

# SmartTrips Southeast

Final Report



December 2007



Portland Office of Transportation  
1120 SW 5<sup>th</sup> Avenue, 8<sup>th</sup> floor  
Portland OR 97204



**WHAT DO SOUTHEAST PORTLANDERS THINK OF SMARTTRIPS?**

44 people think SmartTrips is **AWESOME**  
18 people think SmartTrips is **AMAZING**  
At least one person thinks SmartTrips is **RAD**  
SmartTrips received two **KUDOS**  
At least two people are **STOKED** about SmartTrips  
Three people think SmartTrips **ROCKS**  
Two people think this is **BRILLIANT**  
Two people have shouted **BRAVO**  
At least 427 people think this is just **GREAT**  
And SmartTrips received at least 781 **THANK YOUs**

**Great program. I love my city.  
Thank you, thank you, thank you.**

**Great program.  
Thanks for encouraging me to walk, ride a bike, save water.  
I've been thinking more about what I personally can do &  
this should get me started.**

**We bought bikes last fall and this is a great incentive to get back on.  
I love the neighborhood walks and will definitely check one out.  
Thanks for putting it all together!**

**I love that the resources are coming to me instead of finding time to research  
them. Thanks also for having them delivered by bike!**

**Your program is good. As a senior, cannot walk well.  
Have to plan my trips where I know there are restrooms available for seniors.  
Thank you for mailing this!**

**I'm needing to lose weight and have started walking.  
Now I'm going to dust off my old bicycle.  
Wish me luck!**

**I'm very excited about this!  
I am looking forward to all the information to get started!**

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## **Project Team**

### **City of Portland Office of Transportation, Options Division**

Linda Ginenthal, SmartTrips Program Manager  
Marni Glick, Options Division Manager  
Dan Bower, Options Milwaukie Liaison  
Rich Cassidy, Ten Toe Express Walking Campaign  
Timo Forsberg, Portland By Cycle Rides  
Donna Green, Senior Strolls  
Caitlin McCollum, Options Administrative Support  
Janis McDonald, Women on Bike and Options Ambassador Programs  
Barbara Plummer, SmartTrips Newsletter  
Jeff Smith, Portland By Cycle Workshops  
Benjamin Doyle, Carl Larson, Elly Blue, Bicycle Delivery Staff

### **City of Milwaukie**

JoAnn Herrigel, Community Services Director  
Grady Wheeler, Information Coordinator

## SMARTTRIPS SOUTHEAST FINAL REPORT

SmartTrips Southeast residents saw a significant reduction in drive alone trips in their area – 9.4%. Twenty thousand southeast Portland and 3,400 Milwaukie households did their part to decrease their neighborhood traffic and pollution and increase their neighborhood’s livability. More people are out walking, riding their bicycles, taking transit, carpooling and car sharing than ever before – because of SmartTrips Southeast.

SmartTrips is in its fifth year working with Portland residents to encourage more people to get around by walking, bicycling, riding transit, carpooling, car sharing, combining trips and reducing their need to drive for their everyday trips. Through a combination of materials, maps, events, activities and personalized information, SmartTrips Southeast showed the same basic results that have been seen in all other SmartTrips projects in Portland. More people are looking to healthier, more convenient, and safer ways to get where they are going.

Approximately 30%, or 7000 SmartTrips Southeast households, either ordered materials or participated in at least one of over 100 Transportation Options events including OptionsMobile tabling events. Five thousand of these households’ names and addresses were captured in our SmartTrips database for continued communications in coming years. Over 1,000 unsolicited positive comments by area residents showed that the program not only garnered the desired mode-shift changes but fostered a positive attitude toward the work that the City of Portland is doing to make their communities a better place to live.

What follows is an overview of SmartTrips, how it works and the results.

### SmartTrips Background

Portland SmartTrips is a comprehensive approach to reduce drive-alone trips and increase biking, walking and public transit in targeted geographic areas of the city. It incorporates an innovative and highly effective individualized marketing methodology, which hand-delivers packets of information to residents who wish to learn more about all their transportation options including transit, walking, bicycling, carpooling, car sharing and combining trips. Key components feature biking and walking maps and organized activities which get people out in their neighborhoods or places of employment to shop, work, and discover how many trips they can easily, conveniently and safely make without using a car. Success is tracked by evaluating qualitative and quantitative results from surveys and other performance measures.

Primary goals for the project include:

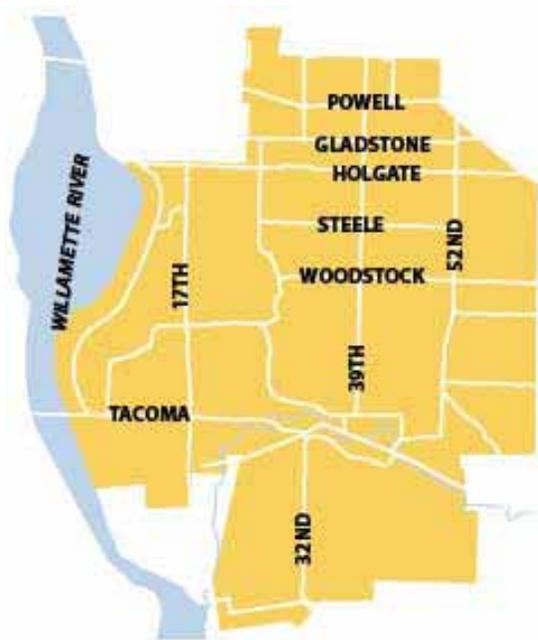
- Reducing drive alone trips
- Reducing vehicle miles driven by area residents and employees
- Increasing awareness and raising acceptability of all travel modes
- Increasing walking, biking, transit, carpooling and car sharing trips
- Increasing neighborhood mobility and livability
- Increase bicycling and walking safety

The Transportation Options Division of the Portland Office of Transportation (PDOT) chooses an area of town each year to implement this program. Area selection is based on analyzing land use patterns, transit service availability, bike and walking infrastructure, and current transit or streetscape infrastructure investments such as new light rail or bicycle and pedestrian trails.

## SmartTrips Southeast Overview

Modeled after the successful “TravelSmart” individualized marketing approach and former “SmartTrips” in four previous Portland target areas, SmartTrips Southeast involved 23,400 households in a coordinated and comprehensive effort to engage residents in reducing their drive alone trips.

SmartTrips Southeast built and expanded partnerships and programs with health organizations, neighborhoods, businesses and residents in Ardenwald, Brentwood-Darlington, Brooklyn, Creston-Kenilworth, Eastmoreland, Reed, Sellwood-Moreland, and Woodstock neighborhoods. Through Metro’s Regional Transportation Options grant process the project included 7,000 residents in the City of Milwaukie.



SmartTrips Southeast incorporated successful elements and added a couple of new programs in 2007. There were ten major programs that made up SmartTrips Southeast. Every household was invited to participate through mailers, media stories and a well-publicized kick-off event. Households interested in learning more or attending events were able to order mode-specific information, read newsletters, or attend any of the 100 or more walks, bike rides, workshops, clinics and outreach events in their neighborhood. A detail description and evaluation of each element can be found under Project Descriptions (page 5)

SmartTrips Southeast target area bordered the Springwater Trail and the city of Milwaukie to the south, 62<sup>nd</sup> Ave to the east and the Willamette River to the west and approximately Powell Blvd to the north. The “Springwater Three Bridges” project linked the two cities bridging major gaps in the Springwater trail creating a nearly seamless bicycle and pedestrian path into downtown Portland and Gresham from southern Portland and Milwaukie.

## Project Development

### Choosing Southeast Portland

Following the 2006 Northeast Portland program, PDOT Transportation Options identified southeast Portland as its next area. Three major factors contributed to choosing this area.

#### *Completed and Future Infrastructure Materials*

The Bybee Bridge and Springwater Three Bridges projects were completed in 2005 and 2006, respectively. These new and improved facilities offered southeast Portland residents access to many more neighborhoods and business nodes by walking and bicycling than ever before. Walking maps for these areas were already developed and printed with the support of Kaiser Permanente.

New light rail, streetcar, Sellwood Bridge and other major infrastructure investments for this area are scheduled many years down the line. As SmartTrips works best post-construction, waiting for these new amenities would have pushed SmartTrips out of this area for many years.

#### *Material Development and Partnership Opportunities*

Grant and sponsorship money from Metro and Kaiser Permanente for southeast Portland made this area an attractive partnership for Transportation Options. Milwaukie city government



**METRO**  
PEOPLE PLACES • OPEN SPACES

was interested in reaching out to its constituents concurrently with some master planning work. SmartTrips enabled them to engage many of their households in their planning process. In 2006, the Cities of Portland and Milwaukie jointly applied for and were awarded funds from Metro to expand the SmartTrips Southeast project to include 3,400 households in Milwaukie.



Kaiser Permanente has taken the lead in the Portland region sponsoring walking maps and providing pedometers for walking programs. Kaiser agreed to sponsor the reprinting of the Southeast Portland Walking Map that was in short supply for calendar year 2007.

### Project Planning

As a major Transportation Demand Management program of the City of Portland Office of Transportation, SmartTrips has already been adopted as a successful program; therefore, the typical process for garnering political, agency, and community support is much abbreviated. SmartTrips for 2007 calendar year planning began summer 2006 with an evaluation of areas to implement the program.

Notification to political and agency leadership began in September 2006 on location and a draft work plan. Program staff requested time on neighborhood and business organizations' agendas to review the program with their constituents and to garner ideas and input. A final implementation plan was completed January 2007.

SmartTrips Southeast normalized performance evaluation survey work by conducting pre- and post-program interviews in September 2006 and 2007, respectively. Performance measurements allow SmartTrips to utilize Business Energy Tax Credits and demonstrate the efficacy of the program. A BETC pre-certification application was filed in December 2006.

With two exceptions, all materials and incentives were ready for deliveries beginning the first week in April. This included intensive program planning and material design and production from December 2006 to March 2007.

SmartTrips Southeast took advantage of the opening celebration of the Three Bridges Project along the Springwater Corridor to work with area neighborhood groups to kick-off SmartTrips. Planning for this event began in Fall 2006. Volunteer trainings and recruitments were conducted in May and June for the myriad of outreach events planned.

### **Community Outreach and Partnerships**

All residents in the area were contacted at least five times during the yearlong campaign. Each segment of the population was reached and persuaded with different strategies with Transportation Options' messages. Transportation Options actively pursued partnerships with several health and bicycling industry leaders for funding and mutually beneficial promotional objectives.

Opinion makers and leaders in transportation, for the most part, have heard of SmartTrips and are supportive. To reinforce and inform these key community leaders, the *Options* newsletter, a quarterly publication posted on the City's website includes regular updates on the program and results.

SmartTrips programs were covered in the *Oregonian*, *Portland Tribune*, *BikePortland.org*, *PortlandTransport* blog, other blogs and in neighborhood newsletters. The Women on Bikes program sparked an *Oregonian* editorial on the increase in women bicycle riders.

Partners involved in one or more project of SmartTrips included:

- All area neighborhood associations
- Southeast UpLift district coalition
- All area business associations
- TriMet
- Flexcar (soon to be Zipcar)
- Kaiser Permanente
- Bike Gallery
- Seven Corners bike shop
- Elders in Action
- Shift
- PaceSetters
- Community Cycling Center
- Reed College
- Alta Consulting
- Bosco-Milligan Foundation
- Bicycle Transportation Alliance
- Pastini
- Pioneer Organics

In addition to these groups and businesses, 75 additional businesses participated by offering discount coupons and/or free samples to SmartTrips participants.

### City of Milwaukie Partnership

PDOT staff also worked with Milwaukie staff and residents to plan guided bicycle rides, walks, and clinics in Milwaukie and included the information on brochures that were distributed to all SmartTrips participants in both Portland and Milwaukie. The *Ten Toe Express* and *Senior Strolls* walking campaigns as well as the *Portland by Cycle* and *Women on Bikes* clinics and guided bicycle rides each included several events that were planned and coordinated by PDOT and Milwaukie staff and residents prior to launching SmartTrips Milwaukie.

Once materials were ordered and the programs were in place, PDOT and Milwaukie jointly selected the 3,400 households that would be included in the SmartTrips Milwaukie program. The target area was extended west from its original boundary to include all of downtown Milwaukie.

PDOT staff developed the remaining materials for the order form including a first of its kind Milwaukie Bicycle Map, a Milwaukie-specific By Cycle kit, and the Milwaukie-specific SmartTrips order form.

## Project Descriptions and Evaluations

Every household was invited to participate through mailers, media stories and a well-publicized kick-off event. Households interested in learning more or attending events were able to order mode-specific information, read newsletters, or attend any of the 125 walks, bike rides, workshops, clinics and outreach events in their neighborhood. The ten major programs that made up SmartTrips Southeast are detailed below.

### Getting Around Portland Options (Lead Staff – Linda Ginenthal and Dan Bower)

To inform residents about the various projects, Options sent each household a Getting Around Portland Options mailer with a menu of materials to order. The mailer addressed each transportation mode and offered materials for each project, including the Portland By Cycle and Ten Toe Express

**"I loved the materials, read all of it and used the products. I felt more informed and eager to participate in the options out there."**



kits, Women on Bikes and Senior Strolls information, all event and class schedules, Southeast Portland Walking Maps, TriMet, Flexcar and CarpoolMatchNW.org materials. In partnership with the Portland Water Bureau, the order form included an indoor and outdoor water conservation kit. The Milwaukie order form had a few more Milwaukie-specific items as well.

December 2006 through March 2007 all materials and incentives were developed and ordered including soliciting area businesses for coupon book inclusion, identifying walk and ride start locations and routes, workshop and clinic topics and locations, and compiling a menu of incentives, information and maps that residents can order. All final drafts for printed materials were forwarded to the graphic designer by February 1. Materials were designed,



useful resources. The first issue was sent out in March, followed by a May issue and three additional issues every two months after that.

The first three newsletters were sent to all households in the target area. Subsequent issues were sent to residents who had expressed interest by returning the GAP Options order form or attending an event.

### **Southeast Portland Walking Map** (Lead Staff – Timo Forsberg)



The Southeast Portland Walking Map was modeled after the three other successful Portland Walking Maps in North, Southwest and Northeast. The map includes the area bounded by I-84, the Willamette River, and the southern city limits and I-205. Kaiser Permanente sponsored the printing and production costs for the map.

All households ordering materials received a walking map. The map was also a key component of the Ten Toe Express Kit. Maps were distributed at all neighborhood events and at the Ten Toe Express walks and Senior Strolls.

The map highlights off-street walking trails, stairs, bus and MAX routes and stops, bikeways, schools, community centers, parks, Heritage trees, retail areas, and other points of interest. Seven sample walking tours were featured on the back of the map along with directions and points of interest along the routes. The map also includes resource information, a list of publications and information on walking clubs in Portland.

### **Ten Toe Express** (Lead Staff – Rich Cassidy)

#### *Ten Toe Express Kits*

Options' Ten Toe Express walking campaign and kit were a great success. Five thousand kits were distributed to residents through GAP Options orders and neighborhood events. An additional 1,000 kits were made available to non-profit groups, schools and area employees.

**"Getting the kit reminded me I wanted to do my neighborhood errands, shopping on foot or bike."**

The kit included a digital pedometer to count one's steps, the Southeast Portland Walking Map, a guided walk schedule, and a Short Tripper coupon book with over \$100



in savings at local businesses. Over 70 businesses were included in this walk (or bike) to the store coupon book, free of charge, thanks to a sponsorship by Kaiser Permanente. Small businesses are the engine for the local economy and they are also the engine for getting people to start walking and biking for short trips and fitness.

Those few (45) who availed themselves of the opportunity to log their steps weekly showed an increase in walking by approximately 24% over the course of 8 weeks.

### *Ten Toe Express Walks*

To help people get started and meet others to walk with, Options planned 11 different walking routes in the area of varying lengths. Staff led 22 walks from May to October. Each highlighted great places to walk within various southeast and Milwaukie neighborhoods.

The walks included historical facts, tours, Heritage trees, water supply and reservoir information. Several regular walkers came from previous years' walks. Attendance averaging 25 to 45 participants with two extremely popular walks topping out at 55 (Elk Island) and 119 (Historic Reedway).



### **Senior Strolls** (Lead Staff – Donna Green)

Senior Strolls is an outreach program intended to get seniors walking more as well as to encourage them to consider walking as a transportation option. A series of stroll routes show off local points of interest, including residential and commercial areas, parks, historic schools and churches, libraries, transit centers, etc. The series is planned in such a way that the shorter strolls precede the longer strolls, thus enabling seniors who haven't been walking to build endurance.

**This is a great program!  
For me it means  
discovering areas of the  
city I never knew as well  
as history.**

This year 642 residents ordered Senior Strolls information with an additional 1000 flyers distributed at community centers and events. One hundred and sixteen came along on at least one of the 22 scheduled strolls May through October. Participants repeatedly state their number one reason for participating is to help them stay active. In a participant survey, 71% said they had replaced short driving trips with a walk instead.

A welcome kit was given to all participants including information, such as the Southeast Portland walking map, a walking log, a pedometer, a Ten Toe Express Walk Schedule, a flier on Multnomah County Aging and Disability Services, Ten Toe coupon book, magnifier/bookmark, and other items.

### **Portland By Cycle** (Lead Staff – Jeff Smith and Timo Forsberg)

The goal of the Portland By Cycle campaign was to encourage new and existing bicycle riders to use their bicycles for more trips and new trip purposes. To help residents overcome barriers to cycling, Options offered a Portland By Cycle kit with accessories and information, Portland By Cycle rides and workshops, Women on Bikes rides and clinics, bicycle helmet distribution, Get Lit bicycling lights distribution, and individualized bike route planning.



### *Portland By Cycle Bike Kit*

The Portland By Cycle Bike Kit proved popular with local residents. Sixty-five percent of all households ordered a kit from the order form. An additional 1,000 kits were made

available at Options events and activities. As always, the bicycle maps were in high demand. The reflective leg band, ride and workshop schedules, and Women on Bikes information were also well received.

Staff prepared 40 individualized bike route trip plans requested by SmartTrips Southeast participants.

### *Portland By Cycle Rides*

The 2007 Portland By Cycle rides consisted of 16 twice-weekly rides starting in southeast Portland, aimed at adult riders who are new to cycling. A different weekly theme, such as Marvelous Milwaukie and Heritage Trees, provided a framework for selecting the routes and enticed participation from a broader audience than just bikers. Routes were designed to provide a comfortable and safe riding experience for beginning cyclists of about 8 to 10 miles.

Cumulatively over 200 riders came along on rides, with over 60 different riders comprising the group of Portland By Cyclists. Ridership was lower this year than in the past, due partly to uncooperative weather. Our first and normally most popular ride, the Sweet Summer Cycle, attracted about 30 riders each day, due to 100+ degree temperatures. The following week's Springwater Fling ride was beset by unseasonable July rain.

**"While there was a certain "safety in numbers" riding with the group, riding by myself has proven to be far easier than expected. As long as I follow safe bike habits - reinforced by your pre-ride talks - I feel cars know my intentions and have had no trouble co-existing with them on my rides."**

Each ride employed at least two volunteers: one to lead the ride and an additional ride assistant. Volunteers were trained and instructed on their roles and responsibilities.



### *Portland By Cycle Workshops*

Nine Portland By Cycle workshops were offered weekly during the Spring and early Fall of 2007 including *Bike Commuting Basics* (held 2x), *Bike Maintenance Basics* (held 2x), *Bike Touring*, *Buying a New or Used Bike*, *Shopping by Bike* (held 2x), and *All Season Cycling*. Attendance was over 150 total for all the workshops, with nearly 100 individuals participating. The best-attended sessions were Bike Maintenance.

Sessions were led by Transportation Options staff with content developed by Options. For the *Bike Maintenance* workshop as well as *Buying for a New or Used Bike* Options relied on the expertise of the local Seven Corners bike shop owner Corey Cartwright to lead the bulk of the sessions.

**Women on Bikes** (Lead Staff – Janis McDonald)

Overall, the Women on Bikes program was a great success. Participants of all



ages became more familiar with the bicycle. They stretched their comfort levels and conquered their fears.

This program garnered significant media interest, generating several local and national news articles or mentions including a Sundance documentary video. The program was successful in getting newer cyclists riding. Most participants were 40-50 years old. All had ridden at some point in their lives, but most had not ridden in a long time or were just starting out.

The clinics and conversations covered bike selection, gear for bike and cyclist, bike handling skills, basic to more in depth bike maintenance, the city's bikeway network, cyclists' rights and responsibilities, and winter commute tips. Rides enabled participants to practice skills, try different routes, meet other women to ride with, and demonstrated the ease of commuting by bike.

**“Attended a seminary early in the summer on Women on Bikes. It helped direct me in terms of making a bike purchase and gain the confidence to tackle a daunting commute to school. I made the commute by bike all summer. Really liked that it was geared toward women!”**

SmartTrips Southeast were offered the Women on Bikes brochure with a calendar of rides and clinics. The brochure was also included in the Portland By Cycle kit. The total number of

households that received the WOB brochure via the order form was 2,655 with 993 specifically asking for WOB information. An additional 1000 picked up the information at events and bike shops in the area. There were 118 women that participated in the clinics and rides.

### Events/OptionsMobile (Lead Staff – Janis McDonald)

The OptionsMobile, a hybrid vehicle modified to act as a mobile display and tabling event car, was at seven outreach events in the SmartTrips Southeast area. Twenty-six trained volunteers, known as Options Ambassadors, helped staff these events. Information on all SmartTrips activities was available as well as a host of other Portland Transportation materials including bicycle and walking maps, transportation fact sheets, and brochures and information about transportation options.



Some events attended in or close to the SmartTrips Southeast area included: Three Bridges SmartTrips kick-off event, Sellwood Conservation Celebration at Sellwood Middle School, Moreland Farmers Market, Woodstock Street Fair, Woodstock Neighborhood Picnic, and PGE Transportation Fair.

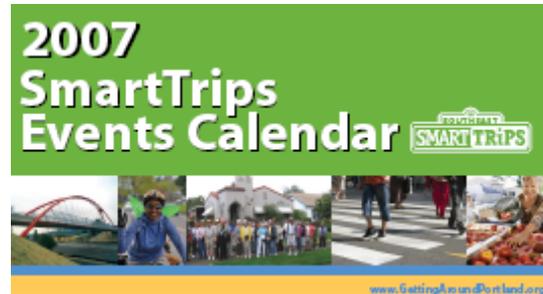


**Transit Tracker™** A key component of SmartTrips Southeast's success was the TriMet and Transportation Options partnership. Three thousand households or 53% of SmartTrips participants ordered some kind of transit information

including bus and MAX schedules and Honored Citizen guides. Personalized transit tracker cards were distributed to over 950 households or 24% of all orders. Transit tracker cards included the two to four closest bus stop ID numbers enabling participants to find out, in real time, when their next bus is going to arrive at that stop. This service, once discovered by participants, greatly increases the willingness to ride transit – eliminating the waiting factor. Even with a schedule, the certainty of when the next bus will actually arrive contributes greatly to a better overall transit experience.

### **Events Calendar** (Lead Staff – Linda Ginenthal)

To pull all the programs together, an events calendar was created for May through October with dates, times, start locations and a location map for the 96 SmartTrips walks, strolls, rides, clinics, workshops and kick-off event. Every household who ordered materials was given this handy schedule along with a thank you letter with contact information.



## **Performance Measurement and Results**

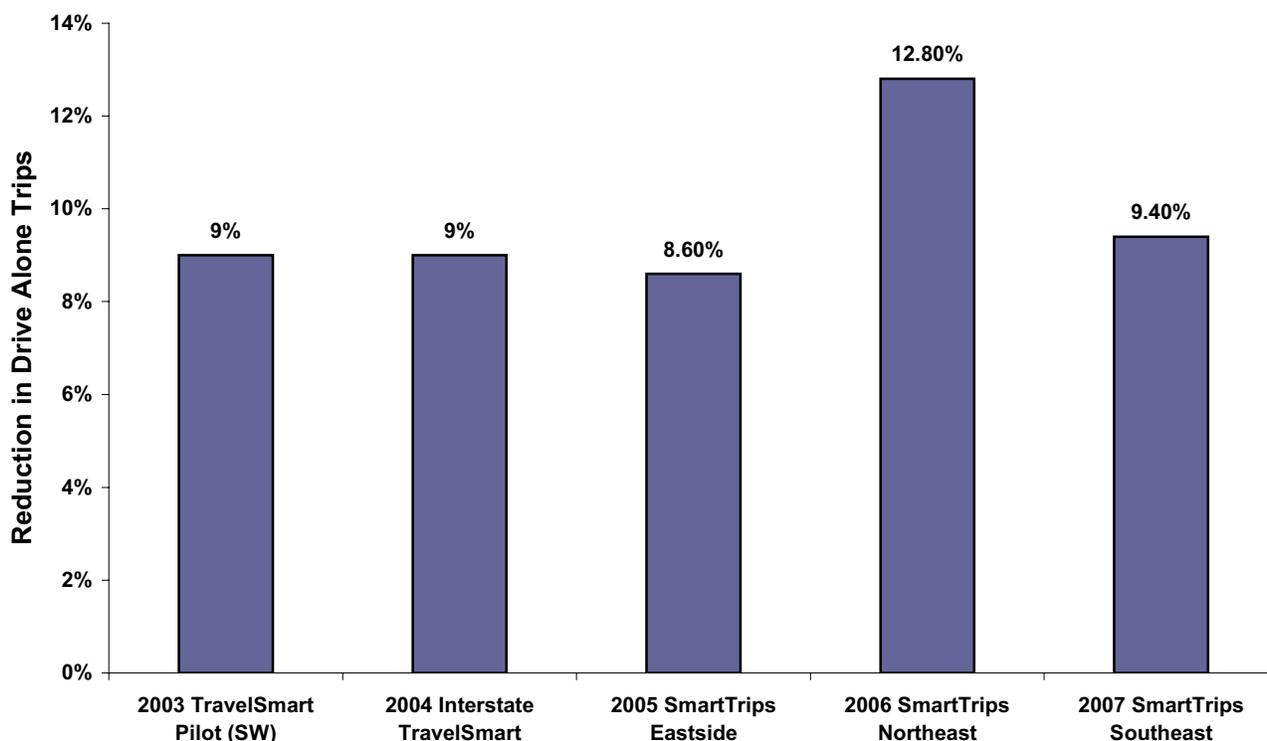
SmartTrips Southeast saved over 19 million vehicle miles traveled in 2007 and reduced drive alone trips by 9.4%. This is equivalent to shifting about one trip per week, per person from driving alone to another, more environmentally-friendly way to go such as walking, bicycling, riding transit and carpooling.

The SmartTrips Southeast conducted both before and after surveys in the SmartTrips area. Professional survey consultants conducted these phone interviews in September 2006 and September 2007. Additionally mail and web qualitative surveys were sent to all program participant households (totaling 5,000 households). See Appendix A for complete survey results.

Trip diaries from the phone surveys showed a relative decrease in drive alone trips (9.4%). These results are consistent with the four previous individualized marketing programs in Portland whose results range from 8.6% to 12.8% reduction in drive-alone trips. Bicycle counts, Flexcar memberships, and CarpoolMatchNW.org sign ups showed marked increases supporting the phone and qualitative survey results.

One of the keys to a successful travel behavior change campaign is communicating that reducing drive alone trips does not equate to a loss of personal mobility. Residents in the SmartTrips Southeast area reported an average of 3.3 one-way trips per day. This is consistent with daily mobility data from Portland and around the globe.

**Reduction in Drive Alone Trips:  
Individualized Marketing Projects in Portland 2003-2007**



**Material Distribution**

<b>SmartTrips Southeast Specific Materials</b>	<b>Quantities Distributed</b>	<b>Offered in GAP Options mailer</b>
SmartTrips Southeast Newsletters	1 <sup>st</sup> , 2 <sup>nd</sup> , and 3 <sup>rd</sup> = 23,400 each 2 newsletters 5000 each	
GAP Options materials brochure/ order form & follow up postcards	23,400 each	
Southeast Portland Walking Map	7,000 (in Ten Toe kit)	<b>X</b>
Ten Toe Express walking kits	6,000	<b>X</b>
Portland By Cycle kits	5,000	<b>X</b>
Portland By Cycle Door hangers	5,000	
Portland By Cycle flyer	6,000 (in PBC kit)	
Women on Bikes flyer	6,000 (in PBC kit)	<b>X</b>
WOB Resource brochure	3,000	
Portland By Cycle Guide	6,000 (in PBC kit)	<b>X</b>
Senior Stroll flyer	2,500	<b>X</b>
<b>Incentives</b>		
SmartTrips Umbrellas	1,636	<b>X</b>
Bandana Bicycle Map	1,215	<b>X</b>
Options T-shirt	891	<b>X</b>
Milwaukie History Book	117	<b>X</b>

<b>Transportation Options Materials</b>		
Citywide Bicycle Map	6,500 (in PBC kit)	<b>X</b>
Southeast Portland Neighborhood Bicycle Map	6,500 (in PBC kit)	<b>X</b>
Northeast Portland Neighborhood Bicycle Map	1,000	<b>X</b>
Outer Southeast Portland Neighborhood Bicycle Map	1,100	<b>X</b>
Milwaukie Bike Map	168	<b>X</b>
CarpoolMatchNW.org materials	290	<b>X</b>
<b>Other Agency/Organizations Materials</b>		
TriMet info, maps, schedules, Honored Citizen information	8,174	<b>X</b>
Flexcar brochure	561	<b>X</b>
AAA Safe Driving for Seniors booklet	403	<b>X</b>
Water Bureau Indoor Conservation kit	1,851	<b>X</b>
Water Bureau Outdoor kit	2,317	<b>X</b>

## **Staffing**

Each staff member of Transportation Options had a role to play in making the program a success.

<b>Staff Person</b>	<b>Lead Role</b>	<b>Allocated Time</b>
<b>Linda Ginenthal</b> Program Manager	Planning and Implementation	65%
<b>Dan Bower</b>	GAP Options, Performance Measures	25%
<b>Rich Cassidy</b>	Ten Toe Express	65%
<b>Donna Green</b>	Senior Strolls	35%
<b>Barbara Plummer</b>	GAP Newsletter	45%
<b>Jeff Smith</b>	Portland By Cycle kit and workshops, Bike trip planning	35%
<b>Timo Forsberg</b>	Portland By Cycle Rides, Website	70%
<b>Janis McDonald</b>	Women on Bikes, OptionsMobile Events, Options Ambassadors	70%
<b>Total Staff Time</b>		<b>4.1 FTE</b>

Three 32-hour per week staff assistants (Carl Larson, Benjamin Doyle, and Elly Blue) processed and delivered SmartTrips Southeast orders for 12-14 weeks included in the materials and services budget.

## Volunteers

Volunteers were used extensively for the OptionsMobile outreach events, Portland By Cycle and Women on Bikes rides, and Ten Toe Express and Senior Stroll walks. Most volunteers were trained Options Ambassadors. Ambassadors received three to four hours of “classroom” training as well as training on the job. A total of 26 new and returning Ambassadors participated in the SmartTrips Southeast projects.

## Materials and Services Budget

The program costs amount to \$10 per person in the SmartTrips area. This 23,400-household program costs \$570,000. This includes 4.1 FT staff and most materials and services. Not included are computer and general overhead (staff overhead is included) plus printing of the bicycle maps and transit schedules.

SmartTrips Options Materials	\$41,600	
SmartTrips delivery staff	\$20,000	
Professional Surveys	\$37,200	Metro grant \$15,000
Ten Toe Express Southeast Portland Walking Map	\$37,600	Kaiser Permanente sponsorship \$40,000
Portland By Cycle Kit Rides and Workshops	\$27,950	
Women on Bikes	\$3,600	
Options Mobile Events/Getting Around Portland Ambassador Program	See below	
SmartTrips Southeast Newsletter	\$28,950	
Senior Strolls	\$2,150	
Miscellaneous and Kick-Off event	\$4,700	
<b>Totals</b>	<b>\$203,750</b>	Metro grant \$50,000

### **Outreach materials distributed in target area budget not included above**

Bike maps = \$9,100 (all maps citywide) and Options Ambassadors = \$950

## Timeline

This outlines of major activities for SmartTrips Southeast.

### **September 2006**

- Before survey in the field
- Presented proposals to PDOT leadership

### **November 2006**

- Project work plans written and developed
- Community/Neighborhood presentations

### **December 2006**

- Finalized Comprehensive Plan
- Community/Neighborhood presentations
- Solicit sponsorships and coupons for events and coupon books

### **January 2007**

- Project materials development and community input on projects
- Partnership agreements finalized

### **February**

- Continued materials development

### **March**

- First Newsletter
- Materials printed and assembled for SmartTrips Options mailer

### **April**

- SmartTrips Options mailer began going out
- Began filling orders

### **May**

- 2<sup>nd</sup> Newsletter
- SmartTrips Options mailer cont. going out
- Continued filling orders
- Kick-off Event
- Ambassador and Volunteer Trainings
- Senior Strolls began
- Ten Toe Express Walks began
- Portland By Cycle Workshops began
- Women on Bikes clinic and rides began
- Options Mobile events

### **June**

- SmartTrips Options mailer cont. going out
- Continued filling orders
- Ten Toe Express Walks
- Senior Strolls
- Ride leader training
- Portland By Cycle door hangers distributed
- Portland By Cycle Workshops
- Women on Bikes clinic and rides
- Options Mobile events

### **July**

- Continued filling SmartTrips Options orders
- 3<sup>rd</sup> Newsletter
- Portland By Cycle rides
- Ten Toe Express Walks
- Senior Strolls
- Options Mobile events
- Women on Bikes clinic and rides

### **August**

- Portland By Cycle rides
- Ten Toe Express Walks
- Options Mobile events
- Senior Strolls
- Women on Bikes clinic and rides

### **September**

- 4<sup>th</sup> Newsletter
- Options Mobile events
- Ten Toe Express Walks
- Senior Strolls
- Portland By Cycle Workshops
- Women on Bikes clinic and rides
- After Survey in the field

### **October**

- Walk and Bike to School Day
- Options Mobile events
- Portland By Cycle Workshops
- Senior Strolls
- Southeast completion party/event

### **November**

- Compiled Projects evaluations
- Final Newsletter

### **December**

- Final Report written and posted online

# Appendices

## SmartTrips Southeast

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December 2007  
Portland Office of Transportation  
Bureau of Transportation System Management  
Transportation Options

## **Appendix A**

### **Measurement Tools and Results**

#### **Overview**

SmartTrips Portland was once again successful at shifting behavior and reducing drive alone trips in 2007 with SmartTrips Southeast. The individualized marketing approach coupled with outreach activities and customized rides, walks, and clinics reduced drive alone trips and increased walking, bicycling, transit, and carpool trips for all types of trips including work, leisure, shopping, school and others.

#### **Methodology**

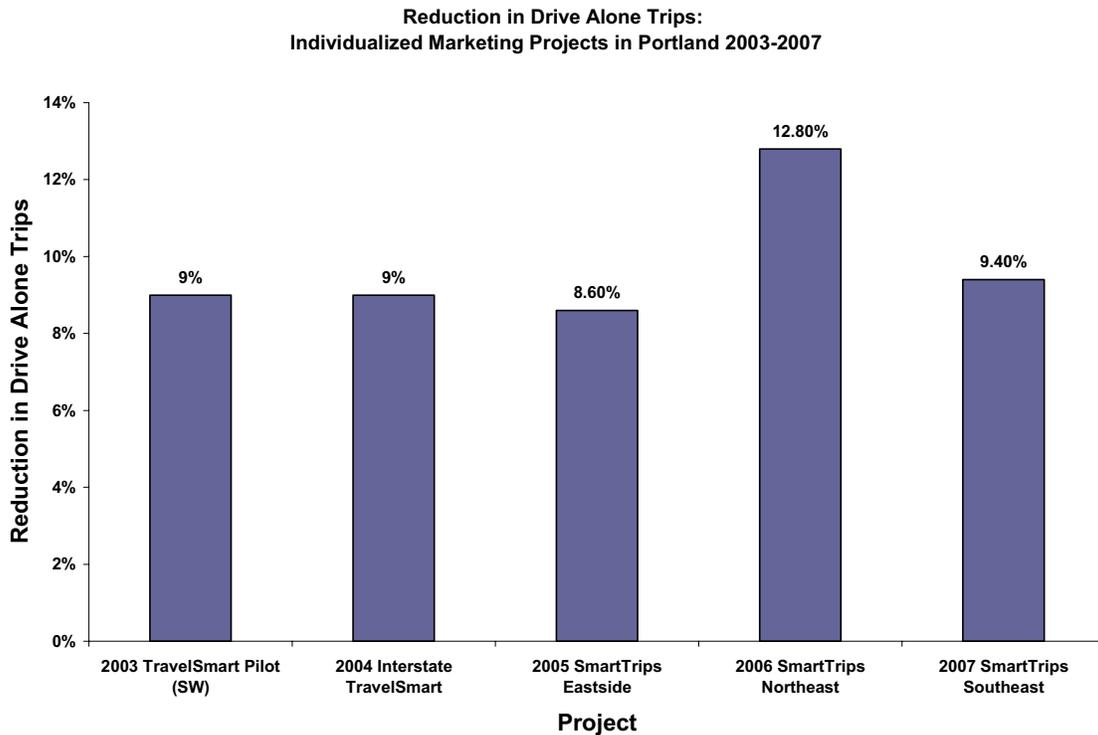
SmartTrips Southeast was evaluated using a blend of statistically significant survey data, counts, and qualitative or anecdotal data gathered through a post program evaluation survey. Campbell Delong Resources Inc performed the primary measurement piece of this project; the random pre and post telephone survey included a one day trip diary administered equally across all days of the week. The telephone survey was administered before the project began in September 2006 and again after the project was completed in September 2007. Both the pre and post surveys were statistically significant at the 96% confidence level and were administered to 600 randomly selected households in the target area matching gender and age demographics as provided by the US Census.

In addition to the surveys, video counts were done at four key intersections in the target area to gauge the level of bicycle use before and after the project. Bicycle counts were done during peak hours of 7-9am, 11-1pm, and 4-6pm for three days (Tuesday, Wednesday, and Thursday) at each location pre and post. Similarly, the number of residents registered in the region's carpool matching database, [www.CarpoolMatchNW.org](http://www.CarpoolMatchNW.org) was also counted pre and post as were the number of residents who registered for the region's car-sharing service, Flexcar.

Lastly, each of the approximately 5,000 active program participants received a customized evaluation survey that was mailed or emailed upon the program's conclusion in early October 2007. The qualitative program evaluation provides information on the usefulness of certain materials and programs as well as some anecdotal data about how people used the information provided to change behavior.

#### **Results**

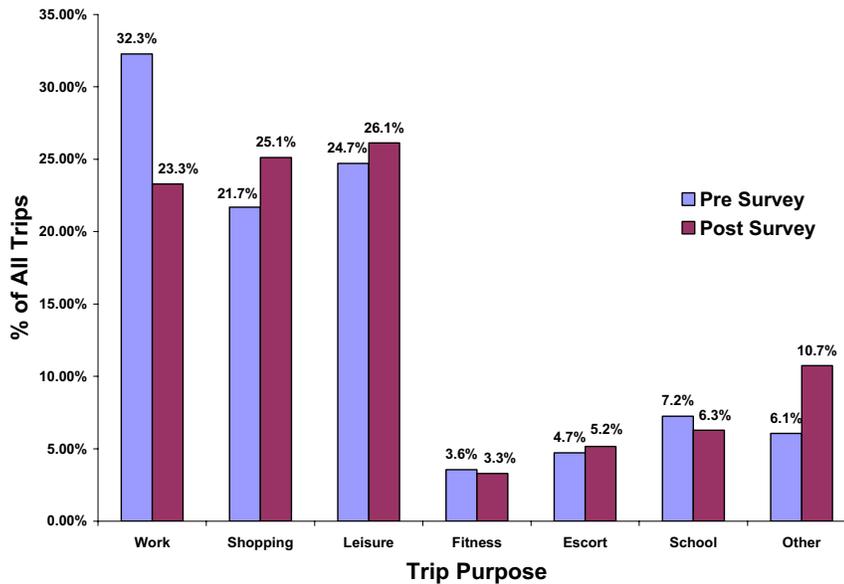
The pre and post trip diaries showed a decrease in drive alone trips of 9.4% among all residents in the SmartTrips Southeast target area. <sup>1</sup>The 9.4% decrease is in line with past individualized marketing projects in the region, as shown in the chart below. SmartTrips Southeast influenced behavior change across the board to varying degrees with significant increases in bicycle use for work and shopping trips and increases in walking for fitness and school trips. Carpooling saw the largest change with significant gains in mode share for all trip types this year. Overall there was a 17.5% increase in environmentally friendly travel modes among southeast residents.



There was a sharp decline in work trips among survey respondents in 2007 coupled with an increase in almost all other trip purposes including “other” trips. However the range for each trip purpose is consistent with past projects with work trips typically comprising 25-30% of all trips. Similar to past projects; survey respondents recorded an average of 3.3 trips per day in the post survey;, which is up a bit from 3.1 trips per day reported in the pre, but still signifying that residents can change their behavior without greatly affecting their personal mobility.

<sup>1</sup> The 9.4% represents Portland residents only. Milwaukie residents will be evaluated in a separate effort in April 2008.

Trip Purpose: SmartTrips Southeast Pre and Post Survey



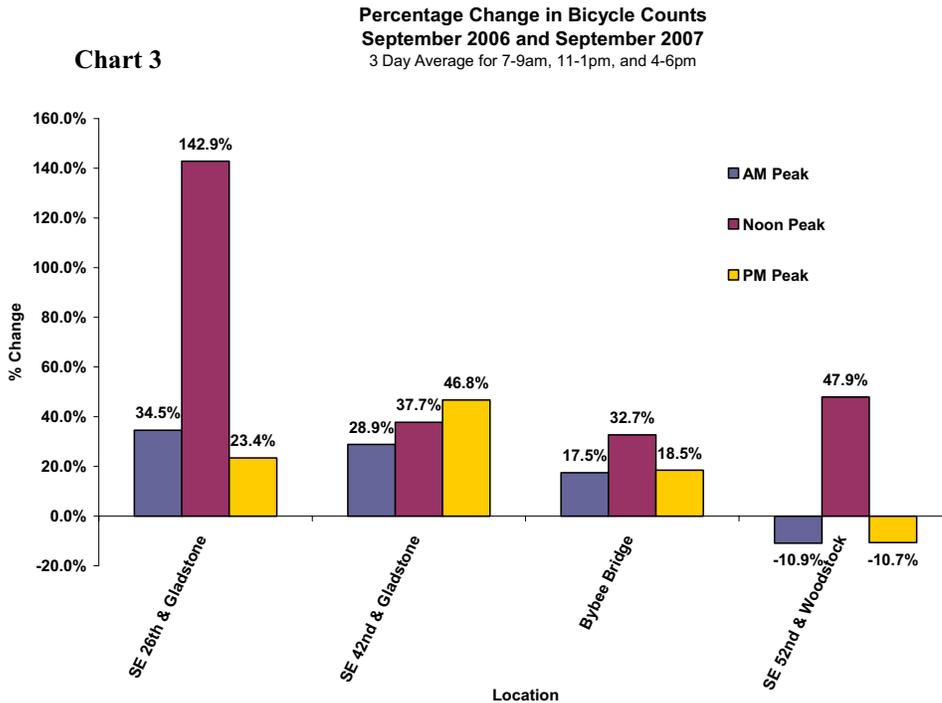
There were some other interesting trends that emerged from the data collection including:

- An increase in bicycle mode share among those over fifty five years old from 1% to 4% for all trips
- 63% of cyclists did not have children (compared to 53% of the general population)
- 58% of bicycle trips were made by women.; this is the first Smart Trips survey where women made more bicycle trips than men
- 73% of residents owned a bike and the average household owned 1.9 cars.
- SmartTrips lead to a 20% increase in fitness walking trips
- The drive alone rate on Saturdays dropped from 51% to 30%

The survey data suggests that SmartTrips can improve on its ability to shift behavior for school trips and escort trips. For both trip purposes there was little or no positive shift in travel behavior. At present time, school related trips and children in general are not the focus of SmartTrips Portland, but rather the City's Safer Routes to School program. The measurement plan reflects this distinction, as only those over eighteen years old are surveyed for SmartTrips Portland. Escort trips (taking somebody somewhere is the purpose of the trip) present a unique problem. While they make up only 5% of all trips, a disproportionate number (91%) are made using the automobile.

## Counts

Bicycle use was tracked through pre and post video counts at four key intersections in the target area. The chart below shows the relative change in bicycle use for the counts performed in September 2006 and September 2007. Count totals increased 26.5% over the year, slightly higher than the 18% increase in bicycle use realized across the city as reported in the annual bicycle count report.



The number of residents who registered for the region’s carpool matching database [www.CarpoolMatchNW.org](http://www.CarpoolMatchNW.org) was tracked by zip code as an indicator of increased awareness of transportation options. The two zip codes in the target area (97202 and 97206) had more than 10 times the number of registrations than the average zip code in the region and were the number one and three respectively in terms of the number of registrations between September 2006 and September 2007. Flexcar, the region’s carsharing company also reported that they added 324 new members in the target area over that same time while doing no outreach of their own. Flexcar attributed this increase to the SmartTrips program and the growth in membership compares very well with other zip codes where Flexcar did do major outreach and marketing efforts of their own.

### **Effectiveness of reducing vehicle miles traveled (VMT)**

The average Portland resident travels 20.3 miles in a vehicle each day, according to Metro’s Data Resource Center. The goal of SmartTrips Southeast was to reduce the amount of daily vehicle miles traveled (VMT) by helping residents shift one or two trips per week from drive alone to bicycling, walking, carpool, and/or transit. Some southeast residents are lucky enough to work near

home and found it easy to walk or bike to work during the program; others found it easier to try riding MAX to a game or walking to a nearby shop. Each trip, regardless of purpose or distance, represents significant energy savings while contributing to the City’s goal of reducing greenhouse gas emissions.

**SmartTrips Southeast saved over 19 million VMT in 2007<sup>2</sup>**, which is equivalent to shifting about one trip per week, per person in southeast, from driving alone to another, more environmentally-friendly mode such as walking, bicycling, or transit.

The VMT calculations take into account changes in behavior associated with each type of trip (work, leisure, shopping, etc.) recognizing that some trip types are, on average, longer than others and that SmartTrips Southeast affected different types of trips to varying degrees. For example, the surveys show that SmartTrips Southeast was most effective at reducing drive alone trips for work, leisure, and shopping trips, and less effective for school or escort trips. Comparing the changes in drive alone rates from pre and post surveys among each trip purpose yielded a net reduction of 1.39 VMT per day, per person in the target area. The majority of the VMT reduction came from work trips as they have the longest average distance. Interestingly, while there was significant behavior change for shopping trips (53% drive alone pre and 49% post) there was an increase in the reported number of shopping trips which offset the VMT reductions realized by a decrease in auto use.

Reducing 19 million vehicle miles reduces congestion and saves over 988,000 gallons of gas but also has significant benefits on air quality and the environment. Table 2 details the significant savings in air quality

Table 1

**Annual VMR: SmartTrips Southeast**

Residents in SmartTrips SE area	50,000
Residents over 18 years old*	41,000
Average Daily VMR	1.39
Travel Days per Year	341
<b>Total annual VMR</b>	<b>19,433,590</b>

\* 2000 Census

pollutants common to automobile use in Portland. In addition to reducing these common pollutants, encouraging walking, biking, transit, and carpooling significantly reduces the amounts of both particulate matter and air toxic pollutants such as benzene, as outlined in Table 3. Particulate matter comes from all automobile emissions; however, diesel engines emit far more than gas engines. Particles smaller than 10 micrometers in diameter can cause or aggravate a number of health problems and have been linked with illness and deaths due to heart or lung diseases.

<sup>2</sup> Portland only; this number does not include Milwaukie residents.

**Table 2**

**Air Emissions Reduced by SmartTrips SE**

<b>Emission Type</b>	<b>Pounds Reduced</b>
VOC	55,268
Nitrogen Oxide	46,403
Carbon Monoxide	626,894
Carbon Dioxide	19,131,985

**Table 3**

**Particulate Matter and Air Toxics Savings**

<b>Particulate Matter</b>	<b>milligrams</b>
Exhaust Particulate Matter 10 Microns	107,470,242
Brake PM10	242,917,382
Tire PM10	155,467,125
<b>Total PM10</b>	<b>505,854,749</b>
Exhaust Particulate Matter 2.5 Microns	97,797,920
Brake PM2.5	102,996,970
Tire PM2.5	38,866,781
<b>Total PM2.5</b>	<b>239,661,672</b>
<b>Air Toxics</b>	
Benzene	640,700,970
1,3-Butadiene	57,520,218
Formaldehyde	162,205,289
Acetaldehyde	118,208,242
Acrolein	7,998,913

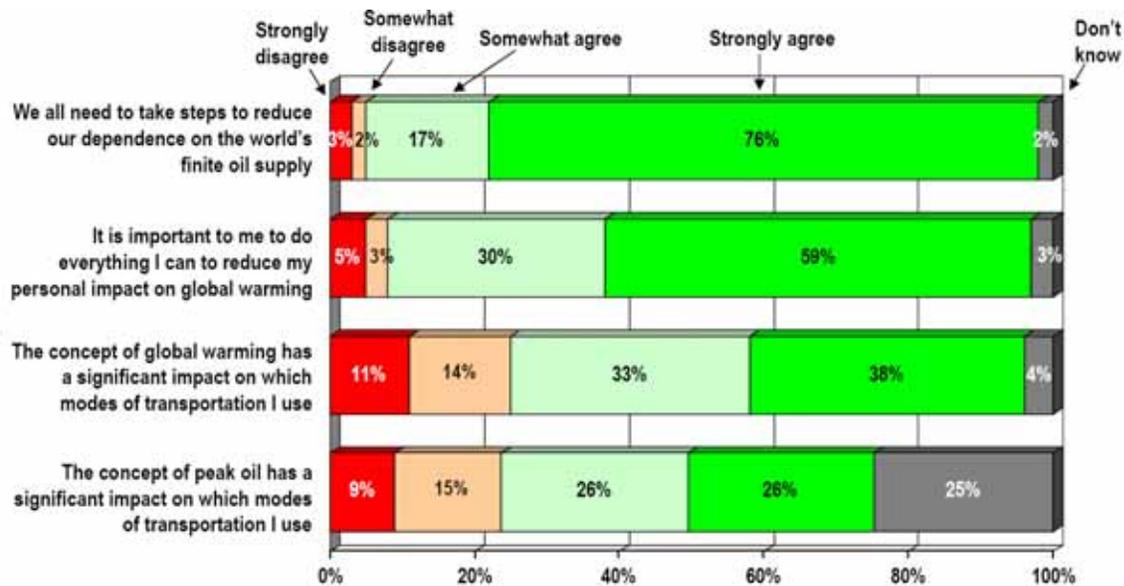
## **Appendix B**

### **Materials and Program Evaluation.**

#### **Overview**

Residents of southeast Portland are open to travel behavior change and are seeking information for a variety of reasons. For example, recent survey work done by the Drive Less. Save More campaign showed saving money and time are the primary motivators for residents in the region to seek out information

about transportation options. Building on this research, SmartTrips Southeast residents were asked to respond to a series of questions related to issues that are central to the future of transportation and personal mobility in this region: global warming and peak oil<sup>3</sup>. The chart below outlines the level to which residents strongly agree or disagree with statements related to global warming, “Peak Oil”, and transportation decisions. Clearly people understand global warming and are motivated to change their behavior as a result however there is more ambiguity surrounding oil as a finite resource with respect to personal mobility and transportation options.



Residents of the SmartTrips Southeast target area perceive they are driving alone less often than they were three months prior to the campaign. When asked to respond to the question, “Do you think you are driving alone to places more often, less often, or about the same number of times each month as you were three months ago?” 28% of residents responded less often, up from 18% in the pre-survey, a 55% increase. Residents were also asked if they recalled hearing messages about SmartTrips over the three months prior to the post survey and 57% responded that they did recall hearing about the campaign. Among the entire population women (64%) those residents with children (64%), and those with college degrees (62%) had the highest percentage of message recollection.

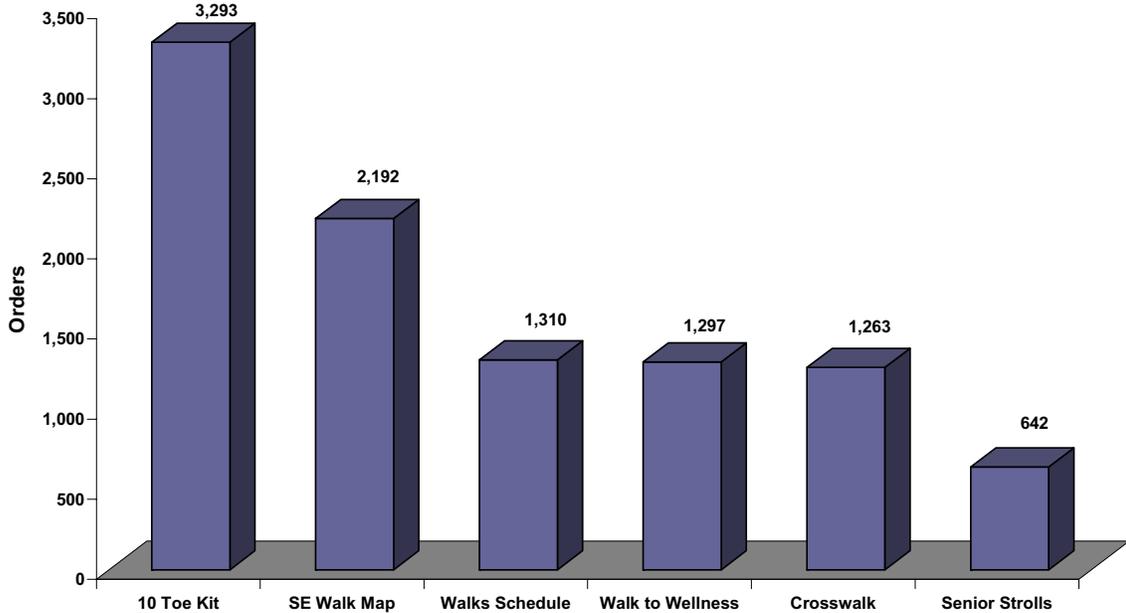
## Materials Ordered and Qualitative Survey Results by Mode

### *Walking*

<sup>3</sup> Portland residents only, these numbers do not include Milwaukie residents.

As with all previous SmartTrips projects, the Ten Toe Express Walking Kit was the most popular walking material ordered and the most popular item overall with over 83% of participants ordering it in 2007.

**Walking Materials Ordered by SmartTrips Southeast Participants**



Program participants reported walking for a variety of reasons; replacing car trips with walking for shopping, errands, or fitness. Only 2% of the surveyed population reported taking no walking trips over the summer and only 7% reported having not replaced a car trip with walking at some point. For most participants replacing a car trip with a walking trip to local store or for a short errand proved quite easy.

**Walking Trips**

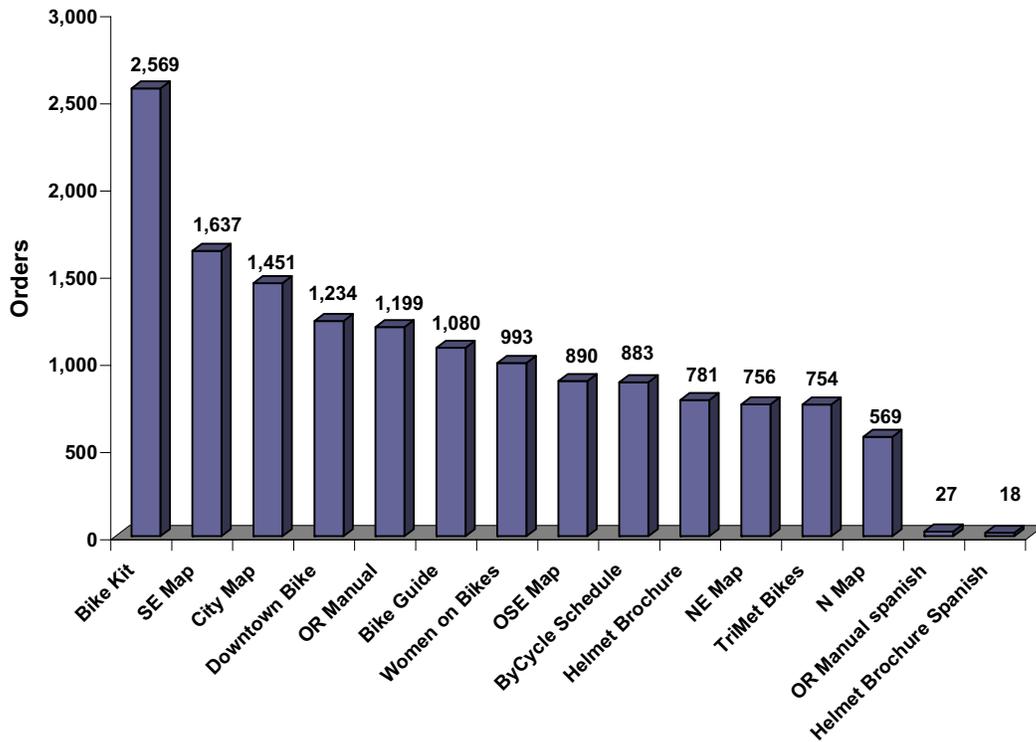
What types of walking trips did you make in the last few months? (check all that apply)		
Walked to work	88	13%
Walked to MAX or Bus	353	52%
Walked to shopping	503	74%
Took fitness walk	441	65%
Walked to do other errands	481	71%
Walked to a friend's house	343	50%
None	15	2%
Other (explain)	132	19%

On average, how many trips do you now make walking instead of driving a car? (answer one)		
Nearly one every day	188	28%
Three or four a week	151	22%
One or two a week	193	28%
One or two a month	102	15%
None	46	7%

**Bicycling**

Similar to walking, the Portland by Cycle kit was the most popular bicycle item offered this year, with over 65% of participants ordering it. This was the first year Spanish brochures were offered (Oregon Cyclist Manual and the Perfectly Fitted Helmet Brochure) and only 45 were distributed among Southeast residents in 2007. This was also the first year for the Downtown Bicycle Map and Guide and it proved quite popular with 1,234 total orders.

### Bicycling Materials Ordered by SmartTrips Southeast Participants



Program participants reported using the materials to help them bike to work, to shopping, for errands and a number of other destinations. Unlike walking however, a significant number (31%) of participants reported taking no bicycle trips over the summer. Eighty eight residents reported having replaced a car trip with a bicycle trip “nearly every day” in 2007 and another 74 reported doing so “three or four” times a week.

#### Bicycle Trips

What types of biking trips did you make in the last few months? (Check all that apply)

Biked to work	186	28%
Biked to MAX or Bus	50	8%
Biked to shopping	252	38%
Took fitness ride	304	46%
Biked to do other errands	261	40%
Biked to a friend's house	196	30%
None	205	31%
Other, (explain)	112	17%

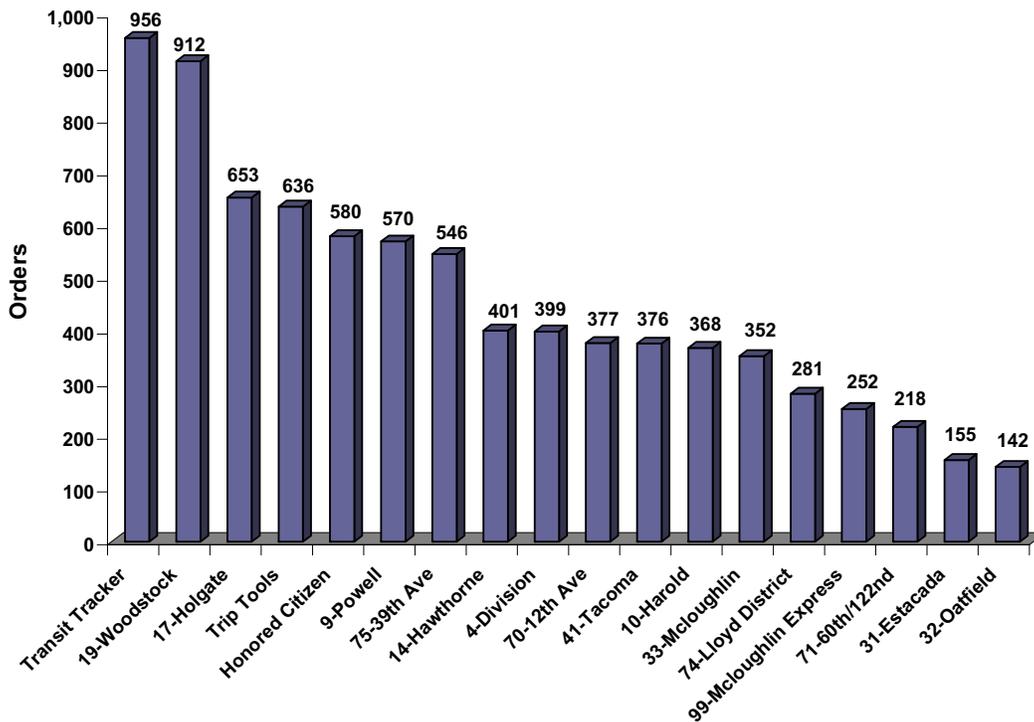
On average, how many trips do you now make biking instead of driving a car? (answer one)

Nearly one every day	88	13%
Three or four a week	74	11%
One or two a week	130	20%
One or two a month	111	17%
None	249	38%

#### Transit

As was the case in 2006; TriMet's Transit Tracker card was the single most popular transit related item offered to SmartTrips Southeast Portland residents. The Transit Tracker card is delivered to residents with the stop ID hand-written in for the two stops closest to their home. The #19 Woodstock bus line was also quite popular as its route snaked through a large portion of the target area serving all the neighborhoods.

### Transit Materials Ordered by SmartTrips Southeast Participants



Transit use by participants mirrored bicycle use in that residents used transit most frequently to get to work and shopping. However, the most frequent transit trip reported was for traveling to an event (38%). Also similar to bicycling, 28% of the participants report taking no transit trips and 31% did not replace any car trips with transit. Still, a full 69% did report shifting modes from driving to the more environmentally friendly transit.

#### Transit Trips

What types of transit trips did you make in the last few months? (check all that apply)

Bus/Max to work	193	29%
Bus/Max to shopping	189	28%
Bus/Max to event	255	38%
Bus/Max to school	37	5%
Bus/Max to do other errands	190	28%
Bus/Max to a friend's house	65	10%
None	189	28%
Other (explain)	93	14%

On average, how many trips do you now make using transit instead of driving a car? (answer one)

Nearly one every day	87	13%
Three or four a week	50	8%
One or two a week	76	11%
One or two a month	245	37%
None	207	31%

Lastly, when SmartTrips Southeast participants were asked if any of the programs or materials helped them shift from driving alone to walking, biking, transit, or carpooling 68% of participants said they did.

**Did any of the SmartTrips programs or materials help you replace drive alone trips with more environmentally friendly modes?**

