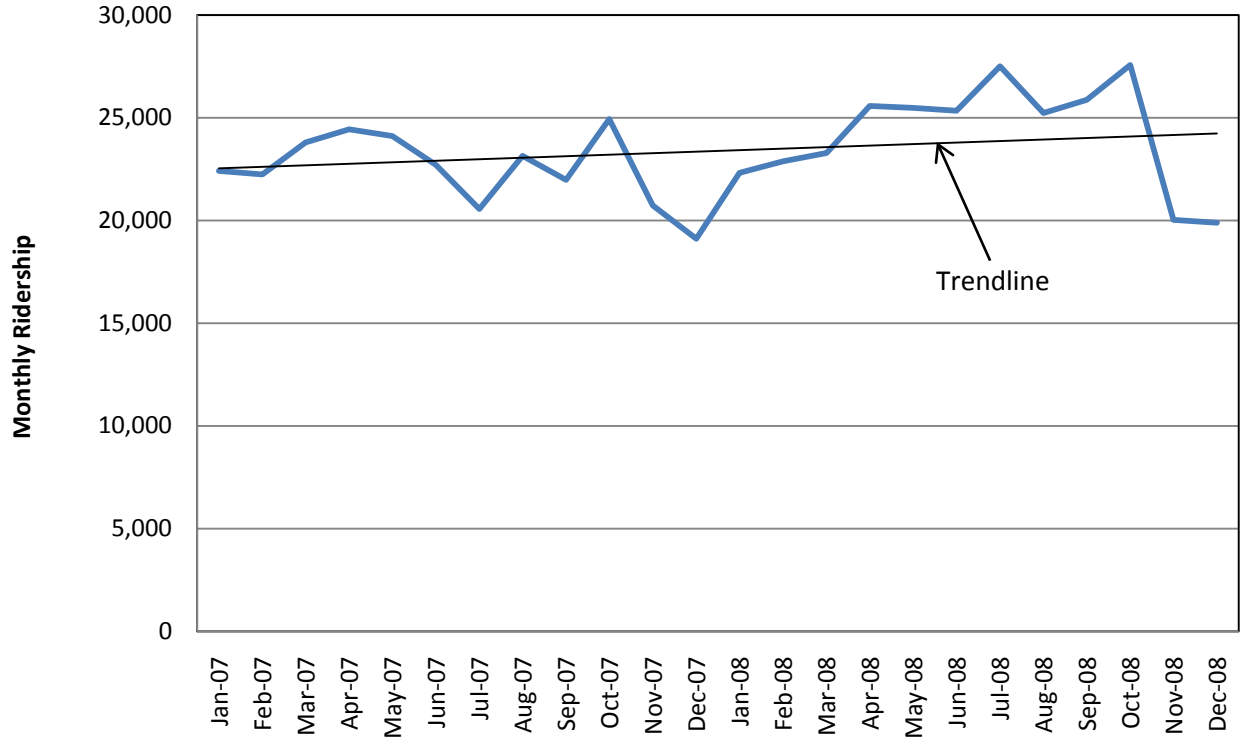



**Figure 9: SMART Transit Ridership, 2007-08**

The employee survey database included 15 Wilsonville worksites with survey data for 2007 or 2008. The overall commute trip mode share for those sites is shown in Table 22. The sites reduced the share of trips made driving alone by 3.5 percentage points due to increases in transit, ridesharing, walking/bicycling, and telecommuting.

**Table 22: 2007-08 Commute Trip Mode Share for Wilsonville Worksites**

| | % of weekday commute trips[a] | | |
|---|---|---|---|
| Mode | Baseline survey | Most recent survey[b] | 2007-08 Percentage point change over baseline |
| Drive Alone | 83.1% | 79.6% | -3.5% |
| Transit | 1.1% | 1.7% | 0.7% |
| Carpool/Vanpool | 12.9% | 13.1% | 0.2% |
| Walk/Bike | 0.8% | 2.2% | 1.5% |
| Compressed work week | 1.8% | 1.3% | -0.5% |
| Telecommute | 0.4% | 2.0% | 1.6% |
| Total | 100.0% | 100.0% | |
| # work sites | 15 | | |
| # ECO-eligible employees | 4,472 | | |

[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 a site average.
[b] Includes surveys conducted in 2007 or 2008.

**Table 23: Distribution of Wilsonville Worksites by Non-SOV Mode Share, 2007-08**

| Non-SOV mode share | % of worksites in Wilsonville |
|---|---|
| Over 55.0% | 7% |
| >45% - 55% | 0% |
| >40% - 45% | 0% |
| >30% - 40% | 13% |
| >20% - 30% | 33% |
| 20% and lower | 47% |
| Total | 100% |
| n | 15 |

Notes:
Data calculated by PSU CUS using employee survey database.
Surveys from 2007 and 2008 included.

## Conclusions and Recommendations

2007 and 2008 was a period of change for Wilsonville SMART and its Travel Options program. Despite some of the disruptions, the Travel Options program continues to be a strong advocate and facilitator of TDM and TO in the Wilsonville area. While its employer outreach remains strong, the program is starting to more actively reach out to the wider

community, as evidenced by its service accommodations to WES as well as its promotional efforts tied to Walk SMART and school visits. But challenges related to tracking outputs and outcomes will need to be addressed in order to better inform those outreach efforts. SMART Travel Options can build on its own success in refining the ECO survey to develop similarly targeted surveys for the larger community. The program should incorporate more specific output and especially outcome targets in workplans and track progress against them in reports by developing a coordinated system for tracking program activities and services. Improved measures of "customer satisfaction" and travel behavior should be incorporated into workplans to guide program development going forward.

## *Lloyd TMA*

### What services were provided? What was the level of participation?

Lloyd TMA continues to be a strong advocate and facilitator for travel options in the Lloyd District and beyond. It has a well-developed structure of committees that work together and with partners to promote trip reduction and TDM. In 2007 the LTMA hired a Project Coordinator to assist in the coordination of these committees and relevant projects. The LTMA also started exploring an internship program to promote its bike marketing. The LTMA's Transportation Coordinators Network is arguably its most important feature, serving as a "liaison" between the LTMA and its partners and their employees. The LTMA and its Pedestrian, Bike, and Transportation committees all help promote their respective travel modes through communications, special events such as the Bike Commute Day and Operation Bike, marketing, and advocacy at relevant planning and policy meetings. It is important to note that Lloyd TMA revenues come from a variety of sources in addition to the RTO program. This additional revenue allows the TMA greater flexibility to join longer term planning efforts in addition to shorter term auto-trip reduction goals.

The Marketing Committee aims to strategically coordinate these efforts by ensuring they promote one another, but it also facilitates committee work through more generalized marketing. In 2007 and 2008, the committee collaborated with the Lloyd District Community Association (LDCA) to create four issues of Lloyd Life, a magazine insert distributed to 40,000 Oregonian subscribers living and working in Portland. In addition, the LTMA conducted eight summer outreach events in major locations and developed a new poster series to displace in kiosks around the district. The LTMA continued to market and sell TriMet monthly transit passes, in addition to participating in the Universal Pass program. The LTMA also developed a new Lloyd District Employee Commute Choice Survey, and staff conducted a pedestrian survey.

The LTMA continued to leverage funding for TDM and travel options in various ways, including participating in the BETC program, the basis for revenue for LTMA's "Transportation Opportunity Fund," and through strategic partnerships with the PDC, the Lloyd Business Improvement District, and other entities. However, by the end of 2007, some BETC tax credits had not been used. In 2008, the LTMA continued to seek out BETC pass-through partners.

Two new programs were launched in 2008, one to promote walking, which included debuting three Lloyd lunchtime walking maps, and the other, "Lloyd Links" (based on the TravelSmart model), to market travel options through individualized marketing and trip-planning service. Other 2008 highlights included: working with Portland Streetcar, Inc. and Alta Planning & Design to seek ways to integrate the streetcar and biking, particularly on NE 7th; partnering with J. Cafe in the Summer Incentive for bike commuters; and the first Annual Walk Week with 200 "sign-ins."

Table 24 compares the activities, services provided, and program participation levels which the Lloyd TMA accomplished in 2007 and 2008 with their corresponding output goals for the contracted periods. The distribution of “no goal specified” across categories and years reflects a shift in program priorities starting in FY 2007 that centered on infrastructure and marketing activities for transit, biking, and walking. On the whole, LTMA was successful in meeting and in some cases exceeding its output goals.

## Table 24: Lloyd TMA Output Goals and Actual Outputs for 2007 and 2008

| Output Category | FY 2006-07 Contract | FY 2007-08 Contract | FY 2008-09 Contract | Actual Output CY 2007 | Actual Output CY 2008 |
|---|---|---|---|---|---|
| Biking | Establish at least 1 bike rack in district | Establish additional bike parking in district; continue purchase of 2 bicycle boxes (using BETC) | No goal specified | Met with State of Oregon to discuss installing more covered parking; facilitated installation of 5 staple bike racks in Oregon Square Park breezeway | Participated in TriMet bike parking planning and discussed with PBOT; met with City of Vancouver regarding hourly electronic bike lockers; met with Dave Gragg of Ashford Pacific to discuss preparing proposal for increase in bike park fund |
| Carpool service | Maintain weekday commute split of 10% (including vanpool) | No goal specified | No goal specified | 11.5% weekday commute mode split (including vanpool) | N/A |
| CarpoolMatchNW.org | Sponsorship and implementation of Lloyd District application | No goal specified | No goal specified | Cannot be determined | N/A |
| Collateral materials distributed | No goal specified | Distribute Lloyd walking map | No goal specified | Cannot be determined | Distributed "Eastbank Esplanade Walk" map to 360 district businesses, and used it and the "Art Walk" and "Historic Homes Walk" maps in First Annual Walk |
| Collateral materials produced | No goal specified | Produce Lloyd walking map | Develop and produce up to 2 lunchtime Lloyd Bike ride maps to complement Lloyd walk maps | Developed and produced a second district walking map, "Historic Homes Walk" | Developed a third "lunchtime leisure map" "Eastbank Esplanade Walk" |
| Transit service | No goal specified | Protect and enhance existing bus service to the Lloyd Transit Hub; upgrade lighting in all bus shelters on NE Multnomah between NE 6th and 13th; ensure continued commuter access from Vancouver | Ensure continued commuter access from Vancouver -- partner with City of Vancouver and C-TRAN in Southbound Solutions, including info and link on LTMA webpage, sign up 10 Lloyd businesses, provide incentives to participants | Cannot be determined | Met with TriMet and PDC to review IGA regarding Multnomah St transit hub improvements; co-hosted Transportation Coordinator's breakfast and lunch to promote Southbound Solutions; launched Lloyd Links website |
| Transit support | No goal specified | Continue to work with TriMet to place transit trackers in appropriate locations; offer comprehensive trip planning at LTMA *Commuter Connection* Transportation Store | Offer comprehensive trip planning at LTMA *Commuter Connection* Transportation Store | Developed poster series to promote *Commuter Connection;* finalized funding responsibilities with TriMet regarding transit trackers on light rail platforms; installed transit trackers at NE 7th Ave light rail platform | *Commuter Connection* Transportation Store sold TriMet passes and various equipment and services including bike locker storage, bike-related gear and equipment, bike maps, and Smart Cards for parking meters. |

| Output Category | FY 2006 Contract | FY 2007 Contract | FY 2008 Contract | Actual Output CY 2007 | Actual Output CY 2008 |
|---|---|---|---|---|---|
| TriMet Pass Program | Increase Passport sales to a total of 6,000; of existing participants, renew at least 39 employment sites; add 4 new sites | Sell 5,000 + Universal transit passes to Lloyd District businesses; renew 95% of existing businesses | Sell 5,500 + Universal transit passes to Lloyd District businesses; renew 95% of existing businesses | Sold 5,238 Universal transit passes; renewed 40 sites, added 1 (Villa Pizza) | Sold 6,000 + Universal transit passes to 40 + sites; met with TriMet to discuss future of program |
| Vanpool service | Maintain weekday commute split of 10% (including vanpool) ; pay the cost of a monthly parking permit for a new vanpool | No goal specified | No goal specified | 11.5% weekday commute mode split | N/A |
| Walking | No goal specified | Purchase and strategically place additional wayfinding kiosks; finalize improvements to I-5/ NE Multnomah pedestrian underpass; continue partnership with LBID on pedestrian and landscape program on NE Holladay between NE 1st and NE 13th; continue effort with PBOT to provide pedestrian safety enhancements at NE Lloyd Blvd and NE 7th Ave | Augment incentives/materials for Walk Week | Initiated development of kiosk posters; I-5/ NE Multnomah pedestrian underpass -- worked with PBOT to "move to final tasks" on improvements, applied for Eastside Combined Overflow grant for project, met with TriMet to discuss fence rehabilitation, finalized an RFP process, and hosted stakeholders overview meeting; NE Lloyd Blvd and NE 7th Ave -- worked to PBOT to assess safety enhancements, and met with City to discuss safety issues; met with 1201 Lloyd building manager and City to discuss pedestrian safety needs at Lloyd and NE 12th; NE Holladay -- requested City assess implementation of streetscape improvements and facilitated reduction of landscape island hedges to improve visibility | Beverage and treats and accessory incentives to First Annual Walk Week; NE Holladay -- discussed pedestrian survey results and security status with DA Pearson, met with contract manager for landscape maintenance, initiated outreach related to assessing feasibility of establishing NE Holladay as a Bike/Walk only corridor through the Lloyd District |

### What was the level of satisfaction with the activities?

There are 71 members of the Lloyd TMA, representing about 9,000 employees. Members contribute funding to the TMA, which demonstrates some level of satisfaction with the TMA's services. No other data were available to specifically assess this measure.

### To what extent did participants use travel options?

Nearly 60% of the commute trips made by Lloyd TMA employers participating in the Universal Pass program are made in non-SOV modes (Table 25). This is a significant change from 1997, when an estimated 60% of commute trips were made in SOVs. Between 2003 and 2007, the share of employees driving alone remained about the same. It declined in 2008, which is a positive sign. The improvement appears to be coming from all non-SOV options except carpooling and vanpooling.

**Table 25: Commute Trip Mode Share for Lloyd TMA Employers Participating in the Universal Pass Program**

| | % of weekly commute trips[a] | | | | | | |
|---|---|---|---|---|---|---|---|
| Mode | 2001 | 2003 | 2005 | 2006 | 2007 | 2008 | % point change over 2001 |
| Drive Alone | 45.5% | 42.5% | 42.7% | 42.4% | 42.4% | 40.5% | -5.0% |
| Transit | 36.0% | 39.3% | 39.1% | 39.0% | 38.2% | 39.4% | 3.4% |
| Carpool/Vanpool | 10.4% | 10.5% | 11.5% | 10.5% | 10.5% | 10.3% | -0.1% |
| Walk | 2.4% | 1.8% | 2.3% | 2.0% | 2.0% | 2.4% | 0.0% |
| Bicycle | 3.7% | 4.3% | 3.3% | 4.1% | 4.6% | 4.8% | 1.1% |
| Compressed work week | 1.2% | 0.9% | 0.9% | 1.1% | 1.0% | 1.1% | -0.1% |
| Telecommute | 0.7% | 0.7% | 0.8% | 0.9% | 1.3% | 1.5% | 0.8% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100% | 100% | |

Sources: Lloyd TMA Annual Reports (www.lloydtma.org) and reports submitted to Metro

The data from the employee survey database analyzed by PSU indicated that two-thirds of the sites within the Lloyd TMA boundaries had a non-SOV mode share of above 55% (Table 26).

**Table 26: Distribution of Lloyd District Worksites by Non-SOV Mode Share, 2007-08**

| Non-SOV mode share | % of worksites in Lloyd District |
|---|---|
| Over 55.0% | 67% |
| >45% - 55% | 10% |
| >40% - 45% | 10% |
| >30% - 40% | 10% |
| >20% - 30% | 2% |
| 20% and lower | 0% |
| Total | 100% |
| n | 48 |

Notes:
Data calculated by PSU CUS using employee survey database.
Surveys from 2007 and 2008 included.

Employers located within the Lloyd TMA are included in the employee survey database used for this evaluation. Therefore, the VMT reduction related to commuting to and from the sites is incorporated in the estimate provided on page 14.

### Conclusions and Recommendations

The Lloyd TMA successfully achieved its output goals related to its various program activities, service provisions, and participation levels, as stipulated in its contracts. There was a dip in drive alone commuting in 2008 over 2007 – a positive note after several years of no change. As the program continues to expand services that affect non-commute trips (e.g. lunch-time employee trips), additional methods will be necessary to measure progress, aside from the employee commute surveys. Measures for tracking levels of satisfaction with Lloyd TMA programs would also be useful.

## *Swan Island TMA*

### What services were provided? What was the level of participation?

The Swan Island TMA (SITMA) continued to work to reduce SOV trips, motivated by the need to facilitate freight movement in this industrial employment area. SITMA is the third oldest TMA in the Metro region. It is a project of the Swan Island Business Association, supported by dues from the area's major employers. These participating employers, including Daimler Trucks North America, Adidas, UPS, and Vigor Industrial, employ roughly three-quarters of the 10,000 employees working on Swan Island. According to the SITMA, these 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. This is a major incentive to drive alone to

work. While a change in this policy is not likely in the foreseeable future, the amount of land in this close-in industrial area given over to parking is significant and could restrict future business expansion.

Despite these challenges, SITMA has continued to grow its programs. Activities included:

- Maintaining travel options information racks at over two dozen locations
- Coordinating with TriMet to increase ridership on two TriMet routes, the 85 Swan Island and 72 82nd Ave/Killingworth
- Managing the Swan Island Evening Shuttle and increasing ridership
- Advancing and helping secure funding for City of Portland projects that provide safer access to transit and better bike and pedestrian connections, including Waud Bluff Trail, Going Street viaduct, River to Lagoon Trail.
- Promoting BTA Bike Commute Challenge. Two SITMA employers had among the high rates of bicycling compared to other sites of similar sizes throughout the region.

The CarpoolMatchNW.org database included 150 employees working in Swan Island that were participating in the matching program in 2007 and/or 2008. Of these, 17 registered in 2007 and 40 registered in 2008. This represents a significant increase, since only 93 of the 150 participants were registered by the end of 2006.

The other major focus for SITMA, especially in 2008, has been on reducing the average commute distance and therefore VMT and SOV trips. To this end, SITMA undertook the "N/NE PDX TNT…Trip Not Taken" project. This is an RTO grant-funded project separate from the RTO TMA grant that is evaluated below, see page 91.

Table 27 compares the activities, services provided, and program participation levels which Swan Island TMA accomplished in 2007 and 2008 with their output goals for the contracted periods. The distribution of "no goal specified" either suggests problems in lack of specificity in contracting target measures or the addition of some new output objectives in 2007 and 2008 or both. The preponderance of "cannot be determined" suggests room for improvement in reporting and makes it difficult to assess the extent to which SITMA met its output goals.

## Table 27: Swan Island TMA Output Goals and Actual Outputs for 2007 and 2008

| Output Category | FY 2006-07 Contract | FY 2007-08 Contract | FY 2008-09 Contract | Actual Output CY 2007 | Actual Output CY 2008 |
|---|---|---|---|---|---|
| BTA Bike Commute Challenge | No goal specified | 6 employment sites participating in BTA Bike Commute Challenge | No goal specified | 2 sites participated, including about 200 individuals, representing about 10% of the employees at those sites. | Wrote article for DTNA's *Truck Times* |
| Carpool service | Encourage 100 new registrants in Freightliner carpool program | No goal specified | 100 additional bike commuters and van or carpool riders | 10 new registrants at Daimler Trucks NA (formerly Freightliner); assisted in compiling data from Freightliner, UPS Adidas, and Vigor Industrial for geo-coding.<br>17 new registrants in CarpoolMatchNW.org database | 10 new registrants at Daimler Trucks NA (formerly Freightliner)<br>40 new registrants in CarpoolMatchNW.org database |
| Drive Less Save More | No goal specified | No goal specified | Promote by participating in outreach events at major employers and encouraging 300 people to pledge | N/A | Fairs held at Adidas and Daimler Trucks NA, reaching over 2,000 employees |
| Employers with TO programs (number of) | No goal specified | See Number of participating TMA members | 15, up from 6 | 8 employers had TO programs | 9 employers had TO programs (one new employer added in 2008) |
| Participating TMA members (number of) | No goal specified | 25, up from 20 | No goal specified | 12 employers are members of the TMA | 12 employers are members of the TMA |
| Transit service | 500 trips/day on Bus #85, up from 400 trips/day; grow ridership on evening shuttle to 400/week, up from 300/week | 600 trips/day on Bus #85, up from 500 trips/day | 625 trips/day on Bus #85, up from 500 trips/day; 200 trips/day on Bus #72, up from 150 trips/day; increase evening shuttle ridership to 75 from 60 trips/day | Ridership on #85 was 540 in 2007. Average weekly evening shuttle ridership climbed from 277 to 307 week during summer | Ridership on #85 was 540 in 2008. See Figure 11. Average weekly evening shuttle ridership approached 350 in June, about 70 trips/day. Worked on service improvements for #72, #85, and Evening Shuttle; Emergency Ride Home for members |
| Transit support | Maintain schedules | No goal specified | Install 6 new info racks at key employers | Updated and distributed schedules | Installed 6 new; updated 25 schedule racks and packets, general customer service |
| TriMet Pass Program | Retain 6 employers in TriMet's Universal, Select, or Direct pass programs | 10 employers in TriMet's Universal, Select, or Direct pass programs, up from 6 | No goal specified | Cannot be determined | Launch of transit pass program at Vigor Industrial, including employer surveys |
| Vanpool service | 10 vanpools, up from 5 | No goal specified | 100 additional bike commuters and van or carpool riders | Assisted in compiling data from Freightliner, UPS, Adidas, and Vigor Industrial for geo-coding.<br>Three vanpools operated between Clark County and Swan island through the Metro vanpool program. | Two vanpools operated between Clark County and Swan island through the Metro vanpool program. |

### What was the level of satisfaction with the activities?

Twelve employers, including the four largest employers on Swan Island, continue their membership in SITMA and voluntarily pay dues, totaling about $30,000 per year. This indicates some level of satisfaction on the part of employers with the services provided.

### To what extent did participants use travel options?

There were only eight worksites on Swan Island with employee commute survey data for 2007 or 2008. Cumulatively at those sites the share of commute trips made in SOVs was lower compared with each site's baseline (Table 28). There was a large increase in the share of employees walking or bicycling to work, which may indicate that the SITMA's efforts to improve pedestrian and bicycle access have paid off.

**Table 28: 2007-08 Commute Trip Mode Share for Swan Island Worksites**

| | % of weekday commute trips[a] | | |
|---|---|---|---|
| Mode | **Baseline survey** | **Most recent survey[b]** | **2007-08 Percentage point change over baseline** |
| Drive Alone | 82.2% | 76.6% | -5.6% |
| Transit | 4.3% | 5.1% | 0.9% |
| Carpool/Vanpool | 10.4% | 7.6% | -2.8% |
| Walk/Bike | 2.4% | 9.5% | 7.1% |
| Compressed work week | 0.3% | 0.5% | 0.2% |
| Telecommute | 0.4% | 0.7% | 0.3% |
| Total | 100.0% | 100.0% | |
| # work sites | 8 | | |
| # ECO-eligible employees | 1,336 | | |

[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 a site average.
[b] Includes surveys conducted in 2007 or 2008.

**Table 29: Distribution of Swan Island Worksites by Non-SOV Mode Share, 2007-08**

| Non-SOV mode share | % of worksites in Swan Island |
|---|---|
| Over 55.0% | 0% |
| >45% - 55% | 0% |
| >40% - 45% | 0% |
| >30% - 40% | 0% |
| >20% - 30% | 38% |
| 20% and lower | 63% |
| Total | 100% |
| N | 8 |

Notes:
Data calculated by PSU CUS using employee survey database.
Surveys from 2007 and 2008 included.

Average daily ridership on the Evening Shuttle has increased steadily since 2002 (Figure 10). Ridership on the #85 TriMet line also increased (Figure 11).

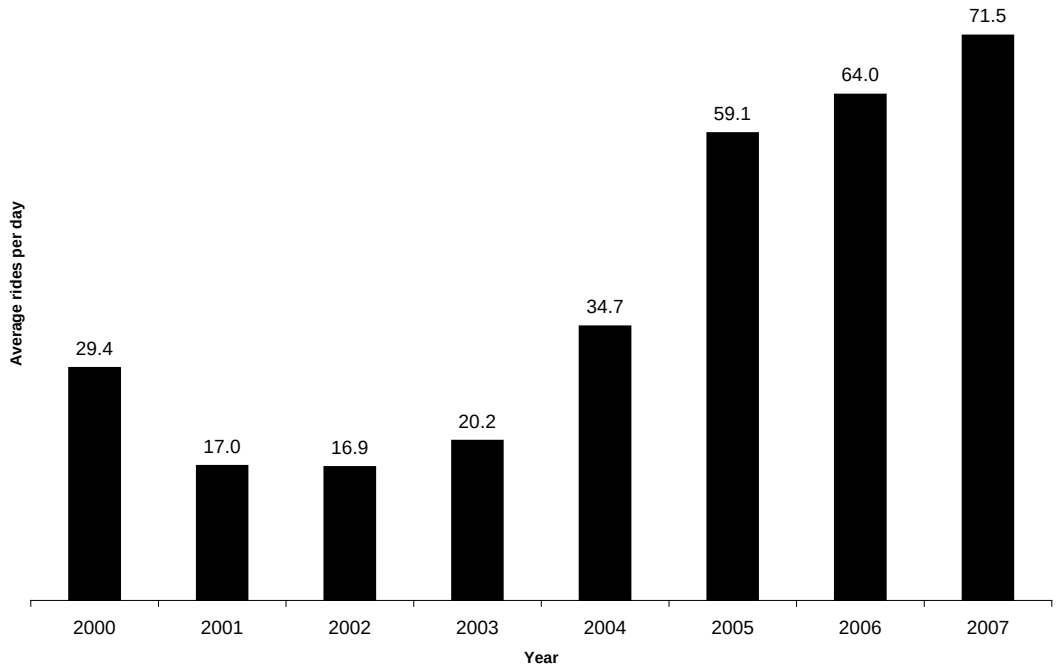



**Figure 10: Swan Island TMA Evening Shuttle Ridership**

Note: 2007 data based upon weekly average ridership of 345, assuming 251 days per year operations.

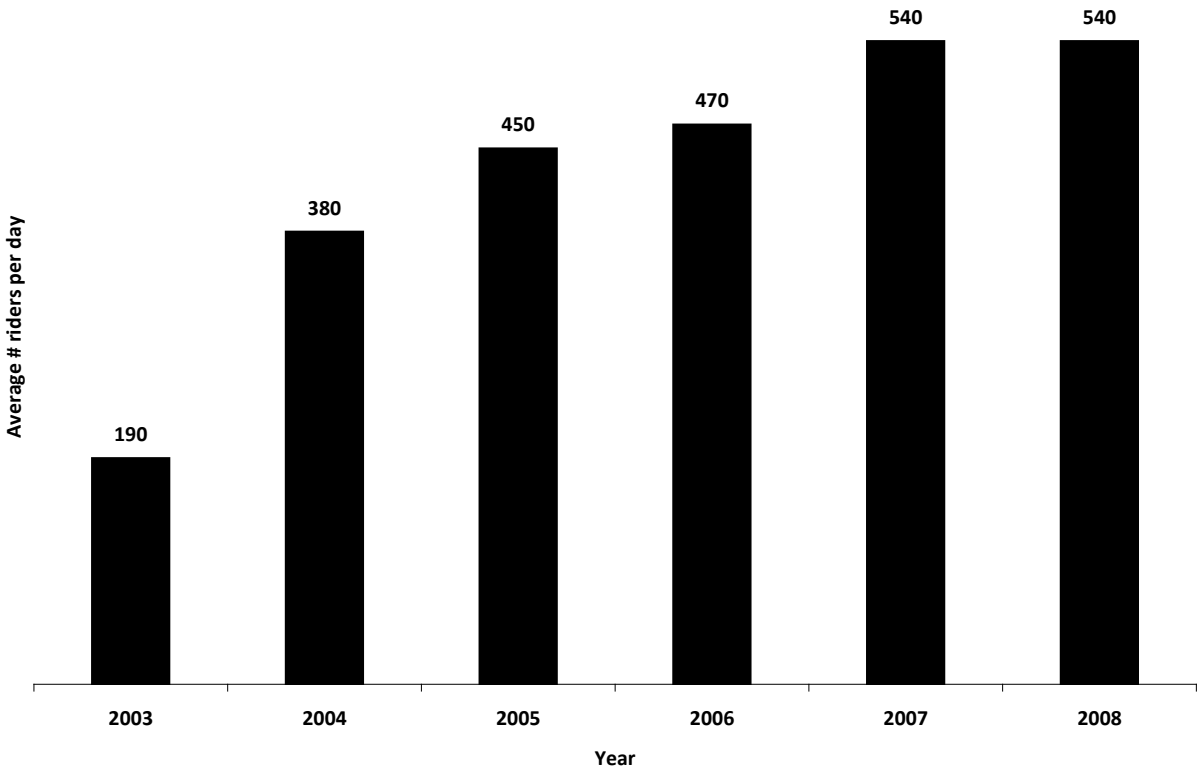



**Figure 11: Average Daily Ridership on Trimet #85 Bus**

### Conclusions and Recommendations

The Swan Island TMA was active in building the kinds of ties with its community needed to design and carry out innovative transportation options programs and projects. There are indications that its efforts are helping to reduce SOV trips, as reflected in increased transit ridership and the employee commute survey data. And although the TNT project is still underway, SITMA has already enjoyed success in bringing together employers, workforce resources, and residents which may reduce VMT in the Swan Island area in the coming years. Still, problems in contracting and reporting make it difficult to assess the relative success of these efforts. This, in turn, makes it difficult to decide where to invest limited resources when developing future workplans and projects. The success of the program may also by hampered by the economic downturn, which has affected some Swan Island employers.

## *Westside Transportation Alliance*

### What services were provided? What was the level of participation?

The Westside Transportation Alliance works to promote transportation options within Washington County. The WTA board and staff is active in promoting travel options and demand management through membership recruitment, employer education and outreach, communications (such as its "Constant Contact" email distribution list), marketing, special

events, including its Carefree Commuter Challenge, and board and committee work, including the Downtown Beaverton Parking Solutions Project and the City of Hillsboro OHSU/Amber Glen Area Plan Project. Like the other TMAs, the WTA also works to provide research support ranging from individual trip reduction assistance to ECO surveys to compiling and relaying employee data for geocoding in carpool and vanpool programs.

Highlights in 2007 included partnering with PGE and Green Mountain Energy in co-hosting the "Transportation Options + Renewable Power = Bottom Line Results," and education and outreach event focused on getting employers to promote travel options to their employees. However, a more general effort to develop and implement a new marketing plan for the WTA was less successful. Still, the WTA continued marketing itself through its many activities and projects. In the area of transit, the WTA promoted ridership on the #46 line, although progress has been slowed, in part by lack of sufficient demand. In addition, the WTA starting promoting the Westside Express Service commuter line to be started in the fall of 2008. The WTA also partnered with WashCo Bicylce Transportation Coalition and BTA in the "And We Bike" campaign to raise awareness among drivers to share the road with bikers. The WTA also helped organize several bike clinics.

In 2008, the WES service was started, and the WTA took strategic advantage of the resulting media and general attention to raise awareness of options for trip reduction. It helped start the "Westside Commuter Club," in part as a means to deliver employer incentives to employees who track sustainable trips online. The WTA also developed brochures for the WES, WTA, and the WCC and held several transportation fairs to get the message out about them. Mailing was planned for early 2009. During 2008, the WTA also actively supported the Hillsboro 2020 Vision as a member of the Vision Implementation Committee and the Outreach and Education Committee. The WTA was also active in the High Capacity Transit Think Tank meetings.

WTA also received two separate RTO grants, evaluated below: Carefree Commuter Challenge (see page 94) and a grant to partner with the Portland Community College to launch a new program for training transportation coordinators, which also served to introduce many employees and employers to the WTA and its services (see page 97).

Table 30 compares the activities, services provided, and program participation levels which WTA accomplished in 2007 and 2008 with their corresponding output goals for the contracted periods. The concentration of “no goal specified” for FY 2006 either suggests problems in lack of specificity in contracting target measures or the addition of new output objectives in 2007 and 2008 or both. An examination of the output goals for FYs 2007 and 2008 suggests a need to develop even more specific target measures, especially in levels of participation in various programs. For the goals which were specific enough to be evaluated, especially TMA membership and TriMet Pass Program, WTA was less successful in meeting its targets. In contrast, WTA was more successful in meeting its objectives for service provision, particularly with regard to individual trip-planning. It should also be noted that while more specific target measures would have aided in evaluating its program, WTA adhered to a quarterly reporting format that explicitly linked activities with their corresponding contract goals, which made this evaluation more straightforward compared to the evaluation of other TMAs. A similar format should be followed by the other TMAs.

## Table 30: WTA Output Goals and Actual Outputs for 2007 and 2008

| Output Category | FY 2006-07 Contract | FY 2007-08 Contract | FY 2008-09 Contract | Actual Output CY 2007 | Actual Output CY 2008 |
|---|---|---|---|---|---|
| Biking | No goal specified | No goal specified | Assess which locations need bike parking; facilitate installation of bike racks at 7 new locations | N/A | Advised Welch Allyn on installation of 1 new bike rack; Solar World installed 2 covered racks |
| BTA Bike Commute Challenge | No goal specified | No goal specified | Facilitate 15 new participating employment sites | N/A | Cannot be determined |
| Carpool service | No goal specified | Assist 4 employers (at least 200 employees) in sending home location data to Metro for geocoding | Assist 17 employers (at least 200 employees) in sending home location data to Metro for geocoding | Assisted FEI Company and EasyStreet Online Services | Assisted Rite Aid, Washington County, SolarWorld, and Planar |
| CarpoolMatchNW.org | No goal specified | No goal specified | Facilitate 25 new registrants | N/A | Distributed CarpoolMatch NW info and facilitated use of Metro's scatter map; Radisys set up 4-5 carpools; Kaiser registered 80 carpools with 120 participants |
| Collateral materials distributed | Mail and distribute 500 posters, 765 packets | 500 posters, 750 postcards printed and distributed to TC's and community centers | Cannot be determined | Set up transit maps at reception on main floor of Beaverton Round building; posted display promoting WES in Beaverton Round Exec. Suites waiting room | Cannot be determined |
| Drive Less Save More | No goal specified | Promote by attending at least 2 transportation outreach events and encouraging pledges; test website for travel tools to commuters | No goal specified | Cannot be determined | Attended T-fairs at Radisys, St. Vincent Hospital and Welch Allyn; participated in DLSM Family Challenge kick-off and assisted one participant in bike trip planning; link from CCC website generated thousands of hits |
| Employers with TO programs (number of) | No goal specified | No goal specified | Enroll 1,750 employees | N/A | Cannot be determined |
| Participating TMA members (number of) | Increase by 8 | No goal specified | 68, up from 33 | Enrolled 12 | Enrolled 2 |
| Transit support | No goal specified | No goal specified | Offer services to WES commuter rail, including assistance in developing trip-reduction plans that follow ECO plan formula | N/A | Facilitated shuttles to MAX |

| Output Category | FY 2006 Contract | FY 2007 Contract | FY 2008 Contract | Actual Output CY 2007 | Actual Output CY 2008 |
|---|---|---|---|---|---|
| Traveler information tools | No goal specified | Test website for travel tools to commuters; offer transit and bike trip planning for tenants of Beaverton Round Executive | Offer comprehensive transit, bike, walk trip planning at TMA office in-person and by-phone | Assisted 13 people with transit planning and park and ride information; not much progress in testing usability of website travel tool | Assisted 3 people; website redesigned; promoted TO's unique to each worksite at T-fairs and group presentations; submitted proposal to Norris Beggs & Simpson to promote Beaverton Round as a transit-oriented office location |
| TriMet Pass Program | No goal specified | No goal specified | Facilitate 15 new employers to join | N/A | Facilitated the enrollment of Solar World and Welch Allyn |
| Vanpool service | Identify 1 new driver and 9 passengers to start a vanpool | Identify 1 new driver and 6 passengers to form a vanpool originating at least 10 miles away; facilitate startup; study feasibility of employer-supported shuttle from Sunset TC to Tanasbourne | Identify 3 drivers and 15 passengers to form a vanpool originating at least 10 miles away; facilitate startup and plan to increase ridership to 30 | Worked with Merix to identify shuttle opportunities using vanppols. Meetings with, Norm Thompson, Kaiser, EcoShuttle; Sunset Transit Center-Tanasbourne shuttle feasibility: concluded not enough demand to sustain service; but potential for shuttle between Tanasbourne - MAX-Willow Creek or Quatama. | Cannot be determined |

### What was the level of satisfaction with the activities?

No data were available to assess this measure.

### To what extent did participants use travel options?

The commute data from the employee commute survey database for worksites identified by WTA as being active with the TMA, as well as all of Washington County appear in Table 31. WTA identified 51 worksites that they worked with in 2007-08, and 34 of those had baseline and follow-up survey data. It should also be noted that a handful of those worksites are located outside of Washington County; WTA works with them because the employer has a primary worksite within the county. The share of drive alone work trips to sites working with WTA was lower than in the baseline. The improvement was due to increases in transit, walking/bicycling, and telecommuting. These changes are comparable to those of employees at work sites throughout Washington County. As shown in Table 32, at 9% of the worksites over 40% of the commute trips are by non-SOV modes.

**Table 31: 2007-08 Commute Trip Mode Share for Washington County Worksites and WTA Worksites**

| | % of weekday commute trips[a] | | | | | |
|---|---|---|---|---|---|---|
| | WTA Worksites | | | Washington Co. Worksites | | |
| Mode | Baseline survey | Most recent survey[b] | 2007-08 % point change over baseline | Baseline survey | Most recent survey[b] | 2007-08 % point change over baseline |
| Drive Alone | 82.9% | 77.5% | -5.4% | 81.5% | 76.0% | -5.5% |
| Transit | 5.1% | 9.1% | 4.0% | 4.3% | 7.6% | 3.4% |
| Carpool/Vanpool | 8.0% | 7.4% | -0.6% | 9.0% | 8.0% | -1.0% |
| Walk/Bike | 2.4% | 3.3% | 0.9% | 2.4% | 3.1% | 0.7% |
| Compressed work week | 1.4% | 1.3% | -0.1% | 2.6% | 3.2% | 0.6% |
| Telecommute | 0.2% | 1.5% | 1.3% | 0.3% | 2.0% | 1.8% |
| Total | 100.0% | 100.0% | | 100.0% | 100.0% | |
| # work sites | | 34 | | | 148 | |
| # ECO-eligible employees | | 14,557 | | | 42,033 | |

[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 a site average.
[b] Includes surveys conducted in 2007 or 2008.

**Table 32: Distribution of WTA Worksites by Non-SOV Mode Share, 2007-08**

| Non-SOV mode share | % of worksites working with WTA |
|---|---|
| Over 55.0% | 6% |
| >45% - 55% | 3% |
| >40% - 45% | 0% |
| >30% - 40% | 3% |
| >20% - 30% | 29% |
| 20% and lower | 59% |
| Total | 100% |
| n | 34 |

Notes:
Data calculated by PSU CUS using employee survey database.
Surveys from 2007 and 2008 included.

### Conclusions and Recommendations

WTA continues to build strategic alliances through its many outreach efforts and individual programs, most notably its Carefree Commuter Challenge and its TDM training course for its network of transportation coordinators. In these respects, the WTA has been successful in raising awareness among employers and employees about transportation options and reducing SOV trips, a reflection of the passion that its Executive Director (Karen Frost) and staff have for the organization's mission. However, outreach could be improved to translate general awareness into increased membership participation and changed commuting behavior. Completion and implementation of a new general marketing plan, as originally planned in 2007, would put WTA in an even more effective position to leverage its resources for maximum impact. The success the WTA enjoyed in piggy-backing its awareness campaign on the WES launch suggests that more of this kind of strategic marketing would serve the organization and its partners well. To this end, the Westside Commuter Club holds much potential to serve as the core of such efforts. As with all of the TMAs, WTA should ensure that its workplan target measures are specific enough to measure and track and that it include strategies for tracking levels of satisfaction with WTA programs.

## *Clackamas Regional Center TMA*

### What services were provided? What was the level of participation?

The Clackamas Regional Center TMA is housed under its parent organization, the North Clackamas Chamber of Commerce (NCCC) which covers some of the overhead and

administrative costs. The CRC-TMA works to integrate transportation policy with land use, economic development, housing, and employment, among other areas. It continues to be a advocate in Clackamas County not only for TDM but for the congestion mitigation, mobility, and livability that accompanies it.

Over the course of 2007 and 2008, the CRC-TMA distributed information pertaining to transportation and travel options projects and events through the NCC Chamber of Commerce Newsletter, website, emails, numerous transportation fairs and other events. The CRC-TMA worked with TriMet to implement its transit pass sale program at the Chamber office. The CRC-TMA has also partnered with other RTO programs such as the Drive Less Save More Campaign, WTA Carefree Commuter Challenge, various BTA bike challenge events. The CRC-TMA Coordinator has been active on a number of transportation policy committees and planning processes, including the Clackamas Mobility Task Force and Milwaukie's transit sub-committee. Through these meetings and planning processes, the CRC-TMA has worked to partner with businesses in promoting transportation options to employees and in exploring ways to fund such initiatives. A major initiative undertaken was the planning for the launch of the MAX Green Line. In support of this initiative, the CRC-TMA spearheaded a sub-committee to the I-205 Industrial Transportation Task Force to examine and proactively address transportation, safety, and security needs associated with the Green Line.

Table 33 compares the activities, services provided, and program participation levels which CRC-TMA accomplished in 2007 and 2008 with their corresponding output goals for the contracted periods. The preponderance of "cannot be determined" suggests a problem with reporting or reporting requirements and makes it difficult to assess the degree to which CRC-TMA met its output goals. Where information is reported , there is evidence that CRC-TMA struggled to meet its output goals. The bike rack needs assessment for two target areas doesn't appear to have gotten very far, nor were any racks installed, although work was underway at Bob's Red Mill to install a rack. Similarly, a bike/walk/trail map project, as originally proposed in FY 2006 had, by 2008, resulted in preliminary meetings with Happy Valley officials regarding map development. (The Clackamas County Bike It! Map project, funded under a separate RTO Grant, was more successful). While reporting has been spotty, the target measures have improved in their clarity since FY 2006. Still, there are indications that CRC-TMA would benefit from more strategic workplans that give it the time it needs to accomplish its priority objectives. This includes strategies to track its performance measures in real time so that the information may be used to make adjustments in its various activities and efforts along the way.

## Table 33: Clackamas Regional Center TMA Output Goals and Actual Outputs for 2007 and 2008

| Output Category | FY 2006-07 Contract | FY 2007-08 Contract | FY 2008-09 Contract | Actual Output CY 2007 | Actual Output CY 2008 |
|---|---|---|---|---|---|
| Biking | No goal specified | Assess bike-parking needs in two target areas; facilitate bike rack installation at CCC and OIT on Harmony Road | Identify and facilitate installation of a bike parking facility at 2 employment site; needs assessment of on-employment-site showers | Cannot be determined | Began working with Bob's Red Mill on bike rack; discussed installation of showers at Cornell Pump |
| BTA Bike Commute Challenge | No goal specified | Market to 2 new employers | No goal specified | Cannot be determined | Cannot be determined |
| CarpoolMatchNW.org | Market through community fora | Market to 2 business venues | Facilitate 300 new participants | Cannot be determined | Promoted through Clackamas LIVE! |
| Collateral materials produced | 2 pieces developed | Produce a bike/walk/trail map | Develop a hike/walk map for Happy Valley; get 100 pledges to use | Cannot be determined | Met with Happy Valley officials and began development of map |
| Drive Less Save More | No goal specified | Host 3 outreach events | Market through 6 transit fairs; get 200 pledges | Participated in DSLM media event at Pioneer Courthouse Square | Hosted a showcase booth at Oregon Lifestyles Expo; promoted through Clackamas LIVE! |
| Employers with TO programs (number of) | No goal specified | 6 | (Enroll 2,240 employees) | Cannot be determined | Cannot be determined |
| Participating TMA members (number of) | 25, up from 20 | 10, up from 8 | 12 new members | Cannot be determined | 6 new stakeholders |
| Transit service | No goal specified | Review need for stops on Sunnyside Road and Harmony Road | No goal specified | Participated in Clackamas Mobility Task Force, which determined there was a need | N/A |
| Transit support | No goal specified | Facilitate discussion between Kaiser and TriMet | Get 50 residents as "First Time" pledges | Cannot be determined | Cannot be determined |
| TriMet Pass Program | Market through community fora | Enroll 200 employees | Enroll 200 employees ; explore with TriMet installing vending machines | Established Chamber office as pass program sale site | Established Chamber office as pass program sale site |
| WTA Carefree Commuter Challenge | No goal specified | 25 North Clackamas County participants | Market and encourage 100 new pledges | Cannot be determined | Cannot be determined |

### What was the level of satisfaction?

No data were available to assess this measure.

### To what extent did participants use travel options?

The employee commute data show that the non-SOV mode share, while higher than the region, was lower in 2007 and 2008 compared to the baseline (Table 34). The improvement was due mainly to an increase in the use of compressed work weeks and carpooling/vanpooling.

**Table 34: 2007-08 Commute Trip Mode Share for Clackamas Regional Center Worksites**

| | % of weekday commute trips[a] | | |
|---|---|---|---|
| Mode | **Baseline survey** | **Most recent survey[b]** | **2007-08 Percentage point change over baseline** |
| Drive Alone | 87.4% | 82.0% | -5.4% |
| Transit | 3.9% | 4.1% | 0.1% |
| Carpool/Vanpool | 4.9% | 6.1% | 1.2% |
| Walk/Bike | 2.7% | 3.2% | 0.5% |
| Compressed work week | 1.0% | 3.8% | 2.9% |
| Telecommute | 0.1% | 0.8% | 0.8% |
| Total | 100.0% | 100.0% | |
| # work sites | 20 | | |
| # ECO-eligible employees | 7,026 | | |

[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 a site average.
[b] Includes surveys conducted in 2007 or 2008.

**Table 35: Distribution of Clackamas Regional Center Worksites by Non-SOV Mode Share, 2007-08**

| Non-SOV mode share | % of worksites in Clackamas Regional Center |
|---|---|
| Over 55.0% | 0% |
| >45% - 55% | 0% |
| >40% - 45% | 5% |
| >30% - 40% | 20% |
| >20% - 30% | 15% |
| 20% and lower | 60% |
| Total | 100% |
| n | 20 |

Notes:
Data calculated by PSU CUS using employee survey database.
Surveys from 2007 and 2008 included.

## Conclusions and Recommendations

The CRC-TMA continues to be an important advocate for travel options and transportation issues in the area, driven to a large extent by its Director's active participation on numerous transportation-related committees. The support the CRC-TMA enjoys from the NCCC also provides it with important access to the business community. But there is a need to do more outreach to the non-commuting population as well. This will be important going forward as the County and surrounding areas experience significant population growth and development. It is therefore important to have in place a strategic workplan that provides a coherent message and policy direction. The newly launched Green Line affords an opportunity to both raise awareness of travel options and facilitate trip reduction and mobility through improved connectivity. Accomplishing this will require bringing together diverse stakeholders to creatively leverage and combine resources (particularly in the current fiscal environment) under a shared vision not only for North Clackamas County but also its abutting areas. This will, in turn, require the CRC-TMA to reach out to its RTO partners and others in developing its program and general organizational capacity. Specific recommendations include:

- Implement a comprehensive program to track and report activities (outputs) and outcomes. This can include use of the ECO surveys.
- Develop a strategy for reducing non-work trips through targeted community outreach
- Include in workplan strategies and measures for tracking levels of satisfaction with CRC-TMA programs

- Develop specific outcome objectives. Ensure that TMA objectives are consistent with RTO objectives, to the extent that RTO funds are used.
- Continue organizational development in areas such as grant-writing, strategic planning, and administration

## *Gresham Regional Center TMA*

### What services were provided? What was the level of participation?

The GRC-TMA is housed in the Gresham Downtown Development Association (GDDA), which also provides staff hours paid for by an Economic Improvement District within the Gresham Regional Center.

The Gresham Regional Center TMA spent much of 2007 developing its Regional Center Plan, which it eventually determined should contain two distinct plans, one for Gresham's downtown and one for the Civic Neighborhood. Work began on the Downtown Plan, which continued through 2008. A major goal of the plan, as ratified by the City Council, is a 50% non-SOV mode split. During this time, work was also started on a Parking Management Plan, which built on the findings of a parking lot survey completed in Spring 2007. But, in order to better coordinate the two efforts, it was eventually decided to put a hold on the Parking Management Plan until more progress had been made on the Downtown Plan. 2008 saw the departure and replacement a month later of the GRC-TMA executive director. This gap, coupled with the natural adjustment and development time of a new hire, somewhat disrupted the progress that was underway, not only in the twin planning processes, but also in meeting the objectives as established in the GRC-TMA 2008-2010 Work Plan.

The GRC-TMA has been working to raise awareness of parking issues, especially in downtown Gresham, through its "Customer First" program. The Bike Safety Fair aimed to raise awareness around bike safety. However, it remains a challenge to determine the extent to which these awareness campaigns actually change people's behaviors, a measurement issue echoed by other TMAs. In the fall of 2008, the GRC-TMA successfully implemented a transportation bulletin board system in the MHCC Small Business Development Center. The GDDA has partnered with GRC-TMA on numerous efforts. It worked with the City of Gresham to apply for RTO funding of an Individualized Marketing Grant for the Civic Neighborhood New Max Station opening and has worked with the Downtown Business Association (DBA) and Gresham station management regarding collaborative marketing efforts. GDDA has also played a part in helping the GRC-TMA explore public-private partnerships and their funding.

Table 36 compares the activities, services provided, and program participation levels which GRC-TMA accomplished in 2007 and 2008 with their corresponding output goals for the contracted periods. CY 2007 effectively cannot be evaluated with respect the listed output goals, which reflects a serious problem in reporting. 2008 reporting improved significantly, and this can safely be attributed to the installment of the new executive

director in August, 2008. Where results were reported in 2008, the GRC-TMA showed strong follow-through on objectives, which bodes well for future implementation success. In the various activities efforts, the GDDA played a consistently prominent role in advocacy, especially in the Downtown Planning process, and in information distribution, especially in implementing a full transportation bulletin board system in the MHCC Business Center. GDDA's contributions reflect the dual roles that its executive director carries as head of both the GRC-TMA and GDDA. As is discussed below, this dual role structure has its advantages and challenges.

## Table 36: Gresham Regional Center TMA Output Goals and Actual Outputs for 2007 and 2008

| Output Category | FY 2006-07 Contract | FY 2007-08 Contract | FY 2008-09 Contract | Actual Output CY 2007 | Actual Output CY 2008 |
|---|---|---|---|---|---|
| Biking | Continue to work with City & GDDA to implement plan and installation of gateway treatments and major downtown portals | Continue to work with City & GDDA to implement plan and installation of gateway treatments and major downtown portals; draft and propose wayfinding system for bikes in conjunction with Parks & Rec Department on MTIP Trailhead Project | No goal specified | Cannot be determined | Cannot be determined |
| BTA Bike Commute Challenge | No goal specified | Facilitate at least 2 employment sites in Regional Center to participate | Facilitate at least 2 employment sites in Regional Center to participate | Cannot be determined | Cannot be determined |
| CarpoolMatchNW.org | No goal specified | Host website | Post DLSM logo and link on website | Cannot be determined | Completed |
| Collateral materials distributed | Distribute to 100 businesses | No goal specified | Distribute 5,000 "Walk There" and other City walking guides; provide walking guides to property owners and developers to distribute to new residents | Cannot be determined | GDDA distributed Downtown Walking Map during Chamber Annual Meeting and the Spirit of Christmas event; met with 2 property managers to incorporate TO information to new residents; over 50 "Walk There" maps distributed at Bike Safety Fair. Metro ran out and decided not to print more |
| Collateral materials produced | Develop TMA brochure; work with Downtown Bus Assoc. on Downtown Walking Map | Work with Downtown Business Assoc. on Walking Brochure | Work with Downtown Bus Assoc. on Downtown Walking Map; work with Downtown Business Assoc. on incorporating TO's in annual business brochure; work with property owners and managers to include TO info in materials to new residents | Cannot be determined | Megan Braunsten met with DBA to discuss updating Downtown Walking Map to include appropriate transit options info; began work on developing a Welcome Packet for new businesses and residents |
| Drive Less Save More | No goal specified | Host website | Post DLSM logo and link on website; facilitate 2 or more employers to partner and sponsor events | Cannot be determined | DLSM logo and link posted; began research of potential employer events |
| Parking | Continue to identify future garage/parking facilities | Customer First Program: 1) incorporate non-SOV options in materials and outreach 2) provide each new business with Customer First materials; visit 3 existing businesses per month reg. Customer First; meet with 2 new property owners for lease inclusion; implement enforcement: identify lots, time limits, and enforcement entity | Customer First Program: 1) incorporate non-SOV options in materials and outreach 2) provide each new business with Customer First materials; visit 3 existing businesses per month reg. Customer First; meet with 2 new property owners for lease inclusion; implement enforcement: identify lots, time limits, and enforcement entity | Cannot be determined | A new business, the Wildlife Café, was given materials on Customer First; Braunsten met with at least 15 landowners, including each business in Historic Downtown, to recommend lease inclusion; started design of a new Welcome Packet covering the Customer First Program |

| Output Category | FY 2006-07 Contract | FY 2007-08 Contract | FY 2008-09 Contract | Actual Output CY 2007 | Actual Output CY 2008 |
|---|---|---|---|---|---|
| Transit service | Investigate potential transit stop at Main Street; investigate concept of "Fareless Square" for Regional Center; work with City to provide improvements at Eastman Parkway & Division | Investigate "Fareless Square" for Regional Center/Rockwood; work with TriMet to improve transit service frequency; work with City to provide improvements at Eastman Parkway & Division | No goal specified | Cannot be determined | Cannot be determined |
| Transit support | No goal specified | Study service needs for Regional Center; meet with 5 top Regional Center developers and with City Councilors regarding funding partnerships; upgrade information rack system to also show directions to access Transit Tracker; create transit options bulletin board in MHCC Business Center; market real-time Traveler Information via 238-RIDE and trimet.org | Recommend to TriMet 2 locations for Transit Tracker displays in GRC; negotiate for transit options bulletin board in MHCC Business Center - expand to add Cal Center/other entity for Civic Neighborhood location; propose to City to place board at City Hall | Cannot be determined | Preliminary feedback from a listening tour suggested demand for expanded service between Mt Hood CC and downtown; advocated for Transit Tracker to be placed at Gresham Transit Center; maintained updated transit schedules at the Small Business Development Center; successfully implemented a full transportation bulletin board system in the MHCC Business Center; both real-time Traveler Information programs marketed |
| TriMet Pass Program | No goal specified | Identify Transit Pass Office location in Regional Center; begin pass sales | No goal specified | Cannot be determined | Explored making Center for Advanced Learning a TriMet pass distributer |
| Walking | Work with City and GDDA to install pedestrian "finding systems" and directories at transit stations and along Main Street and other locations; work with Town Fair and East Hill to develop access routes for pedestrians | Work with City to update Downtown Plan that focuses on pedestrian friendly design in TGM process; draft and propose wayfinding system for pedestrians in conjunction with Parks Rec on MTIP Trailhead Project; Town Fair & East Hill access routes -- draft and propose wayfinding system for pedestrians | Submit recommendations on pedestrian friendly design in TGM process | Cannot be determined | GDDA active advocate in Downtown Planning process and Planning Dept's Development Advisory Group meetings; met with reps of both Town Fair and East Hill to advocate for more pedestrian friendly environment |

### What was the level of satisfaction with the activities?

No data were available to assess this measure.

### To what extent did participants use travel options?

There were no data to directly evaluate the effects of the GRC-TMA's programs, particularly the Customer First program. The employee commute data show that the overall non-SOV mode share at worksites in the Gresham Regional Center was lower in 2007 and 2008 compared to the baseline (Table 34). The improvement was due mainly to an increase in the use of compressed work weeks and carpooling/vanpooling.

**Table 37: 2007-08 Commute Trip Mode Share for Gresham Regional Center Worksites**

| | % of weekday commute trips[a] | | |
|---|---|---|---|
| Mode | **Baseline survey** | **Most recent survey[b]** | **2007-08 Percentage point change over baseline** |
| Drive Alone | 85.7% | 76.4% | -9.3% |
| Transit | 6.5% | 12.0% | 5.5% |
| Carpool/Vanpool | 4.0% | 6.3% | 2.3% |
| Walk/Bike | 2.2% | 2.7% | 0.5% |
| Compressed work week | 1.4% | 2.2% | 0.8% |
| Telecommute | 0.2% | 0.4% | 0.3% |
| Total | 100.0% | 100.0% | |
| # work sites | 10 | | |
| # ECO-eligible employees | 1,035 | | |

[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 a site average.
[b] Includes surveys conducted in 2007 or 2008.

**Table 38: Distribution of Gresham Regional Center Worksites by Non-SOV Mode Share, 2007-08**

| Non-SOV mode share | % of worksites in Gresham Regional Center |
|---|---|
| Over 55.0% | 0% |
| >45% - 55% | 0% |
| >40% - 45% | 10% |
| >30% - 40% | 10% |
| >20% - 30% | 40% |
| 20% and lower | 40% |
| Total | 100% |
| n | 10 |

Notes: Data calculated by PSU CUS using employee survey database.
Surveys from 2007 and 2008 included.

## Conclusions and Recommendations

The departure of its executive director in 2008 somewhat disrupted GRC-TMA's work, particularly in marketing the organization and its mission. In the future, better record-keeping would preserve institutional memory, which would shorten the learning curve for incoming directors. Another challenge continues to be weighing the different and sometimes conflicting priorities within the organization. The Downtown Plan took up much of GRC-TMA's focus in 2007 and 2008, and this kind of focus in its programming perhaps explains GRC-TMA's more successful achievement of its intermediate target measures. At the same time, the organization recognizes the need to balance Downtown's needs with other areas in the Gresham Regional Center, including Civic Neighborhood. Another challenge stems from the fact that the executive director is also head of the GDDA and is housed within it. Given this arrangement, it will be important to manage the overlapping but also different priorities of various funding streams. For example, the "Customer First" parking policy program confers benefits to downtown businesses but it is not clear whether it is the best use of RTO funds in meeting RTO objectives, which includes reducing VMT. Going forward, the GRC-TMA has an opportunity to more clearly articulate and advocate for these objectives in the Parking Management Plan. All that said, the natural alliance of GRC-TMA and GDDA offers opportunities for getting the business community behind TDM, including transit-oriented development, while promoting economic development and livability.

Recommendations build on those from the previous evaluation which were not completely addressed, and add some new ones as well:

- Implement a comprehensive program to track activities (outputs), satisfaction levels, and outcomes. This can include use of the ECO surveys. Improve internal record-keeping.

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

- Ensure workplan reflects a regional focus that emphasizes connectivity between districts and beyond and relies on collaborative marketing.

- Continue building on the GDDA alliance to reach out to large employers with good transit access.

## *General Recommendations for TMAs*

To capitalize on the institutional infrastructure of the RTO program, TMAs need time and training to get acquainted with its policies and procedures. Administrative processes, particularly with regard to contracting and reporting, have become more standardized, and this will eventually save time (although any change in administrative policy or procedure is inherently disruptive and should only be instituted when its benefits outweigh the costs and furthermore those advantages can be clearly communicated to the TMAs). But TMAs would benefit from even greater clarity in expectations from Metro regarding applications and program development, particularly by shortening the learning curve of new staff. More generally, some of the TMAs would benefit from organizational development that focuses on building skills in strategic thinking, planning, and implementation. Here, the network of TMA directors can continue to be an important resource for new directors to tap into. In addition, several TMAs suggested a pool of RTO booster funds that would be dedicated to TMAs. By carrying unused funds over to the following year, TMAs that are still learning how to write winning grants or are otherwise still developing their programs need only compete with other TMAs instead of with other RTO programs. Such an approach implicitly recognizes the unique role that public-private partnerships like TMAs play within the larger RTO program.

Finally, TMAs and the larger RTO program would benefit from improved data collection of outputs, levels of satisfaction, and outcomes. The biennial ECO survey, Drive Less Save More survey, CarpoolMatchNW.org survey, and other RTO partner programs continue to improve. However, collection and tracking remains an almost universal challenge and the lack of sufficient measurement hinders program evaluation and development. To begin to address this, contracts and IGAs should require the operationalization and collection of output, satisfaction, and outcome measures as well as a strategy for collecting and monitoring them. Contractors should also be required to report these measures on a regular basis so that program coordinators and managers can make adjustments in "real time" to address underperformance, be it in program goals or in measurement-tracking itself. Obviously data collection and monitoring requires resources and staff time, and Metro should work with its RTO partners to think of ways to build on the success of the ECO survey and similar programs to further realize RTO Objective 5.1: "to apply appropriate measures to programs and report findings to support investment in cost-effective strategies."

# 8. Travel Options Grants

## *BTA Bike Commute Challenge*

### Background

The primary objective of the Bicycle Transportation Alliance (BTA) Bike Commute Challenge, held every September, is to encourage and support commuters in biking to work through a friendly competition between workplaces. The BCC has a regional reach, involving the participation of RTO partners, especially TMAs. Through its ever-growing network of onsite bicycle coordinators (BCs), BCC sought to expand its program in 2007 and 2008 by focusing outreach on first-time bike commuters and new audiences, especially school children, and on a more year-around basis.

The BTA Bike Commute Challenge grant directly supports RTO Objective 2.1/Strategies 2.1.1 and 2.1.2.

BTA received $40,000 in RTO funding. The grant was in force from July 1, 2007 to December 31, 2008 and subsequently extended to April 15, 2009.

### What services were provided? What was the level of participation?

Table 39 compares the output goals with actual outputs for the grant period. As with other grants, the table below uses the deliverables/work products finally agreed to in the amended contract. All of the major tasks were accomplished. However, work still needs to be done in evaluating which outreach and media strategies contributed the most to the success of the events. This information will be useful in deciding where to invest limited resources in future BCC events. Continued development of web-based resources and portals to track commute behavior can itself be part of incentivizing bike commuting.

### To what extent did participants use travel options?

In 2007, the BCC logged 101,269 bike trips, or 922,835 miles ridden. In 2008, 1,235,219 bike miles were logged. Of the 10,689 riders who participated, 27% (2,869) identified themselves as "new riders." Developing an estimate of vehicle miles reduced from these numbers is difficult due to several unknowns: (1) whether and how much existing riders rode *more* because of the Challenge; (2) how much new riders rode; and (3) what mode participants would have taken if they had not bicycled. Regarding the first two issues, new riders are unlikely to have ridden as far or as often as existing riders. Regarding the third issue, it is unlikely that all of the new bicycle mileage replaced driving alone; many bicyclists might have taken transit instead. **If 15% (low) to 25% (high) of those miles bicycled replaced driving, the average annual VMR would be between 161,900 and 269,800.**

**Table 39: BTA Bike Commute Challenge Output Goals and Actual Outputs for Grant Period**

| Output Goal | Contract | Actual Output for CYs 2007-2008 |
|---|---|---|
| List 30 Outreach Targets | BTA will draw outreach targets focusing on workplaces near multi-use trails, large technology firms not already participating, and members of various business associations and networks. BTA will also partner with other BTA efforts, including its Safer Routes to Schools program, as well as with other entities such City of Portland's SmartTrips program and Metro. | Completed |
| Contact 300 workplaces and present 100 Commute Workshops | With the assistance of 2 BCC Outreach Assistants, present 100 commute workshops on-site at targeted workplaces. Workshops teach route-finding, bike laws, bike skills, connecting to transit, and social networking. BTA will also conduct more general outreach to 300 new, targeted workplaces to raise awareness of BCC and bike commuting. | 2007: Exceeded 50 workshops "by nearly 50%," 888 workplaces and 9,746 riders participated, 2008: Conducted 62 workshops, 1,073 workplaces and 10,689 riders participated, of which 2,869 identified themselves as "new riders" |
| Include 1,000 school children and 100 school employees | BTA will conduct bicycle workshops and outreach events targeted at middle and high school students, helping them get started bicycle commuting and improving their cycling experiences. | Cannot be determined, although 32 schools and 4,500 children participated in the May Challenge Month in 2008 |
| BCC Coordinator support | BTW will provide opportunities for employer site coordinators to network and share information amongst themselves, with the goal of sustaining the BCC's success at creating bicycle commuters | 2007: Stephanie Noll of BTA reported that partners shared lists and information; also shared anecdotal reports that workshops worked well in fostering social networking; 2008: more than 50 workplace coordinators attended a coordinator training in August. |
| Handout | BTA will develop, design, and print out a simple handout piece covering the keys to a successful first bicycle commute | A "Recipe for Your Ride" card was developed to give to new bike commuters |
| Write a Best Practices Report | BTA will produce a Best Practices Report in October 2007 on bike-to-work and web-based behavior change programs around the world | Cannot be determined |

## *City of Lake Oswego Carsharing Feasibility Study*

### Background

The purpose of the grant was to determine the feasibility of a carsharing program in downtown Lake Oswego designed to reduce VMT, greenhouse gas emissions, and parking

demand. Information would be used to assess the development of a carsharing program in such a suburban market. Residents and businesses were contacted to fill out a survey online asking them about their interest in such a program and what incentives, if any, would get them to join. Information was also gathered from supplemental questions added to the ECO survey in 2008. Finally, developers and the Lake Oswego Redevelopment Agency were interviewed about the feasibility of a carsharing program.

The City of Lake Oswego received $5,000 in RTO funding. The grant was in force from March 1, 2007 to December 31, 2008.

The Lake Oswego Carsharing Feasibility Study grant directly supports RTO Objective 4.1/Strategies 4.1.1, 4.1.2, and 4.1.3.

### What services were provided? What was the level of participation?

Table 40 the output goals with actual outputs for the grant period. The major tasks were completed.

**Table 40: Lake Oswego Carsharing Study Output Goals and Actual Outputs for Grant Period**

| Output Goal | Contract | Actual Output for CYs 2007-2008 |
|---|---|---|
| Write a research plan | Establish roles and responsibilities, designating a research professional and timeline | Completed |
| Conduct research | Researcher to arrange meetings as necessary with City of Lake Oswego, Metro RTO, and Flexcar; Researcher to review literature, data, and other unique info about carsharing in Portland/Vancouver area;Researcher to review timelines for transportation and land use planning and implementation; Researcher to use established methods and data; Researcher to consider partnerships | Completed |
| Report findings | Write and present an assessment of data in context and recommend a course of action: provide written report, present report to RTO Subcommittee and guests, provide method details and data to City of Lake Oswego and Metro RTO staff | Completed |

## *City of Milwaukie SmartTrips*

### Background

SmartTrips is an individualized marketing program that aims to increase walking, bicycling, transit, ridesharing, and trip chaining at the neighborhood-level. The program uses a combination of brochures, maps, events, incentives, activities and personalized information. It was modeled after the TravelSmart™ program developed by a private firm, SocialData, and implemented within the City of Portland after success in Europe and Australia. The City of Portland developed their own version of the program and implements it in a different neighborhood each year. In 2007 the City of Portland's Office of Transportation (PBOT) implemented the program within the City of Milwaukie, along with parts of Southeast Portland.

### What services were provided? What was the level of participation?

The program targeted 3,400 households in the City of Milwaukie. PBOT worked with City of Milwaukie staff to develop materials specific to Milwaukie residents, including a Milwaukie Bicycle Map (the first of its kind), a ByCycle kit, and a SmartTrips materials order form. Activities and events, along with participation numbers, are shown in Table 41.

**Table 41: Milwaukie SmartTrips Outputs and Outcomes**

| SmartTrips Milwaukie Activities and Events | Participation |
|---|---|
| SmartTrips newsletter and order form mailed to 3,400 households | 12.3% of households ordered materials. Highlights include:<br>Ten Toe kit – 319<br>Bike kit – 234<br>Milwaukie Bike Map – 157<br>SE Portland walking map - 214 |
| Four Ten Toe Express walks | 125 total participants |
| Two By Cycle Rides | 30 participants |
| Senior Stroll | 25 participants |

### To what extent did participants use travel options?

As with other SmartTrips projects, the City of Portland conducted random pre- and post-surveys in the targeted area. The phone surveys included 260 residents in April 2007 (pre-SmartTrips) and April 2008 (post-SmartTrips). Respondents were asked about trips they made the previous day. The post-SmartTrips sample made 3.4% fewer drive alone trips than the pre-SmartTrips sample of respondents. The shift was larger for shopping and leisure trips – a decrease of 13%. Post-survey respondents who reported that they heard about a travel options message made 5.6% fewer drive alone trips than the pre-survey respondents.

The City of Portland estimated a VMR of over 6.6 million miles annually. This was based on an estimate of 9,527 adults in the target area (based upon Census data), an average daily reduction of 2.05 miles, and 341 travel days per year. This estimate is likely too optimistic

for a number of reasons. First, the calculation assumes the same reduction in travel behavior year-round. Both surveys were conducted in April. If the weather during this period was particularly conducive to walking and bicycling, the results may overstate year-round changes. More importantly, the price of gasoline increased significantly between the two survey periods, from $2.68 per gallon to $3.49 per gallon. This points to the inability to distinguish between changes in behavior due to the SmartTrips program versus other factors. The importance of doing so is highlighted by trying to "back out" the effect of program using the estimate from above. The surveys were random samples of adults within the target area and did not distinguish between program participants and non-participants. Therefore, the 2.05 miles reduced per day is an average; some adults did not reduce their mileage at all, while others reduced their mileage by more than 2.05 miles. The way the City did the VMR calculation assumes that the entire reduction is due to the program. If so, the participants would have reduced their mileage by a large amount and everyone else would show no change in mileage, for an average of 2.05 miles per person. The City indicated that 12.3% of the households ordered SmartTrips program materials. If it is assumed that the program only affected these households, that represents 1,172 of the 9,527 adults used in the VMR assumption. If all of the 6.6 million VMR is attributed to these 1,172 adults, they would have needed to reduce 16.7 miles per day. Since the average person in the region travels 19-20 miles per day, this magnitude of reduction from the program seems very optimistic. **Given the change in gas prices and the myriad other factors that might have caused the change in travel, a more conservative approach would be to assume that 25% (low) to 50% (high) of the VMR was associated with the program. This results in a VMR estimate of 1,665,000 to 3,330,000.**

One of the reasons for targeting Milwaukie was to promote the new connections along the Springwater Corridor Trail. This appears to have worked. In the pre-survey 11% of respondents had used the trails and 54% could not answer the question. In the post-survey, 44% of respondents had used the trail in the past year and less than one-percent could not answer the question.

## *Clackamas County Bike It! Map*

### Background

The primary objective of the project was to update, produce, and evaluate Clackamas County's bike map as a resource for bikers in Clackamas County. A key strategy was to coordinate the information on the map, including links to transit, with that of Metro's "Bike There" map to provide a comprehensive and more standardized bike guide to commuting, local trips, and recreation. Research and development entailed partnerships between the CRC-TMA and the Clackamas County Tourism Development Council, the North Clackamas County Parks and Recreation District, The Clackamas County Pedestrian/Bikeway Advisory Committee, and others. Part of the research involved integrating data into regional GIS data layers.

The Clackamas County Bike It! Map grant directly supports RTO Objective 3.2/Strategy 3.2.1.

The grant was in force from March 1, 2007 to December 31, 2008.

### What services were provided? What was the level of participation?

The printed maps were unveiled on September 4, 2008 at the Kaiser Transportation Fair, where Clackamas County staff distributed 160 maps and baseline surveys to residents interested in the new map. The maps are available for sale at the County Planning Office in Oregon City.

A follow-up survey was administered to the same individuals approximately six weeks later. The primary purpose of the survey was to assess what effect if any the new BikeIt! map had on respondents and to thereby gauge the map's effectiveness in promoting the bicycle travel mode in Clackamas County. Some of the survey results from 47 respondents were provided for this evaluation.

Table 42 compares the output goals with actual outputs for the grant period. All of the major tasks were accomplished.

**Table 42: Comparison of Output Goals and Actual Outputs for Grant Period**

| Output Goal | Contract | Actual Output for CYs 2007-2008 |
|---|---|---|
| Planning | Coordination with jurisdictions regarding information to be on the map and identification of data needs | Completed |
| Data collection | Data collection and integration into regional GIS data layers. Include information for use by on-line bike mapping tool, bicycle.org | Completed |
| Map production | Map production and printing | Completed |
| Evaluation and reporting | Evaluate and report on the effectiveness of the Bik Map as a tool to influence people travel choices | Completed |

### What was the level of satisfaction?

The survey did not include a question specifically assessing the quality of the map. The open-ended questions solicited both positive feedback and constructive criticisms.

### To what extent did participants use travel options?

Of the 46 survey respondents who answered the question, 9% indicated that they used the map to plan their *first* bike ride to work, while 63% said that they used the map only for non-work bike routes. Overall, 20% said that their primary use of the map was for planning a route to work, while 46% said it was to plan a recreational ride. This differs from the results of the survey on the Bike There! map, which found a higher rate of use for commuting (see page 30). This may reflect the land use and street connectivity pattern found in Clackamas County, which differs from, for example, the City of Portland where bicycle commuting rates are high. With more dispersed land uses and less of a grid-street

pattern, many work and shopping trips are longer than what many people consider a "bikeable" distance.

## *Gresham Bicycle Safety Equipment and Bicycle Rack Project*

### Background

The primary objective of the project was and remains to promote awareness of bicycle safety and parking and to provide to equipment and facilities serving these two needs within the City of Gresham. The grant called for three basic tasks: 1) purchasing and distributing bicycle safety equipment; 2) purchasing and installing bicycle racks in Gresham's downtown area; and 3) a final report of activities and findings, including any bike rack surveys. The GRC-TMA, working through the GDDA and partnering with the City of Gresham, sponsored a successful Bike Safety Fair in the summer of 2008, giving out 302 helmets and providing education to over 900. Combined with the Earth Day event in April, the total number of helmets given out came to 571. In addition, a bike rack inventory was carried out by the GRC-TMA and mapped using GIS with the assistance of the City of Gresham. Preliminary meetings with TriMet resulted in the decision to carry out a bike rack survey in conjunction with TriMet's survey in 2009. In addition, the GRC-TMA current executive director is chairing the new Economic Improvement Advisory Group to, among other things, work with business representatives from the Downtown, Civic, and Rockwood districts as well as local government and other partners to develop a bike rack program in 2009 that can help brand Gresham and its three distinct districts. It was decided to hold off on purchasing and installing the bike racks until the bike rack survey and program were completed. The original grant IGA has been extended until June 30, 2009 to preserve funds to design, purchase, and install bike racks.

The Gresham Bicycle Safety Equipment and Bicycle Rack grant directly supports RTO Objective 2.1/Strategy 2.1.1.

The grant was in force from March 6, 2007 to December 31, 2008 and subsequently extended to June 30, 2009.

### What services were provided? What was the level of participation?

Table 43 compares the output goals with actual outputs for the grant period. All of the major tasks were accomplished. The bicycle safety equipment goal has been met; the remaining tasks associated with purchasing and installing bike racks and tracking and reporting are scheduled to be completed by June 30, 2009.

**Table 43: Gresham Bike Project Output Goals and Actual Outputs for Grant Period**

| Output Goal | Contract | Actual Output for CYs 2007-2008 |
|---|---|---|
| Bicycle safety | Purchase and distribute bicycle safety equipment | Distributed 571 helmets at the Earth Day and Bike Safety Fair events |
| Bicycle racks | Purchase and install bike racks | Completion date amended to June 30, 2009; contingent on bike rack survey and program |
| Evaluation and reporting | Track and report activities and findings | Completion date amended to June 30, 2009 |

### To what extent did participants use travel options?

The effect of the helmet distribution on bicycling activity could not be determined.

## *PSU Bike Parking Facility*

### Background

The Portland State University Transportation and Parking Services Office (TAPS) received this grant to install and administer a long-term bicycle parking structure as part of its general effort to promote and support bicycle commuting to campus. The structure will hold approximately 75 bikes, will be ADA compliant, and will be a secure, 24-hour key-card access facility. In addition to administering the facility, TAPS will conduct follow-up surveys of PSU students to assess the effectiveness of the facility in promoting bicycle commuting. The project was originally slated to be completed by the Spring of 2009, but project delays mean that the facility will likely be completed by Fall, 2009, with follow-up surveys being completed by Spring, 2010.

The PSU Bike Parking Facility grant directly supports RTO Objective 4.1/Strategies 4.1.1, 4.1.2, and 4.1.3.

PSU TAPS was budgeted to receive $50,000 in RTO funding. The grant was in force from August, 2008 until May, 2009.

### What services were provided? What was the level of participation?

Table 44 compares the output goals with actual outputs for the grant period. The facility is slated to be constructed and opened for use by Fall 2009. The project has encountered delays and many of the tasks and deliverables are yet to be completed. In contrast to most Region 2040 grants, this project is a capital project and the delays are, in part, tied to delays in capital investments.

**Table 44: PSU Bike Parking Output Goals and Actual Outputs for Grant Period**

| Output Goal | Contract | Actual Output for CYs 2007-2008 |
|---|---|---|
| Phase 1: Design, Planning, Permitting | Complete structure design and review process, ensure design is ADA compliant, obtain all necessary permits, and pay related fees | Completed |
| Phase 2: Construction | Site preparation, purchase and deliver materials, and install a fully enclosed, roofed structure with space for approximately 75; purchase and install lighting and security equipments | Underway during the evaluation period.<br>Facility opened in March 2010. |
| Marketing | Provide marketing materials and circulate information about the facility to the campus and university tenants | Contingent on completion of Phase 2 |
| Administration and operation | Administer and provide for ongoing operation and maintenance of the bike parking structure; a minimal fee will be charged for use of the facility | Contingent on completion of Phase 2 |
| Evaluation and reporting | A bicycle survey will be conducted in the spring of 2007, prior to installation and follow-up surveys both campus-wide and targeting facility-users will be conducted over the year following construction of the facility to assess its impact on campus bike commuting behavior | 2 surveys (a mode-split survey and a bicycle transportation survey) will be conducted campus-wide; a survey of facility-users will be conducted within 6 months of the facility's opening, followed by another campus-wide bicycle transportation survey in Spring, 2010. |

## *Swan Island TMA Location Efficient Living (aka "N/NE PDX TNT…Trip Not Taken")*

### Background

Effective March 1, 2007, SITMA received a Location Efficient Living grant through the Region 2040 Grant Program. The immediate objective of the grant, also known as "N/NE PDX TNT…Trip Not Taken," is to increase the share of Swan Island employees who live in close proximity to their workplace by connecting employers with area residents and by encouraging and supporting existing Swan Island employees in relocating closer to their workplace. The TMA developed the project in partnership with several organizations, including Portland Housing Center, Portland Community Land Trust, Portland Development Commission and Portland Community College/PCC Campus and Northeast Workforce Center.

The TNT grant supports the RTO Objective 4.1/Strategy 4.1.4 "Support location-efficient strategies.

The TNT was in force from March 7, 2007 to December 31, 2008 and later extended to June 30, 2009.

### What services were provided? What was the level of participation?

The project produced a map/guide "Historic N/NE Portland Today" (available on the web at www.nnepdxtnt.org) Copies were distributed throughout the area including over 2,000 to employers at Daimler Trucks NA alone. The Alliance of Portland Neighborhood Business Associations awarded the Swan Island Business Association its first annual Business Association of the Year award for the map/guide.

Table 45 compares the output goals with actual outputs for the grant period. The project was largely successful in meeting its output targets. One notable challenge was the relatively low survey response rate.

**Table 45: Swan Island Trip not Taken Output Goals and Actual Outputs for Grant Period**

| Output Goal | Contract | Actual Output for CY's 2007-2008 |
|---|---|---|
| Task 1: Housing/Relocation Survey | Implement baseline survey at Swan Island's 6 largest employers by May 1, 2007; repeat survey after completion of project in Spring, 2009. | Baseline survey carried out at 8, mid-sized Swan Island employers in Spring, 2007. 600 surveys were sent out; 250 were completed. Follow-up survey carried out for 120 of the 250 respondents in Fall, 2008; of these, 29 responded. |
| Task 3: Outreach to residents | Gather and create materials related to career opportunities on Swan Island, cultural opportunities, amenities, and services to interest residents | 2007 PCC/Cascade campus Job Fair brought residents and prospective employers together. Followed by outreach to PCC and Swan Island Business Association, leading to SIBA table at 2008 Job Fair. |
| Task 4: Outreach to employees | Gather and create materials related to homeownership on Swan Island, cultural opportunities, amenities, and services to interest residents | Housing and homeownership materials provided by NGO and agency partners, including Portland Housing Center, Portland, Community Land Trust, and PDC. Materials distributed at employee health fairs at Daimler Trucks NA and adidasAmerica. |
| Task 5: Outreach to employers | With partners, SITMA will provide employer outreach to all TMA member employment sites, plus 6 additional employment sites in 2007, and 20 more in 2008. Assemble a booth table with information about local recruitment and employment opportunities. Attend 4 job fair events in the project area, staffing table for 16 hours (or staffing table for 16 hours at job fair events in the project area with expected attendees totaling 4,000 or more prospective employees). | The housing/relocation survey itself, which entailed creating a Partnership Plan ("Task 2 in the contract"), also functioned as a form of outreach, with materials related to housing, neighborhood, and transportation options sent to baseline survey respondents. "Historic N/NE PDX Today" map/guide was also made available to employees in 2008. |
| Task 6: Outreach to community | With partners, SITMA will provide community outreach at 4 or more events, with potential to reach 4,000 community members and documenting interaction between 400 individuals. Arrange speakers and materials for 2, home-buying seminars and 2 employment seminars in 2007. | The Partnership Plan led to the formation of a "N/NE marketing group" to spearhead the design, production, and distribution of the "Historic N/NE PDX Today" map/guide in 2008. Half of the maps/guides were distributed through neighborhood associations and business district associations in the area and the rest directly to Swan Island employees. |

## To what extent did participants use travel options?

Progress was measured by taking a baseline survey of employee zipcodes at eight mid-sized Swan Island employers in the Spring of 2007 and another survey, originally scheduled for the Fall of 2008 and eventually scheduled for Spring 2009. The first survey found that out of 600 employees surveyed, 75 indicated an interest in relocating to N/NE Portland. A comparison of the home zip codes of employees at the eight sites found that the share living in the five closest zip codes increased from 10% to 13% between spring 2007 and fall 2008. Final evaluation of outcomes must await follow-up survey scheduled for Spring 2009.

## *WTA Carefree Commuter Challenge*

### Background

The goal of the WTA Carefree Commuter Challenge (CCC) is to increase the number of employees who take transit, walk, bike, carpool, vanpool, telecommute, and work a compressed week. The project covers the Portland metropolitan region and includes the participation of other TMAs. For the last grant cycle, effective March 1, 2007 through June 30, 2009, a specific goal was to expand the CCC to additional employers and to concentrate outreach in the Hillsboro, Beaverton, and Washington Square Regional Centers.

The CCC grant directly supports RTO Objective 2.1/Strategies 2.1.1 and 2.1.2.

The CCC grant was in force from March 1, 2007 to June 30, 2009.

### What services were provided? What was the level of participation?

Table 46 compares the output goals with actual outputs for the grant period. On the whole, output targets were achieved, although closer documentation of collaboration with other TMAs would be helpful to assess which collaborative marketing strategies work best.

**Table 46: WTA Carefree Commuter Challenge Output Goals and Actual Outputs for Grant Period**

| Output Goal | Contract | Actual Output for CYs 2007-2008 |
|---|---|---|
| Task 1: Planning | Seek sponsors and prize donations; develop communications plan to TCs; provide CCC info to TMAs; organize workshops, meetings, events for TCs in Hillsboro, Beaverton, and Washington square RCs | 2007: 27 sponsors and 20 prize donors; created email format for "Constant Contact" with CCC alerts; 2008: 31 sponsors totaling $10,950 and 18 prize donors totaling $6,490; held 2 CCC meetings |
| Task 2: Promotion | Hire graphic designer; develop, print, and distribute poster, brochure, and collateral materials; develop website info; promote CCC region-wide | 2007: 500 posters and 750 postcards including CCC inserts printed and distributed to TCs and community centers; placed ad in Daily Journal of Commerce; created email format for "Constant Contact" with CCC alerts; poster on website; 2008: Internship program; Bikeshare Grant to provide free bikes to 2 workplaces; promoted "Green Commuters" category as well as competition among 5 different divisions; held 2 Award Meetings |
| Task 3: Evaluation | Track participation; gather travel behavior info from CCC participants; invite all participating businesses in Hillsboro, Beaverton, and Washington Square RCs to participate in more in-depth evaluation; write follow-up report documenting participation, trips saved, air quality impact, and provide quarterly progress reports to Metro | Reporting objectives met. One innovation in 2008 was the conversion to an online trip diary (taken from Drive Less Save More) to improve accuracy |

### To what extent did participants use travel options?

Table 47 shows the annual participation rates, along with WTA's estimate of vehicle miles reduced (VMR) and $CO_2$ emissions saved as a result of the Carefree Commuter Challenge since 2005. The table indicates that participation has steadily increased over four years, though the number of first-timers did decrease for the first time from 2007 to 2008. The WTA suspected that the drop was due largely to a change in the way data was captured and may have understated the actual number of first timers.[20] Another possible explanation is CCC has "converted" the segment of the working population that were more already more inclined to change commuting behavior, leaving a "core" population of commuters whose characteristics make them more resistant to changing commuting behavior or at the very least less receptive to existing marketing messages. Overall, the share of participants that are first-timers is less than 10% in both 2007 and 2008. It is unclear whether non-first time participants *increased* their use of travel options over their normal pattern, or simply continued to use that at the same rate.

The limited information available for this evaluation made it impossible to independently and accurately estimate VMR. WTA used the DLSM on-line trip diary to estimate VMR, though the exact methodology was not clear in their reports. Some of the same questions regarding the estimate for the BTA Bicycle Commute Challenge likely apply here, namely how much did first timers reduce driving and how much did non-First Timers reduce driving beyond their normal behavior? The numbers that were provided indicate that each participant reduced their driving by an average of 286 miles in 2007 and 278 miles in 2008 over the month-long program. If each participant traveled an average of 20 miles round trip to and from work, that would represent about 14 days per participant. Given that less than 10% of the participants were first timers, it is likely that a large share of the non-SOV use would have occurred normally. **If 25% (low) to 50% (high) of the VMR estimated is attributable to the program, the annual VMR would be 278,700 to 557,400.** These estimates do not attempt to account for whether the event had a lasting effect on people's behavior, e.g. if they continued to use non-SOV modes at a higher rate after the Challenge ended. A portion of that would be captured through the employee surveys conducted after the Challenge took place.

[20] Trips were logged using he Drive Less Save More Trip Diary, while participants had to undertake an extra step to report if they were a first-timer, which may have reduced reporting.

**Table 47: WTA Carefree Commuter Challenge Outcomes Reported from 2005 to 2008**

| Outcome | 2005 | 2006 | 2007 | 2008 | % change from 2007 to 2008 |
|---|---|---|---|---|---|
| Participating companies | 68 | 112 | 119 | 209 | 76% |
| Individual participants | 1,940 | 2,137 | 3,375 | 4,548 | 35% |
| First Timers (individuals new to not driving alone) | 129 | 269 | 319 | 149 | -53% |
| % of participants that are First Timers | 7% | 13% | 9% | 3% | |
| WTA's estimate of vehicle miles reduced | 427,815 | 521,661 | 964,825 | 1,264,985 | 31% |
| WTA's estimate of $CO_2$ emissions saved (lbs) | 440,650 | 513,562 | 883,780 | 1,028,148 | 16% |

Source: WTA reports

## *WTA TDM Training Course Development*

### Background

The objective of the TDM Training Course Development program was to build a network of trained Transportation Coordinators (TCs) to advocate for, build, and facilitate travel options programs at employment sites in Washington County and thereby enhance the capacity of WTA to meet its TDM objectives. The TDM Training Course Development program was and continues to be a partnership with PCC.

The TDM Training Course Development grant directly supports RTO Objective 2.1/Strategy 2.1.1.

The grant was in force from March 1, 2007 to December 31, 2008.

### What services were provided? What was the level of participation?

Table 48 compares the output goals with actual outputs for the grant period. While the pilot course was successful, with a solid enrollment, enrollment dropped off entirely in the second year once the program started charging. The program, however, is still planned as an on-going course of study at PCC. Going forward, it will be important to track more closely what improvements (if any) in employer TO programs resulted from their TCs enrolling in the program.

**Table 48: Comparison of Output Goals and Actual Outputs for Grant Period**

| Output Goal | Contract | Actual Output for CYs 2007-2008 |
|---|---|---|
| Develop curriculum | Develop 24 hours of curriculum to train employer TCs and transportation students in TDM strategies; develop short courses on selected topics, including an intro course and a train-the-trainer course; convene a stakeholder group to guide curriculum development; get expert review from Nelson/Nygaard; invite local experts to teach courses; develop a draft manual to accompany curriculum; develop electronic versions of trainer and participant course materials | Developed 24 hours of curriculum; CDs of course created; developed 1, 5 hour course, 5, 2.75 hour courses, and 1, 2.5 hour course; stakeholder group facilitated by BCB Consulting with Tippens & Furry; due to timing, Nelson/Nygaard-PCC transportation study was not used to inform curriculum development |
| Provide project management of pilot program | Deliver 24 hours of curriculum to pilot courses with goal of enrolling 30 TCs; courses offered for free first year (2007); develop "Recognition Awards" for course participants; offer open enrollment and promote throughout region; determine cost of courses to student/employer at post-grant implementation according to PCC standards | 24 hours of curriculum delivered; 30 students enrolled and recognized under "Recognition Awards"; promoted through newsletters and mailing lists; determined cost in 2009 to be $295 for the series, $69 for Overview, $45 for other individual classes |
| Evaluate program results and impacts | Develop curriculum and program evaluation standards and evaluate program outputs and outcomes. Use surveys and other techniques to measure: stakeholder involvement, participation, and satisfaction; course attendance and completion; impacts on employer TO programs and commute trips; program's potential as a sustained, on-going course at PCC | Student evaluations averaged about 4.3 out of 5; only Farmer's Insurance agreed to meet to discuss developing TDM program further; anecdotal reports that employer TO programs improved; tested pilot in Customized and Workforce Training and sustained in Continuing Ed; sustained as an on-going PCC course of study |

### To what extent did participants use travel options?

The effectiveness of the program in reducing SOV trips cannot be determined at this time.