# Oregon Department of Transportation Individual Transportation Options Pilot Project Contract No. 24872

Final Report of IndiMark® and Behavioral Analysis

IndiMark<sup>®</sup> and Behavior Change Results

For the Cities of Salem-Keizer, Eugene, and Bend, Oregon

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Submitted by

SH-

Socialdata America Ltd 5 1020 SW Taylor St, Suite 800 Portland, OR 97205

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# **Executive Summary**

Socialdata America was hired by the Oregon Department of Transportation (ODOT) in October of 2005 to conduct an Individualized Marketing (IndiMark<sup>®</sup>) project in the cities of Salem-Keizer, Eugene, and Bend, Oregon. The goal of the project was to reduce single-occupant vehicle use and promote environmentally friendly modes of transportation such as walking, bicycling, ridesharing, and public transportation.

This report provides a detailed account of the marketing campaign conducted by Socialdata America during the spring and summer of 2006. It outlines the project phases, timelines, and methodologies used during the campaign. Also included in this report are response figures and final results for the 'Before' and 'After' travel surveys. Results from the in-depth analysis will be provided in a supplemental report.

The ODOT IndiMark<sup>®</sup> campaign focused on households that were interested in changing their travel behavior. During this campaign, Socialdata America personally delivered a total of 821 tote bags containing over 8,000 informational materials to households that requested information pertaining to environmentally friendly modes of transportation. A total of 200 stop specific bus schedules were distributed in Salem-Keizer and Eugene and 95 detailed public transportation and bicycle trip plans were created and delivered in all three areas. In addition, a total of 40 home visits were conducted for the bicycling, walking, and public transportation modes of travel.

The data provided in this report demonstrates successful travel behavior changes occurring in Salem-Keizer, Eugene, and Bend among project participants. The results from the project show substantial increases in environmentally friendly modes of travel (EFMs) following the IndiMark<sup>®</sup> campaign. EFMs (i.e., walking, bicycling, and public transportation modes of travel) increased by 31 percent for the project as a whole. EFMs also increased significantly in each project area—35 percent in Bend, 18 percent in Eugene, and 52 percent in Salem-Keizer. In addition, car-as-driver trips decreased by nine percent for the project as a whole. Car-as-driver trips decreased by 10 percent in Bend, three percent in Eugene, and 11 percent in Salem-Keizer.

It is important to note that mobility was not constrained due to these changes in travel behavior. The results indicate that on an average day of the year, Salem-Keizer, Eugene, and Bend residents spend 54 minutes traveling, making 3.2 trips to 2.0 activities and traveling 17 miles. Following the IndiMark campaign, cars were used less and for fewer trips. Car usage, trips, trip duration, and distance traveled all decreased following the marketing intervention. Over 1.3 million

vehicle miles were reduced as a result of the project, representing a nine percent VMT (vehicle miles traveled) reduction.

Physical activities also increased substantially due to the marketing efforts. Changes in active travel time (walking, cycling, and access and egress to public transportation or parked cars) increased from 104 to 112 hours per person/year, representing an eight percent relative increase. The IndiMark<sup>®</sup> campaign was therefore successful for increasing levels of physical activity for Bend, Eugene, and Salem-Keizer residents without compromising mobility.

# 1.0 Introduction

This report provides a detailed account of the Oregon Department of Transportation's Individualized Transportation Options Pilot Project (ODOT IndiMark<sup>®</sup> Pilot Project) in Salem-Keizer, Eugene, and Bend, Oregon. It outlines the development and implementation of the IndiMark<sup>®</sup> (also called TravelSmart<sup>®</sup>) campaign conducted in each project city. Work on this project began in October of 2005.

The project phases and timeline follow:

<pre>'Before' Survey Salem-Keizer and Eugene Bend</pre>	October and November 2005 January and February 2006
IndiMark <sup>®</sup> <u>Salem-Keizer and Eugene</u> Phase One Phase Two	November and December 2005 April and May 2006
Bend	February and March 2006
<b>Evaluation</b> 'After' Survey (all areas) In-depth Interviews (all areas)	June and July 2006 July and August 2006

This report is presented in eight sections. Chapter 1 provides an introduction and Chapter 2 describes the IndiMark<sup>®</sup> process and phases. Chapters 3 and 4 discuss the project background and implementation process. Chapter 5 includes response tables from the 'Before' survey. Chapter 6 presents a detailed account of the TravelSmart<sup>®</sup> marketing campaign, and Chapter 7 shows responses to the 'After' survey and indepth interviews. Chapter 8 presents behavior change results for the project as a whole and for each project area and Chapter 9 provides a conclusion.

# 2.0 Individualized Marketing (IndiMark®)

# 2.1 Introduction

The methodology selected for this project was the IndiMark<sup>®</sup> process. This technique was developed by Socialdata and used in more than 100 pilot projects and 100 global large-scale projects involving voluntary travel behavioral change programs.

# 2.2 IndiMark® Methodology

The traditional approach to achieving modal shift has focused on hard policies such as the provision of transportation services and infrastructure, pricing, and longer-term land use policies. The value of transportation system improvements can be maximized using a 'soft policy' approach. Soft policies are required to improve peoples' perceptions of the infrastructure and knowledge of services available in order to realize the full potential for travel behavioral change.

Socialdata has been at the forefront of travel behavior research for 30 years. The primary focus is on research and marketing in the field of mobility behavior. Socialdata's research has shown that so-called 'soft policies' can activate large potentials for travel behavioral change, often on the same scale or better than system improvements.

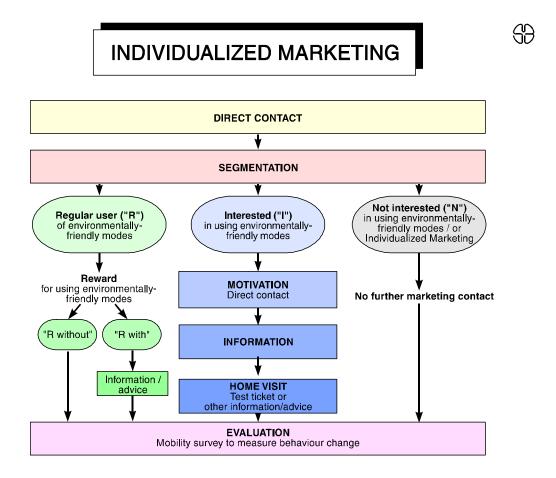
During the late 1980s, Socialdata pioneered IndiMark<sup>®</sup> as a technique for changing personal travel behavior. IndiMark<sup>®</sup> was utilized primarily to promote public transportation services; however, the program evolved in the late 1990s to include the promotion of other environmentally friendly modes such as bicycling, walking, and carpooling/vanpooling. The IndiMark<sup>®</sup> process recognized that people's reluctance to use environmentally friendly modes of transportation was largely due to a lack of information and motivation.

The key elements of the IndiMark<sup>®</sup> process are to:

- Personally contact all target households,
- Motivate them to think about their travel behavior, and
- Inform them about alternatives in their travel mode choice.

In general, IndiMark<sup>®</sup> means establishing a dialogue through an individualized, direct approach via a detailed step-by-step procedure as illustrated in Figure 2.1.

Figure 2.1 Individualized Marketing Flow Chart



The IndiMark<sup>®</sup> process involves several stages, each based on personal contact with the target households. This dialogue motivates people to consider and review their travel behavior in the context of their own life situations. People who are interested in changing their travel behavior are supported and encouraged, but the choice is always left to the individual.

The IndiMark<sup>®</sup> methodology consists of a series of phases that are listed in the text below:

## Contact Phase

During the Contact Phase a random selection of households in a defined area<sup>1</sup> were initially contacted via mailed survey announcement letters. The letters introduced the project and the consulting firm conducting the project (Socialdata America). Each letter was printed on an official city letterhead and included the name and signature of a local city representative.<sup>2</sup>

Once project participants had a chance to review the announcement letters (five to seven days), survey packets were mailed to each household so they would arrive the same day as the household's nominated sample day (Monday through Sunday). Included in the survey packets were: a household survey form, person forms (for recording trips), an explanatory letter, a Frequently Asked Questions (FAQ) brochure, and a self-addressed and stamped return envelope.

Households that did not return their surveys were contacted by telephone. These telephone calls were conducted by experienced Socialdata America staff and were instrumental in motivating households to return their survey forms and for answering any questions household members had regarding the travel survey.

#### Segmentation Phase

In the Segmentation Phase, households were divided into groups according to specific criteria<sup>3</sup>. Three main groups were formed:

• **Group 'I'** ("Interested") included households where no members were regular users of environmentally friendly modes of travel (i.e., biking, walking, and/or public transportation) but they were interested in changing their travel behavior. Group 'I' represented the 'receptive' households that were more likely to use environmentally friendly travel modes with personal contact, motivation and information. This group received the most attention.

<sup>&</sup>lt;sup>1</sup>Randomly selected households within city limits were used in the sample for each project area.

<sup>&</sup>lt;sup>2</sup> For the Cities of Salem-Keizer and Eugene, the Mayors signed the letters. For the City of Bend, the City Managers signed the letters.

<sup>&</sup>lt;sup>3</sup> The specific criteria comprised of questions on the survey form regarding various modes of transportation all members of the household used and how often they used those modes.

Interested households received a mailed Service Sheet (order form) that listed available information, incentive items, and services related to environmentally friendly modes of transportation.

- Group 'R' ("Regular Users") included households where at least one member in the household was a regular user of one or more environmentally friendly travel modes. This group was further segmented into regular users who required additional information ('R With') and regular users who did not require additional information ('R Without'). A Service Sheet was mailed to 'R With' households so that household members could order informational materials and incentive items. A TravelSmart<sup>®</sup> tote bag including a gift item, updated maps, coupons, and a Thank You letter were delivered by bicycle to 'R Without' households to reward them for already using sustainable travel modes.<sup>4</sup>
- Group 'N' ("Not Interested") included households that did not wish to participate, and/or had no interest, intention or possibility of using environmentally friendly travel modes. This group received a mailed envelope containing a Thank You letter, a AAA brochure on using automobiles more efficiently, a city map, a public transportation day pass<sup>5</sup>, and park and ride information.

It is important to note that the *Socialdata* approach is to motivate households to change any trip they are interested in changing—not just the commute trip to work. For example, a basic tenet of travel behavior change is that one should start by changing easy trips to gain familiarity with the process, rather than trying to start with one of the most difficult trips for many households—the daily commute trip.

#### Motivation Phase

Households that were interested in using environmentally friendly travel modes received the most attention. A Service Sheet was mailed to 'Interested' and 'R With' households so that all members were able to discuss their specific information needs. The Service Sheet motivates household members to think about their travel choices, to discuss this topic with others, and to choose only the information that is relevant to their situation.

Incentive items, such as an umbrella or commuter mug, were offered on the Service Sheet to encourage people to return their requests promptly.

<sup>&</sup>lt;sup>4</sup> 'R Without' households had an option to decline the package upon delivery.

<sup>&</sup>lt;sup>5</sup> Public Transportation day passes were only distributed in Salem-Keizer and Eugene.

A self-addressed stamped envelope was enclosed to make this process as effortless as possible for the households to reply. This ensured that a larger number of households participated in the project.

#### Information Phase

During the information phase, the alternative transportation materials and incentive items that households requested from the Service Sheet were collated, individually packaged, and delivered personally to each participating household. The incentive items, which included pedometers, umbrellas, transit day passes, commuter mugs, safety lights, and books, were included in the information package for further encouragement. If people were at home during the time of delivery, then the information contained in the package was discussed with them. This technique has proven to be very effective for encouraging travel behavioral changes.

## **Convincing Phase**

During the Convincing Phase, the opportunity existed for group 'l' and 'R With' households to participate in a home visit (Further Service). During home visits, household members received personalized advice and instruction concerning the public transportation, bicycling, and/or walking modes of travel. Home visits involved a visit from transit, bicycling, or walking specialists, called Travel Ambassadors. The Travel Ambassadors, comprised of Socialdata America and local agency staff, encouraged household members to use alternative modes of transportation more frequently by providing them with useful information, incentive items, and personal training.

## Evaluation Phase

An important component of all IndiMark<sup>®</sup> projects is the extensive evaluation of results in which travel behavior from the 'Before' and 'After' surveys are compared. A control group was randomly selected in each city during the 'After' survey to measure external factors (i.e., weather, holiday travel) that may have influenced travel behavior outside of the project. Control group participants were not subject to the IndiMark<sup>®</sup> campaign and only received the 'After' survey. Target group participants received the 'Before' survey, the IndiMark<sup>®</sup> campaign, and the 'After' survey.

In-depth interviews and customer service explorations are also evaluated during this phase. The in-depth interviews were conducted among 390 persons (in all three project areas) who participated in the 'After' survey.

# 3.0 Project Background

## 3.1 Objectives

The aim of the ODOT IndiMark<sup>®</sup> Pilot Project was to demonstrate the effectiveness of IndiMark<sup>®</sup> as a tool for reducing car use and promoting sustainable travel modes in Salem-Keizer, Eugene, and Bend, Oregon.

The specific objectives were:

- Conduct a 'Before' survey to provide a baseline study of mobility behavior in each project area.
- Segment households into three main groups, "I", "R", and "N"
- Consult with the project team<sup>6</sup> on the appropriate marketing materials, incentive, and gift items.
- Personally deliver (by bicycle) transit, walking, cycling and other travel options informational materials to project participants.
- Schedule home visits to be conducted by Travel Ambassadors.
- Conduct a series of in-depth interviews (100 persons net in each city) shortly following the completion of the 'After' survey to measure attitudes concerning transportation issues and potentials for using alternative modes of transportation.
- Analyze the survey responses to produce a statistically robust measure of the changes in travel behavior.
- Analyze the responses from the in-depth interviews to measure the potentials for using sustainable travel modes and identify attitudes and perceptions regarding local transportation services and infrastructure.

# 3.2 Area Profile

The target area in each city comprised of a random sample of households located within city limit boundaries. Each project area possessed varying characteristics for public transportation, bicycling, and walking infrastructure, in addition to climate, population, and geography.

<sup>&</sup>lt;sup>6</sup> The project team consisted of ODOT Project Managers, Socialdata America staff, and local agency staff in Salem, Eugene, and Bend.

#### 3.3 Salem-Keizer

#### Geography and Demographics

The cities of Salem and Keizer are located in the Willamette Valley, just west of the I-5 corridor and approximately 45 miles south of Portland. The Willamette Valley has a mild climate consisting of rainy winters and relatively dry summers. Seventy percent of the rain falls between the months of November and March. The topography is relatively flat (around 150 feet above sea level); however, the cities are flanked by hills on the Westside that reach up to 800 feet above sea level.

The population of Salem and Keizer is approximately 192,000 persons. Over 41,000 Salem residents work in government offices. The median family income is around \$39,000 per year. There are two main colleges in Salem: Willamette University, located near downtown Salem, and Chemeketa Community College, located in Northeast Salem.

#### Public Transportation Services

Public transportation services in Salem and Keizer are operated by Salem-Keizer Transit, or Cherriots. Cherriots was formed by a vote of the Salem/Keizer area electorate in 1979, with the purpose of consolidating transit services within the urban growth boundary and securing an ongoing funding base for the operation of the system. Cherriots ridership grew from 2.7 million trips in 1990 to over 4.3 million in 2000, representing a 60 percent increase during the decade. Cherriots carried over 5 million riders in 2003.

Cherriots buses connect at the Transit Mall to "SMART" buses operating commuter schedules to and from Wilsonville, as well as to CARTS buses which provide service to rural Marion and Polk County locations. In addition, the Cheery Lift bus service offers transportation for people with disabilities. Cherriots offers a fare less square within the downtown area and there are six park and ride locations within the City of Salem. Most of the Cherriots buses are powered by compressed natural gas (CNG) and contain bicycle racks that carry two bicycles. Bus fares for adults are \$1 for a single fare (\$.75 for youth) and \$2 for an all-day fare (\$1.50 for youth).

Cherriots buses run out of the Transit Mall, located at 220 High Street NE. The mall serves as the hub of all bus activity and can hold up to 22 buses at one time. In addition to providing a central transfer point for riders, the mall contains a large customer service department, waiting room, public restrooms, and a coffee shop next door.

#### **Bicycling and Walking**

The walking and bicycling infrastructure in Salem-Keizer is adequate. The topography is relatively flat (except for the west side of the city), meaning that walking and bicycling can be easily promoted as alternative travel modes. Bicycle lanes exist on major streets, allowing accessibility to and from many areas in Salem and Keizer. Access to rural bicycling routes is also good. Sidewalks are prevalent in both cities, allowing for decent pedestrian infrastructure.

#### 3.4 Eugene

#### Geography and Demographics

The City of Eugene is also located in the Willamette Valley, approximately 65 miles south of Salem. Eugene shares a similar climate to Salem, with mild temperatures, rainy winters, and dry summers. The central portion of Eugene is relatively flat; however, there are steep hills (buttes) to the north and south of the city. The City of Eugene rests at 426 feet above sea level; however, Spencer's Butte on the south end of town rises to 2052 feet above sea level.

The population of Eugene is approximately 149,000 persons and the median household income is around \$36,000 (based on 1999 Census information). The University of Oregon is the largest college in the city, with over 20,000 students enrolled in 2006. Other schools are Lane Community College and Northwest Christian College.

#### Public Transportation Services

Lane Transit District began in 1970 with 18 buses and two vans and has grown and changed along with the community. In 2006, weekday bus boardings averaged 31,233 persons and annual ridership was at 9,113,813 persons. LTD buses revolve around a hub of 10 stations located in Eugene and Springfield, making for an efficient public transportation system. LTD also operates 26 park and ride locations throughout the Eugene-Springfield area. LTD's EZ Access and Ride Source programs provide services to seniors and residents with

disabilities. Commuter Solutions is a branch of LTD that promotes and offers these types of transportation options programs (including biking, walking, and carpooling) to the Lane County region's businesses, organizations, and educational institutions for their employees, staff and students.

The majority of LTD riders (79 percent) are employed or students and commute trips account for roughly 63 percent of LTD's passenger trips<sup>7</sup>. Subsidized transit passes are offered to Eugene students and discounted passes are offered to employers (Group Pass Program). Bus fares for adults are \$1.25 for a single fare (\$.60 for youths and seniors) and \$2.50 for an all day fare (\$1.20 for youths and seniors).

In January of 2007, LTD launched the first EmX (bus rapid transit) service from the Eugene station to the Springfield station. More EmX projects are currently in the process of planning and implementation.

## **Bicycling and Walking**

The City of Eugene has excellent biking and walking infrastructure. Within Eugene exists 72 miles of on-street bike lanes, 33 off-street shared use paths, 21 miles of signaled bike routes, and five biking/pedestrian bridges spanning across the Willamette River. Eugene's bikeways connect to Springfield's bicycle system and to bikeways in metropolitan Lane County. The Eugene Bicycle Coalition, among other bicycle advocacy groups, is pushing for further bicycle consideration in the Eugene/Springfield area.

Furthermore, in collaboration with community and agency partners, the City of Eugene is developing a Strategic Pedestrian and Bicycle plan. The goal of this plan is to identify tangible methods of making Eugene a more pedestrian and bicycling friendly city.

## 3.5 Bend

# Geography and Demographics

The City of Bend has a different climate and demography than Salem-Keizer and Eugene. Bend is located east of the Cascade Mountains in Central Oregon and is considered the "High Desert." With an elevation of around 3,600 feet, winter in Bend is colder with more snow and less rain. The climate is also relatively dry for most of the year; however, snow can be persistent for months during the winter, covering roads and bicycle lanes.

<sup>&</sup>lt;sup>7</sup> Data is from 2004 origin/destination study research report for LTD by CJI Research Corp.

The population of Bend is approximately 65,000 persons and the area is growing rapidly. Median household income in 1999 was approximately \$41,000 per year. Central Oregon Community College is the largest educational center and is located on the west end of the city.

#### **Public Transportation Services**

During the marketing phase of this project (March and April, 2006), Bend did not posses a fixed-route public transportation system. The Dial-A-Ride service, a demand response transit system, was the primary means of public transportation in the area. Other transit services included various shuttles, taxis, and vanpools. In October of 2006, Bend developed its first fixed-route transit system know as the Bend Area Transit (BAT).

Commute Options for Central Oregon is an organization that promotes alternative modes of transportation such as public transit, ridesharing, bicycling, and walking. Commute Options for Central Oregon sponsors contests and fairs to promote sustainable transportations options in addition to providing an outreach for employers to reduce single occupant vehicle (SOV) commute trips.

#### Bicycling and Walking

The City of Bend has integrated bike lanes and sidewalks into approximately 85 percent of arterial streets and there are currently 85 miles of bicycle lanes in the city. The City of Bend also recently built a new multi-use path tunnel linking the Larkspur Trail and Pilot Butte State Park and implemented the use of roundabouts to improve bicycle safety at 18 intersections. The City plans to develop five more trail networks to improve pedestrian access and conductivity. The City of Bend has been steadfast in promoting the development of mixed-use communities, where residents can more easily bike or walk to destinations.

# 4.0 **Project Implementation**

## 4.1 Background

Planning and consultation for the ODOT IndiMark<sup>®</sup> Pilot Project began during the summer of 2005. Several meetings were held among the project team to discuss a timeline, marketing strategy, and implementation process. Each project city was awarded a local match contribution, which was used for local partners to reimburse for staff time and project expenses.

After lengthy discussions about project locations in each city, the project team determined that the best course of action was to conduct the project city-wide (within city limits) using a random sample of households within that geographical area. The decision was based on two factors—local agency partners could not distinguish neighborhoods that were representative of the entire cities and a city-wide approach would yield excellent mobility behavior data that could benefit future transportation projects.

After selecting the target areas in each project city, the project team decided on appropriate marketing items for each city. Furthermore, the project team developed a timeline and scope of work for implementing the three separate marketing campaigns.

'After' survey preparations commenced during the marketing campaigns. Survey forms, letters, envelopes, and in-depth interview packets were prepared and printed during this time period. The 'After' survey commenced in early June among a random sample of target and control group residents in each project area.

## 4.2 Project Setup

The Socialdata America office is located in downtown Portland at 1020 SW Taylor Street, Suite 800. The Portland office was equipped with 20 phone lines to provide added capacity during the Contact, Motivation, and Information Phases for the ODOT IndiMark<sup>®</sup> Pilot Project. Each phone contained quality headphones with special microphones to mute background noise. Project information technology processes were also developed and installed. Socialdata America encouraged an 'open door' policy, and stakeholders in the project were welcomed into the office to witness the project in action.

Separate field offices (delivery centers) were established in the downtown corridors in each project area. In Salem, Socialdata America staff members worked out of a large conference room at the downtown Salem-Keizer Transit Mall. In Eugene, staff members worked at the Lane Council of Government (LCOG) offices in the downtown Wells Fargo building. The field office in Bend was located at Commute Options for Central Oregon. Marketing materials were stored at these locations, which served as the bicycle delivery hubs in each project area.

Local staff members were employed in various positions during the conduct of the travel surveys and the marketing campaigns. The majority of the positions for the project were part-time, although employees who received initial training were given the opportunity to further develop skills in their particular areas of interest. Recruitment for the entire project involved employing local staff, including individuals fluent in Spanish. Socialdata America actively encouraged diversity to ensure a balanced, more efficient, and productive workplace. This goal was taken into account during the recruitment process of employees and future transfers and promotions.

#### 4.3 Project Design

The ODOT IndiMark<sup>®</sup> Pilot Project design involved a 'Before' survey, a marketing campaign, an 'After' survey evaluation, an exploration phase, and comprehensive in-depth interviews.

Following the completion of the 'Before' survey, Socialdata America implemented the first of two marketing phases in Salem-Keizer and Eugene in November and December of 2006. The second phase of the marketing campaign for Salem-Keizer and Eugene commenced in April and May of 2006. Marketing phases for Salem-Keizer and Eugene were split to obtain travel behavior data for two distinct seasons—winter and summer. The Bend marketing campaign was conducted during one phase in February and March of 2006.

Once the marketing campaigns (including home visits) were completed in each project area, the 'After' survey was launched to target and control group participants. The main purpose of the 'After' survey was to evaluate the results of the IndiMark<sup>®</sup> campaign. During the 'After' survey, Socialdata America conducted an Exploration (customer satisfaction) phase in addition to a series of in-depth interviews among project participants in each city. The Exploration phase consisted of telephone interviews to project participants that undertook bicycling, walking, and/or

public transportation trips during the 'After' survey. A series of questions were asked regarding the customers' satisfaction with those travel modes, such as the quality of bus services, bicycling lanes, sidewalks, etc.

During the months of July and August, 2006, in-depth interviews were conducted among a total of 390 persons in all three project areas. Socialdata America staff scheduled interview appointments via the telephone. Interviews took place in residents' homes to enable all household members to participate.

Trained staff conducted the interviews by asking all household members a series of questions regarding their attitudes and perceptions towards local transportation issues. Interviewees were also asked a series of questions about the mode(s) of transportation documented in their main travel survey.

Interview responses and notes were recorded in a packet. Once the interviews were completed, the data were coded and analyzed by Socialdata America staff.

# 5.0 'Before' Survey

#### 5.1 Introduction

The ODOT IndiMark<sup>®</sup> Pilot Project 'Before' survey consisted of a mailback travel survey that was administered to a random sample of households in each project area. The travel survey was conducted according to the processes outlined in the New KONTIV<sup>®</sup> Design. This design is based on the mail-back diary technique, which is proven to be the most reliable method for collecting data on mobility behavior. The New KONTIV<sup>®</sup> Design methodology allows Socialdata America to collect information on the individual activities performed at an out-of-home destination on a nominated travel day. This methodology provides Socialdata America with an accurate account on how, where, and why residents travel (or did not travel).

The survey design used in this project has been developed over many years by Socialdata and applied successfully in travel behavior research programs in more than 15 countries worldwide. The survey aims to collect information on all trips to all out-of-home destinations on a nominated travel day for each household. The customer focus of the questionnaire design and individualized approach in the introductory mailing and subsequent motivation ensures high response rates and reliable results.

For each household, the survey consists of a household questionnaire and a set of individual travel diaries for each of its members for a nominated day of the week. The survey sample includes households completing travel diaries for all seven days of the week. To ensure a high response rate a pre-paid return envelope is provided with the survey. Further motivation by mailed letters and telephone calls is utilized when surveys are not returned

A gross sample of persons in Salem-Keizer, Eugene, and Bend was randomly drawn in each area (within city limits) to achieve the required responses of 1200 persons (net) for each city. All returned travel diaries were checked on arrival at the office, and households were telephoned if there was missing information on the household form or if clarification was required on the information supplied. Corrections to the forms were made in red pen to clearly distinguish between information supplied by the respondent and information collected by Socialdata America staff. Questionnaires were checked for:

- Missing household information (age, gender, employment status)
- Car and bicycle ownership
- All modes of transportation undertaken
- Sequence of trips and missing return trips, start and end time of trips, and distances
- Incomplete or unclear destination addresses

# 5.2 Responses to the 'Before' Survey

For the Cities of Salem-Keizer and Eugene, the 'Before' survey was launched in October of 2005 to a random sample of households located within city limits. During the Salem-Keizer 'Before' survey, Socialdata America achieved a 60 percent response rate with 1,220 persons (net) returning a survey. During the Eugene 'Before' survey, Socialdata America achieved a 62 percent response rate with 1,318 persons (net) returning a survey. For the City of Bend, Socialdata America achieved a 61 percent response rate with 1,264 persons returning their survey<sup>8</sup> (Table 5.3).

Tables 5.1 through 5.3 provide response figures for each project area and Table 5.4 depicts the segmentation breakdown for the various IndiMark<sup>®</sup> groups ("I", "N", "R With", and "R Without").

# Table 5.1Response to the Salem-Keizer 'Before' Travel Survey<br/>Target: 1200 persons (net)

	Persons
Mail Out Gross	2400
Genuine Non-Response	343
Adjusted Gross	2057
Response Total	1220
Response Rate in %	60%

<sup>&</sup>lt;sup>8</sup> The Bend 'Before' survey was conducted in January and February of 2006. The survey was initially planned to run concurrently with the Salem-Keizer and Eugene 'Before' survey; however, the survey was delayed because Bend City Council members did not officially approve the project until October 19, 2005.

Table 5.2Response to the Eugene 'Before' Travel Survey<br/>Target: 1200 persons (net)

	Persons
Mail Out Gross	2400
Genuine Non-Response	275
Adjusted Gross	2125
Response Total	1318
Response Rate in %	62%

Table 5.3Response to the Bend 'Before' Travel Survey<br/>Target: 1200 persons (net)

	Persons
Mail Out Gross	2400
Genuine Non-Response	335
Adjusted Gross	2065
Response Total	1264
Response Rate in %	61%

Table 5.4Segmentation Results from the Salem-Keizer, Eugene, and<br/>Bend 'Before' Survey

	Salem	Eugene	Bend
Group "I"	33%	34%	49%
Group "R With"	4%	3%	1%
Group "R Without"	8%	9%	5%
Group "N"	55%	54%	45%

# 6.0 Individualized Marketing Campaign

## 6.1 Introduction

The marketing package developed for the ODOT IndiMark<sup>®</sup> Pilot Project consisted of a range of alternative transportation informational materials and incentive items, as well as the offer of face-to-face advice for households on walking, bicycling, and/or public transportation modes of transportation.

Alternative transportation materials and services were listed on Service Sheet order forms that were mailed to households during the Service Phase of the IndiMark<sup>®</sup> process. Project participants were then able to select which items on the Service Sheet they were interested in receiving. After Socialdata America received each respondent's Service Sheet, a personalized package (tote bag) was assembled and delivered by bicycle to each household.

Individual households identified in the Contact Phase as 'Interested' received a package of informational materials and other transportation-related services that were tailor-made to their individual needs. Experience from other IndiMark<sup>®</sup> projects around the world shows that this leads to greater satisfaction and use of the information and services provided.

# 6.2 Materials Requested

The project team developed marketing materials and incentives items that were unique to each city. One of the most important items offered on the Service Sheet was the stop-specific bus schedule—a personalized timetable that listed transit routes and timetables for stops closest to the household. The stop specific bus schedules produced by Cherriots and Lane Transit District (LTD) staff were a perfect tool for encouraging Salem-Keizer and Eugene residents to ride public transportation more frequently. A total of 200 of these schedules were requested from the returned Service Sheets.

Trip planning information was also provided to households during the IndiMark<sup>®</sup> campaign. Target group participants were given an opportunity to request a public transportation and/or bicycle trip plan by filling out the

form on the back of the Service Sheet.<sup>9</sup> Participants were asked to write down a starting point, ending point, the day of travel, and time of day they wished to travel. Public transportation and bicycle trip plans were printed and placed in folders within the personalized tote bags. Table 6.1 shows the numbers of public transportation and bicycle trip plans requested for each project area.

 Table 6.1
 Public Transportation and Bicycle Trip Plans Requested

	Transit	Bicycle
Salem-Keizer	26	7
Eugene	36	15
Bend	N/A	11

Table 6.2 provides Service Sheet response rates and the total number of personalized information packages that were delivered in each project area during the ODOT IndiMark campaign.<sup>10</sup>

 Table 6.2
 Service Sheet Response Rate and Total Deliveries

	Service Sheet	Total
	Response Rate	Deliveries
Salem-Keizer	90%	240
Eugene	93%	285
Bend	91%	296

The range of informational materials provided to project participants covered public transportation services, bicycling, walking, vanpooling, and carpooling information. These items are listed in Tables 6.3 through 6.11. The quantity of materials requested provides proof that many households were interested in a variety of information on environmentally friendly modes of transportation.

<sup>&</sup>lt;sup>9</sup> Public transportation trip plans were not provided for participants in Bend due to the city's lack of a fixed-route public transportation system.

<sup>&</sup>lt;sup>10</sup> Additional tote bags, information, and incentive items were delivered to households who participated in home visits and in-depth interviews.

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- Salem (Fall and Spring Phases) -

Meet Your Match (Carpool, Vanpool, Park & Ride)	159
Cherriots System Map	91
Stop Specific Bus Schedules	91
Amtrak Schedules	90
A Rider's Guide To Salem-Keizer Transit	84
Cherriots Schedules For Salem-Keizer	81
How to Ride Brochure	68

- *Meet Your Match* was a brochure provided by Mid-Valley Rideshare that offered free carpool and vanpool matching services, in addition to matches for park and ride lots and daycare centers.
- The *Cherriots System Map* contained information on Salem-Keizer bus routes and other relevant public transportation information such as ticket and pass prices, station locations, and points of interest.
- Stop Specific Bus Schedules were an important tool for providing detailed transit information to the household. The personalized bus schedules were easy to read and showed the bus stops and service routes closest to the household. The schedules allowed Salem-Keizer residents to utilize local bus services more frequently.
- *Amtrak* schedules contained timetables, route guides, and travel tips for the Amtrak Cascades line.
- A Rider's Guide to Salem-Keizer Transit showed detailed timetable information for Cherriots busses. The guide also contained how to ride information and details for other Salem area transit services such as CARTS (Chemeketa Area Rural Transportation System) and Cherry Lift, in both English and Spanish.
- Cherriots Schedules for Salem-Keizer were distributed upon request. These schedules contained information on local bus routes and services. SMART (South Metro Area Rapid Transit) bus schedules (Salem to Wilsonville) were also distributed to project participants that ordered public transportation information.
- The *How To Ride* brochure was provided by Salem-Keizer Transit and provided detailed information regarding Cherriots' bus services.

#### Table 6.4 Bicycle Marketing Materials Requested—Salem-Keizer

## MARKETING MATERIALS REQUESTED

\$7

- Salem (Fall and Spring Phases) -

Salem-Keizer Bicycle Map	89
Willamette Valley Scenic Bikeway	88
Discount Coupon For Area Bike Shop	82
Safe Biking	80
Get There By Bike!	77
Get There By Bike! How To Fit Your Bicycle Helmet	7

- The Salem-Keizer Bicycle Map identified safe bicycle routes in Polk and Marion Counties. The map was also used to create bicycle trip plans for project participants.
- The *Willamette Valley Scenic Bikeway* contained a map of Oregon's first designated scenic bikeway from Champoeg State Park to Eugene.
- The *Discount Coupon For Area Bike Shop* offered a free bicycle safety check and 15% off all bike accessories at several participating Salem bicycle stores.<sup>11</sup>
- The *Safe Biking* brochure was provided by the Bicycle Transportation Alliance (BTA). The brochure covered important cycling topics such as safety, road rules, proper hand signals, and a helmet fitting guide for cyclist of all ages.
- The Get There By Bike! brochure was provided by the Community Cycling Center in Portland and contained bike commuting tips, safety information, and a roadside repair guide. The brochure was made with a waterproof coating, enabling cyclists to use it during inclement weather.
- *How To Fit Your Bicycle Helmet* listed seven easy steps for proper helmet fitting. This brochure was popular among parents who were teaching their children how to bicycle.

<sup>&</sup>lt;sup>11</sup> Participating Salem bicycle stores were Bike Peddler, Santiam Bicycle, Scott's Cycling and Fitness, and South Salem Cycleworks.

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- Salem (Fall and Spring Phases) -

City Of Colom Dorko	124
City Of Salem Parks	
Welcome To Minto-Brown Island Park	115
Walking For A Healthy Heart	111
Downtown Salem Discovery Guides	111
Downtown Salem Historic Walking Tour	109
Just Move!	106
Five Steps To Being A Safer Pedestrian	95

- The *City of Salem Parks* brochure was the most popular item in the walking category. The brochure provided a map and information pertaining to all of Salem's parks and services.
- Welcome to Minto-Brown Island Park brochure contained a map of trails, picnic areas, a dog run, and working farm fields.
- The Walking For A Healthy Heart Brochure was a guide to help Salem-Keizer residents start a regular walking program. The American Heart Association brochure provided information on the benefits of walking, walking gear and clothing, warm-up and stretching techniques, and a calorie use chart.
- *Downtown Salem Discovery Guides* included a map of restaurant and shopping areas within walking distance from downtown.
- Downtown Salem Historic Walking Tour contained walking maps of Willamette University, Historic Downtown, and the State of Oregon Capitol Grounds.
- Just Move! was another American Heart Association brochure that stressed the importance of physical activity in daily routines.
- Five Steps To Being A Safer Pedestrian was provided by ODOT and contained important safety information for pedestrians of all ages.

- Eugene (Fall and Spring Phases) -

Stop Specific Bus Schedules	116
	109
LTD Dideale Direct	
LTD Rider's Digest	108
LTD EZ Access Program	81

- *Rideshare Matching* brochures were provided by Commuter Solutions. The brochures contained rideshare information and a free referral service for carpool, vanpool, and school pool matching.
- *Amtrak Schedules* contained timetables, route guides, and travel tips for the Amtrak Cascades line.
- Stop Specific Bus Schedules were personalized, easy to read, and showed the bus stops and service routes that were closest to the household. The schedules were produced by LTD staff.
- *LTD Rider's Digest* included all LTD route maps, timetables, neighborhood stations, and bus schedules.
- *LTD EZ Access Program* was a transportation guide for seniors and people with disabilities.
- *LTD's Park & Ride* brochure was provided by Commuter Solutions. The informational brochure showed park and ride locations throughout Eugene and Springfield.
- Smart Ways To School—Student Transit Pass Program brochure contained information pertaining to LTD's free student pass program.

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- Eugene (Fall and Spring Phases) -

Eugene/Springfield Bike Map	161
Discount Coupon for Area Bike Shops	155
Willamette Valley Scenic Bikeway	134
Oregon Bicyclist Manual	125
Get There By Bike!	124
Safe Biking Brochure	122
Take Your Bike On The Bus	97
How To Fit Your Bicycle Helmet	91
Smart Ways To School Brochure - Cycling	82

- The *Eugene/Sprinfield Bike Map* showed safe bicycle and walking routes in Lane County. The map also provided information about bicycle safety.
- *Discount Coupons for Area Bike Shops* offered a free bicycle safety check and 15% off all bike accessories at several participating Eugene bicycle stores.<sup>12</sup>
- The *Willamette Valley Scenic Bikeway* contained a map of Oregon's first designated scenic bikeway from Champoeg State Park to Eugene.
- The *Oregon Bicyclist Manual* was provided by ODOT and contained tips and rules for safe bicycling in Oregon.
- The *Safe Biking* brochure covered important cycling topics such as safety, road rules, proper hand signals, and a helmet fitting guide for cyclist of all ages.
- The *Get There By Bike!* brochure contained bike commuting tips, safety information, and a roadside repair guide.
- Take Your Bike On The Bus offered step-by-step instructions for taking your bike on LTD buses.
- How To Fit Your Bicycle Helmet listed seven easy steps for proper helmet fitting.

<sup>&</sup>lt;sup>12</sup> Participating Eugene bicycle stores were: Collin's Cycle Shop, Wheel Works, and all Paul's Bicycle Way of Life stores.

- The Smart Ways To School Brochure Cycling brochure offered information for Eugene families to organize student bicycle groups for commuting to school (Table 6.7).
- Table 6.8
   Walking Marketing Materials Requested—Eugene

\$7

Walking	
Welcome To Eugene's Parks	184
Discover Downtown Eugene	164
Walking Discount Coupon	156
Walk With Me Newsletter	151
Track Town USA	147
Just Move!	142
5 Steps To Being A Safer Pedestrian	130
Smart Ways To School - Walking	92

- Eugene (Fall and Spring Phases) -

- *Welcome To Eugene's Parks,* provided by the City of Eugene, was the most popular walking item. The Parks brochure included a map of parks, wetlands, recreation areas, and other open spaces in Eugene.
- *Discover Downtown Eugene* included a map of destinations and landmarks in downtown Eugene that are accessible using public transportation services.
- The *Walking Discount Coupon* was good for 10% off all shoes, apparel, and accessories at the Eugene Running Company.
- *Track Town USA* offered a running and walking trail map for Eugene and Springfield.
- *Just Move!* was provided by the American Heart Association. The brochure stressed the importance of physical activity in daily routines.
- *Five Steps To Being A Safer Pedestrian* contained important safety information for pedestrians of all ages.
- The *Smart Ways To School Walking* brochure offered information for Eugene families to organize student walking groups for commuting to school.

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- Bend -

Oregon Intercity Passenger Timetables	95
SeQuential Biofuels	94
Breeze Bus Schedules	92
Green Energy Bus	86
Dial-A-Ride Brochure	81
Better World Club	79
Park & Ride Brochure	65
Commute Options For Central Oregon Brochure	64
VPSI Vanpool Brochure	52

- Oregon Intercity Passenger Timetables were provided by ODOT to connect Bend to the rest of Oregon by bus, train, and shuttle.
- The SeQuentials Biofuels brochure provided information on biodiesel options for cars and trucks, as well as distribution and pump locations throughout Oregon.
- Breeze Bus Schedules offered information and schedules for daily bus services from Bend to Portland, as well as charters and sightseeing tours.
- Green Energy Bus brochures contained contact information and schedules for Bend's alternatively fueled (biodiesel) shuttle and tour service.
- The *Dial-A-Ride* brochure was produced by Bend's Public Works Department. The brochure provided contact information and fare listings for Bend's demand response public transportation service.
- The *Better World Club* is an environmentally friendly automobile club, similar to AAA. The brochure offered discount memberships for Hybrid automobile users and bicyclists.
- Bend's *Park & Ride Brochure* listed park and ride locations throughout the Central Oregon.
- The *Commute Options For Central Oregon* brochure offered information about rideshare matching (registration form), park and ride locations, vanpool assistance, and commute reductions programs and activities.
- The VPSI Vanpool Brochure described services for Bend's professional vanpool company.

#### Table 6.10 Bicycling Marketing Materials Requested—Bend

# MARKETING MATERIALS REQUESTED

- Bend -

Deschutes County Bike Guide	164
Treadmaps Mountain Biking Map	157
Discount Coupon for Area Bike Shops	156
Safe Biking Brochure	117
Get There By Bike!	116
Oregon Bicyclist Manual	115
How To Fit Your Bicycle Helmet	98

- The *Deschutes County Bike Guide* contained a map of safe bicycle routes throughout Deschutes County.
- Treadmaps Mountain Biking Maps contained 3-D topographic mountain bike maps for popular trails in Bend and Sunriver. The maps were sprayed with a waterproof coating, making them extremely durable and ideal for wet and muddy rides.
- *Discount Coupons for Area Bike Shops* offered a free bicycle safety check and 15% off all bike accessories at several participating Bend bicycle stores.<sup>13</sup>
- The Safe Biking brochure covered important cycling topics such as safety, road rules, proper hand signals, and a helmet fitting guide for cyclist of all ages.
- The *Get There By Bike!* brochure contained bike commuting tips, safety information, and a roadside repair guide.
- The Oregon Bicyclist Manual contained tips and rules for safe bicycling in Oregon.
- How To Fit Your Bicycle Helmet listed seven easy steps for proper helmet fitting.

<sup>&</sup>lt;sup>13</sup> Participating Bend bicycle stores were: Bend Bike 'N Sport, Hutches Eastside and Westside, and Sunnyside Sports.

#### Table 6.11 Walking Marketing Materials Requested—Bend

# MARKETING MATERIALS REQUESTED

- Bend -

Walking	
Bend's Urban Trails Map	202
Walking Discount Coupon	185
Bend Historic Sites Map	160
Experience Downtown Bend	146
Just Move!	140
5 Steps To Being A Safer Pedestrian	122

- *Bend's Urban Trails Maps* were provided by the Bend Metro Park and Recreation District. This brochure was very popular and contained maps of local parks and trails throughout Bend.
- The *Walking Discount Coupon* was good for 15% off regularly priced shoes at the FootZone.
- The *Bend Historic Sites Map* included a walking map that listed historic buildings in Bend.
- The *Experience Downtown Bend* brochure contained a walking map of shopping areas and restaurants in downtown Bend.
- The *Just Move!* brochure stressed the importance of physical activity in daily routines.
- *Five Steps To Being A Safer Pedestrian* included important safety information for pedestrians of all ages.

Table 6.12 describes the types and quantities of incentive items that were distributed to project participants during the ODOT IndiMark<sup>®</sup> campaign.

Table 6.12 Marketing Materials Distributed—Incentive Items

# MARKETING MATERIALS DISTRIBUTED

Tote Bags	1,200
Umbrellas	900
Transit Day Passes	675
Safety Lights	650
LTD Pens	500
Commuter Mugs	450
LTD Magnets	325
Bend color multi-modal maps	300
Pedometers	140
Trip Saver Calculators	95
Walking Made Powerful Book	45
History of Salem Book	35
Bicycle Tool Kits	25

- Tote Bags contained folders full of informational brochures and pamphlets each household ordered. The bags were made of a nylon water-resistant material and contained the TravelSmart<sup>®</sup> logo and website address. The tote bags were provided to organize the informational materials and also to remind residents to walk, bike, or use the bus when going out for groceries or other errands. Additional tote bags were given to 'Regular Users' of environmentally friendly modes of transportation and also to in-depth interview participants.
- Umbrellas were provided to Salem-Keizer and Eugene residents. The umbrellas were high quality "Rain Shed" compact umbrellas that contained the TravelSmart<sup>®</sup> logo and website address. The TravelSmart<sup>®</sup> umbrellas were a perfect incentive for residents to walk and use public transportation during rainy Oregon days.
- *Transit Day Passes* were provided by Cherriots in Salem and LTD in Eugene. The *Transit Day Passes* were good for one round trip using public transportation services and a total of 675 of these passes were distributed to project participants

- LED *Safety Lights* were distributed in Salem-Keizer and Bend. The safety lights provided residents a safe means to walk or bike during the early mornings and late evenings.
- *LTD Pens* were given to Eugene residents. The pens listed LTD's contact information and were used to clip the folders together in the tote bag.
- Commuter Mugs were offered on the Bend Service Sheet as an incentive item for returning the order form. The mug was labeled with the TravelSmart<sup>®</sup> and Commute Options for Central Oregon logos. Additional mugs were distributed to 'Regular Users' of alternative modes of transportation and also to in-depth interview participants.
- *LTD Magnets* were placed in the TravelSmart<sup>®</sup> tote bags to give Eugene residents a means for posting bus schedules and other alternative transportation information on their refrigerators.
- Bend Color Multi-Modal Maps were produced by the City of Bend. The maps showed existing and future bicycling and walking routes throughout the entire city. Color copies of these maps were distributed in all Bend TravelSmart<sup>®</sup> tote bags to help Bend residents plan safe and convenient walking and biking trips.
- *Pedometers* were provided by Kaiser Permanente and distributed during walking home visits. Pedometers, log sheets, and exercise plans were also given to 'Regular Users' of the walking mode and indepth interview participants. The pedometers were an excellent motivational tool to encourage greater use of walking.
- *Trip Saver Calculators* were provided by LTD and given to 'Regular Users' of the public transportation mode. Project participants were challenged to calculate their trip savings from using alternative modes of transportation.
- The Walking Made Powerful book was provided by Tyler Burgess, founder of "Walk With Me." Tyler is a well known walking advocate and organizer of a large walking group in Eugene. Her book highlights proper walking techniques, stretches, gear, training programs, and outlines six great walks in Eugene and Springfield. Walking Made Powerful was distributed to 'Regular Users' of the walking mode and also to Eugene households that received walking home visits.
- The *History of Salem Book* was provided by Cherriots. The book provides a historical account of important events in Salem's history, including the progression of transportation services in the community. The book was distributed to Salem households who received home visits and also to 'Regular Users' of the public transportation mode.
- Bicycle tool kits were distributed in Bend and Eugene. The kits included a set of wrenches and screwdrivers, a tire patch kit, and tire levers for changing flat tires. The tool kits were reserved for home visit participants to encourage greater use of biking.

## 6.3 Personalized Information Packages

During the Information Phase, informational materials were collated and placed in folders to provide the household with a tool to keep the information together and in an accessible place. Distribution of the marketing materials occurred in two phases for the Cities of Salem-Keizer and Eugene—November and December of 2005 and April and May of 2006. For the City of Bend, distribution took place in one phase during the months of February and March, 2006.

Most deliveries were completed using bicycles.<sup>14</sup> Socialdata America Project Managers hired a local bicycle delivery team for each project area. Socialdata America's bicycle delivery crew members were trained to explain the contents and information contained in the tote bags to the household members. Many residents expressed surprise and appreciation that their package was delivered personally by staff using bicycles.

## 6.4 Further Services

In the Further Services section of the Service Sheet, households were given an opportunity to request a home visit to make greater use of public transportation, walking, and/or bicycling modes of travel. Travel Ambassadors, comprised of Socialdata America and local agency staff, were responsible for conducting the home visits. The Ambassadors commuted to home visit appointments using alternative modes of transportation (transit or bicycling).

**Public Transportation**—Public transportation home visits have been implemented successfully by *Socialdata* in many other IndiMark<sup>®</sup> projects across the world. The objective of the home visit is to offer face-to-face advice and a 'Test Ticket' (provided by the local transit agencies) for local bus services to specifically selected households in Group 'I'. This approach is geared towards convincing these households to utilize public transportation services more often.

A total of eight public transportation home visits were conducted during the Convincing Phase of the ODOT IndiMark<sup>®</sup> Pilot Project. During these visits, Travel Ambassadors gave personalized advice on using local public transportation services and answered questions from residents pertaining to bus routes, timetables, park and ride locations, taking bicycles on the bus, etc.

<sup>&</sup>lt;sup>14</sup> Some households were too far away for bicycle deliveries due to a change in address; therefore, deliveries that could not be completed by bicycle were accomplished either by using a biodiesel-powered car or by mailing packages to project participants.

Day passes for free travel on public transportation were provided to all household members in addition to other informational materials such as system maps, stop specific bus schedules, and trip plans. The free passes allowed new users to try out the public transportation system with the least amount of worry and effort.

Further Services were also offered to households interested in the walking and bicycling modes. Travel Ambassadors conducted a total of 13 bicycling home visits and 19 walking home visits during the ODOT IndiMark<sup>®</sup> campaign.

**Bicycling**—During bicycling home visits, Travel Ambassadors identified safe biking routes, provided information about bicycle security and safety, completed basic bicycle repairs, and conducted an on-street bicycle training session (if necessary). They also administered a visual bicycle safety check and corrected minor adjustments such as the height of the seat and handle bars. Additionally, Travel Ambassadors distributed bike maps, discount coupons, and other bicycling informational brochures during home visits.

A discount coupon was offered to household members during home visits to encourage them to bicycle more frequently. The discount voucher was good for a free bike safety check and 15 percent off bike accessories at participating local bicycle stores. Bicycling discount coupons were also distributed to households that checked the appropriate box on the Service Sheet.

**Walking**—During walking home visits, Travel Ambassadors gave advice on journey planning and pedestrian safety. Pedometers were distributed to encourage family members to walk more often. Travel Ambassadors calibrated the pedometers for each member of the household and demonstrated how the pedometer worked. Travel Ambassadors also mapped popular walking routes and hiking trails in each project area and shared this information with the household. Discount coupons at local area running/walking stores were also offered to project participants in Bend and Eugene. The participating stores also offered free consultation for proper shoe fitting and walking/running techniques.

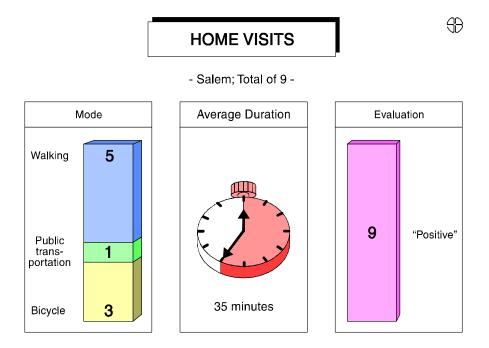
Table 6.13 lists the distribution of home visits conducted for each alternative mode of transportation. A total of 40 home visits were completed during the ODOT IndiMark<sup>®</sup> campaign in all three project areas. Socialdata America was responsible for scheduling and conducting all of the home visits. During the scheduling process, many households

indicated they were satisfied with the information they received from the Delivery Phase and did not need any further support via a home visit.

Home Visit	Quantity
Walking	19
Cycling	13
Public Transportation	8

Figure 6.1 depicts the breakdown of Salem home visits and the evaluation provided by Travel Ambassadors.<sup>15</sup>

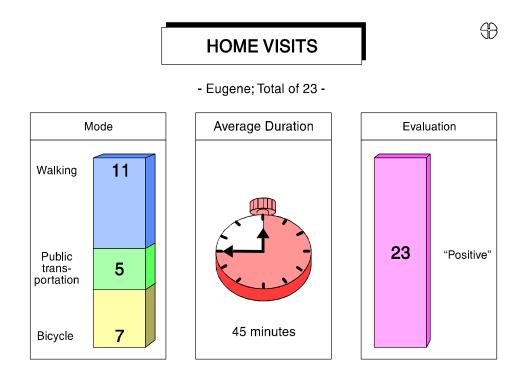
### Figure 6.1 Salem Home Visits



<sup>15</sup> The duration of the home visit was the average amount of time the Travel Ambassadors spent in households. After completing each visit, the Travel Ambassadors wrote up a brief report describing the duration of the visit, the materials provided to the household, the services that were performed (bike safety check, setting up a pedometer, etc.) and the overall assessment of the visit. The assessment was ranked as either "positive" or "negative". A "positive" home visit indicated that the household was satisfied with the service, whereas a "negative' visit indicated that the household was not satisfied with the service and/or they were not responsive to the visit. For the Cities of Salem and Keizer (Figure 6.1), Travel Ambassadors conducted a total of nine home visits—five for the walking mode, one for the public transportation mode, and three for the bicycle mode (Figure 6.1). In addition to the one public transportation home visit, Salem-Keizer Transit staff conducted two public transportation phone consultations for project participants. The average duration of the home visits lasted approximately 35 minutes and all nine home visits were evaluated "positive" by Travel Ambassadors.

Figure 6.2 shows the breakdown of Eugene home visits and the evaluation provided by Travel Ambassadors.

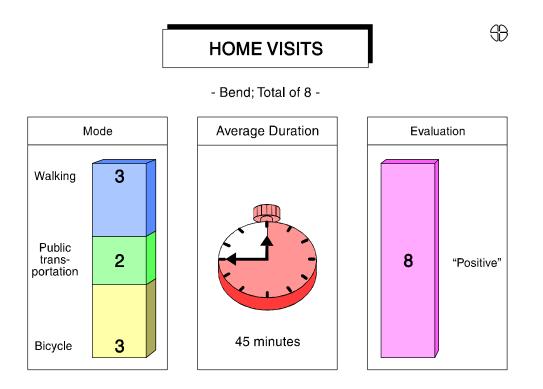
Figure 6.2 Eugene Home Visits



For the City of Eugene, Travel Ambassadors conducted a total of 23 home visits—11 for the walking mode, five for the public transportation mode, and seven for the bicycle mode. The average duration of the home visits lasted approximately 45 minutes and all 23 home visits were evaluated "positive" by Travel Ambassadors.

Figure 6.3 provides a breakdown of Bend home visits and the evaluation provided by Travel Ambassadors.

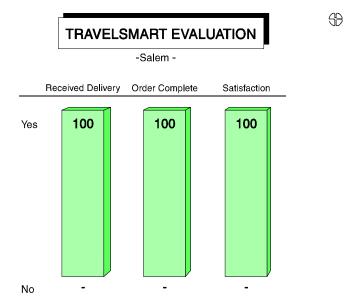
Figure 6.3 Bend Home Visits



For the City of Bend, Travel Ambassadors conducted a total of eight home visits—three for the walking mode, two for the public transportation mode, and three for the bicycle mode. The average duration of the home visits lasted approximately 45 minutes and all eight home visits were evaluated "positive" by Travel Ambassadors.

### 6.5 Quality Control

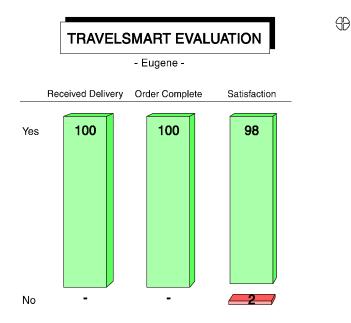
Rigorous quality control measures were carried out by Socialdata America following the ODOT IndiMark<sup>®</sup> campaign. Households were contacted by telephone and asked if their order was complete and if they were satisfied with the marketing materials and the delivery service. Project participants also provided comments and feedback regarding the project. Figures 6.4 through 6.6 show the quality indicators that were recorded during the Quality Control Phase.



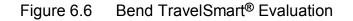
### Figure 6.4 Salem-Keizer TravelSmart<sup>®</sup> Evaluation

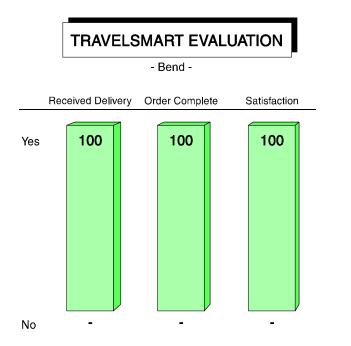
During Socialdata America's quality control measures, customer feedback indicated a 100 percent satisfaction rate with deliveries received, orders completed, and overall satisfaction in Salem-Keizer.

Figure 6.5 Eugene TravelSmart<sup>®</sup> Evaluation



For the Eugene project, customer feedback was also positive. One hundred percent of deliveries were received and completed and 98 percent of customers were satisfied with the contents and delivery service.





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Quality control measures for the Bend project were all positive. All contacted households received their delivery with a completed order and were satisfied with the materials and the service.

Comments that Socialdata America received from quality control measures were recorded and sent to clients and stakeholders daily in an email entitled 'Quote of the Day'. The following passages provide examples of the quotations that were emailed each working day:

### **Quotations from Salem-Keizer:**

"This is great! I had no idea how close I was to a bus. I really appreciate all of the stuff. I'm sure I'll use it to check out the city, maybe by bus."

"My family and I really like the walking materials. The parks map is nice and I really like the walking tour. I can't wait for it to warm up so I can get out and go walking more."

*"I'm so glad you gave me these things. I took the bus downtown the other day and it was so nice to sit back and not think about driving. I just enjoyed the ride and I think I'll get out and do that more often now."* 

*"My neighbors saw the bike guy drop off my bag and came over to check it out. I've been showing everybody!"* 

### Quotations from Eugene:

*"I wasn't expecting this much. I just thought there would be a map or two. But the bus schedules, bike maps, walking maps, newsletters, and coupons—Wow! This is truly amazing."* 

"The project needs to happen. We think we are progressive in this town, but we definitely need some work. This kind of project is definitely pushing us and providing us with some useful information and options. I'm very glad you're doing it. Thank you."

"I'm really excited about all the information and can't believe what's available. I love the maps and umbrella and I'm excited about meeting with a bike person and talking about the possibility of using my son's newer bike to commute. My other bike is my old 10-speed from college."

"Our whole family was impressed. Everything was neat and orderly. We just kept saying Wow! Wow! Wow! The day it was delivered was sunny, but it was cold. We were so impressed to see the delivery person out there on his bike. We really liked the maps. Thank you very much."

### Quotations from Bend:

*"I'm very impressed. The materials are better than I expected. I will use the Bend Urban Trails Map to walk the dog. Thank you."* 

*"I was just thinking of gas prices today and I'm thinking, hello, it's time for us to wake up! This information is really useful."* 

I'm excited to go through it more. I'm interested in the maps because we don't go out as much as we used to and my niece just had a child and wants to go to the parks. They also gave me a nice little bag and coffee mug. We got the call and the guy [Travel Ambassador] is coming over to give the kids a class on bicycles. They've never had a safety course."

*"I thought it was really cool that I got just what I asked for instead of getting a bunch of fluff that I would just throw away. Thank you."* 

### 'After' Survey 7.0

### 7.1 Introduction

The ODOT IndiMark<sup>®</sup> Pilot Project 'After' survey was conducted for all three project areas during the months of June and July of 2006. The first sample day was June 12, 2006. The 'After' survey consisted of a mailback travel survey that was administered to all household members in each project area. A gross sample of persons in Salem-Keizer, Eugene. and Bend was randomly drawn in each area (including a control group) to achieve the required responses of 1200 persons (net) for each city. The control group was used to measure travel behavioral changes resulting from external factors (i.e., weather, holiday travel) that may have influenced travel behavior outside of the ODOT IndiMark<sup>®</sup> Pilot Project.<sup>16</sup>

The Exploration phase, which consisted of customer service telephone interviews to project participants that undertook bicycling, walking, and/or public transportation trips, commenced shortly following the launch of the 'After' survey. In-depth interviews were then conducted among a total of 390 project participants (in all three project areas) during July and August of 2006. Tables 7.1, 7.2, and 7.3 provide response rates to the ODOT 'After' travel survey.

#### 7.2 'After' Survey Response Rates

Response to the Salem-Keizer 'After' Travel Survey<sup>17</sup> Table 7.1 Target: 1200 Persons (net)

	Target Group	Control Group
Mail Out Gross	1200	1300
Genuine Non-Response	180	214
Adjusted Gross	1020	1086
Response Total	733	650
Response Rate in %	72%	60%

<sup>&</sup>lt;sup>16</sup> Target group participants received the 'Before' and 'After' surveys and were subject to the marketing campaign. Control group participants only received the 'After' survey and were not subject to the ODOT IndiMark<sup>®</sup> campaign.

All figures are in numbers of persons.

Table 7.2	Response to the Eugene 'After' Travel Survey	
	Target: 1200 persons (net)	

	Target Group	Control Group
Mail Out Gross	1200	1300
Genuine Non-Response	115	196
Adjusted Gross	1085	1104
Response Total	805	670
Response Rate in %	74%	61%

Table 7.3Response to the Bend 'After' Travel Survey<br/>Target: 1200 persons (net)

	Target Group	Control Group
Mail Out Gross	1200	1300
Genuine Non-Response	172	198
Adjusted Gross	1028	1102
Response Total	690	661
Response Rate in %	67%	60%

### 7.3 In-depth Interview Methodology

The in-depth interviews were conducted according to the processes outlined in the New KONTIV<sup>®</sup> Design. The design was based on a personal in-home interview, proven to be the most reliable method for collecting more comprehensive data on mobility behavior and perceptions of traffic issues. Using a standard set of questionnaire forms, interviewers collected detailed information showing the 'potentials' that exist for alternative travel modes in the target area.

The main stages of the in-depth interview process were:

- Thank You Letter
- Scheduling
- Conduct of Interview
- Field Control

A gross sample of persons in each project area was drawn from the respondents to the 'After' Travel Survey conducted in June and July of 2006. The goal was to successfully interview a total of 100 persons (net) in each project area. Socialdata America met and exceeded that target.

### 7.4 In-depth Interview Fieldwork

- 1) **Thank You Letter** Letters were sent to households thanking them for participating in the travel survey and to announce the selection process for the in-depth component. Letters were mailed on June 22, 2006.
- 2) Scheduling Following the mailing of the Thank You letters, households were contacted by phone to schedule an interview in their home at a time most convenient for all household members. Scheduling of in-depth interviews took place from June 28 to August 3, 2006.
- 3) **Conduct of Interview** Trained interviewers from Socialdata America met with participants to conduct the in-depth interviews. The appointments lasted between 30 and 90 minutes (depending on the number of people present and the number of trips household members took). Interviews took place from July 5 through August 26, 2006.
- 4) **Field Control** Follow-up calls were made after the completion of the interview to assess the quality of the field work and to ensure the interviewers were meeting Socialdata America's high standards of customer service. Field control was applied to 50% of the households that participated in an interview.

### 7.5 In-depth Interview Responses

Table 7.4 depicts the total number of persons who participated in in-depth interviews for all three project areas.

# Table 7.4Responses to In-depth Interviews in Salem-Keizer, Eugene<br/>and Bend

	Total	Target Group	Control Group
Mail Out Gross	670	330	340
Genuine Non-Response	57	26	31
Adjusted Gross	613	304	309
Response Total	390	206	184
Response Rate in %	64%	68%	60%

## 8.0 Evaluation of Mobility Behavior

## 8.1 Introduction

Mode choice is the basic measure for travel behavior and a key indicator of interest to the ODOT IndiMark<sup>®</sup> Pilot Project. The changes in mode choice (away from drive alone trips) are the central indicators of the success of the ODOT IndiMark<sup>®</sup> Pilot Project. To separate the effect of IndiMark<sup>®</sup> from external factors such as weather and holiday travel, a control group was applied during the 'After' survey. The analysis of the 'Before' and 'After' surveys was designed to show changes in mode choice attributable to the IndiMark<sup>®</sup> intervention. This involved a comparison of behavioral data from the target and control group samples in the 'Before' and 'After' surveys.

It is important to note that the following results show the changes in travel behavior that were achieved across the whole population in the target area *including* those in the "N" ("Not Interested") group and non-respondent households.

The key outcomes for evaluation of the IndiMark® program were the changes in personal travel behavior resulting from the Individualized Marketing campaign. As outlined above, these were measured by a series of travel surveys, conducted before and after the marketing campaign. The surveys included samples of randomly selected households from the target population (i.e., those offered Individualized Marketing) and from the control group (i.e., those that did not participate in Individualized Marketing).

## 8.2 Overview of Project Results

Section 8.2 presents project results collectively for all three project areas. The Figures displaying "Oregon Totals" show results for all three project areas combined. Figure 8.1 presents the results for modal choice in each project area for the 'Before' survey and the 'After' survey control group.

Figure 8.1 Results from the 'Before' Survey and 'After' Survey Control Group



In Figure 8.1, the 'Total Before' column shows results from the 'Before' survey that was conducted in January and February of 2006. Bend residents indicate they walk (without using another travel mode) for four percent of their daily trips and bicycle for 0.3 percent<sup>18</sup> of their daily trips. The results show that the car is the mode of travel most frequently used, with 72 percent of trips by car-as-driver (drive alone) and 22 percent by car-as-passenger. Public transportation accounts for only two percent of all trips, which comprises mostly of school bus transportation for children.

The 'Control Group After' column provides results from the 'After' survey that was conducted in June and July of 2006. The control group consisted

 $<sup>^{\</sup>rm 18}$  The figure 0.3 percent is rounded down to 0.

of a random sample of residents who did not participate in the 'Before' survey or IndiMark<sup>®</sup> campaign. The results indicate that Bend residents walk and bike more frequently during the warmer months. The results show a one-percentage point increase in walking (from four to five percent) and a three percentage point increase in cycling (from zero to three percent). Car-as-driver decreased two percentage points (from 72 to 70 percent), car-as-passenger remained the same, and public transportation decreased two percentage points (from two to zero)<sup>19</sup>.

The results for the Eugene 'Total Before' column<sup>20</sup> (Figure 8.1) indicate that Eugene residents walk for seven percent of their daily trips and bicycle for three percent of their daily trips. The car is also the mode of travel most frequently used, with 67 percent of trips by car-as-driver and 21 percent as car-as-passenger. Public transportation accounted for two percent of daily trips.

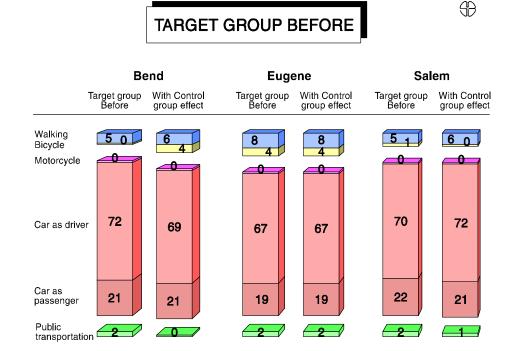
For the City of Eugene, few changes were seen in the 'Control Group' After' column. Walking remained the same (seven percent); bicycling gained one percentage point; car-as-driver and car-as passenger remained constant; and public transportation trips decreased by one percentage point.

For the Cities of Salem and Keizer (Figure 8.1), results from the 'Total Before' column show that Salem-Keizer residents walk for five percent of their daily trips; bicycle for one percent; use a car (as driver) for 67 percent of daily trips and a car (as passenger) for 24 percent of trips; and use public transportation for three percent of daily trips.

Results from the 'Control Group After' column (Figure 8.1) indicate that the walking mode increased by one percentage point (from five to six percent), bicycling remained constant at one percent, car-as-driver increased by two percentage points (from 67 to 69 percent), car-aspassenger decreased by one percentage point (from 24 to 23 percent), and public transportation decreased by two percentage points (from three to one percent).

<sup>&</sup>lt;sup>19</sup> The two-percentage point decrease in public transportation was most likely attributed to the closing of schools (summer vacation) during the conduct of the 'After' survey. <sup>20</sup> The Eugene and Salem-Keizer 'Before' survey was conducted in October and November of

<sup>2005 (</sup>fall) and the 'After' survey was conducted in June and July of 2006 (summer).



### Figure 8.2 Target Group Before and Control Group Effect

Figure 8.2 shows the target group 'Before' survey results with a control group effect. The control group effect captures the seasonal travel behavior and other external factors from the 'After' survey (conducted during the summer months) and imposes that travel behavior on the target group in the 'Before' survey. The control group effect is necessary for evaluating the effectiveness if the TravelSmart<sup>®</sup> campaign<sup>21</sup> because it shows the net effect of the TravelSmart<sup>®</sup> campaign.

Mode share among target group participants ('Before') changed due to the control group effect. The most significant changes were from the City of Bend. Walking increased by one percentage point (from five to six percent); bicycling increased by four percentage points (from zero to four percent); car-as-driver decreased by three percentage points (from 72 to 69 percent); car-as-passenger remained constant; and public transportation decreased by two percentage points (from two to zero

<sup>&</sup>lt;sup>21</sup> The control group effect allows for a comparison between the 'Before' and 'After' survey results because the two surveys were conducted in different seasons (winter and summer). For example, in wintertime, Oregon residents make fewer walking and cycling trips than during the summertime. Therefore, the control group effect takes into account these seasonal variations and external factors and imposes those differences onto the 'Before' survey results.

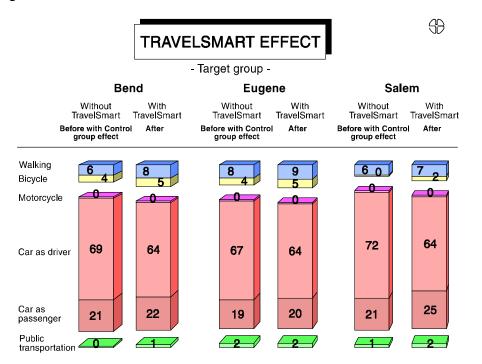
percent). These changes, most notably for the bicycling, car-as-driver, and public transportation modes, are the result of seasonal influences (weather) and external factors.

The City of Eugene's mode share remained constant, indicating that mode choice was not affected by seasonal variations or external influences. Mobility in Eugene is similar during the winter and summer seasons.

The Cities of Salem-Keizer showed changes in mode choice when the control group effect was applied. Figure 8.2 shows that walking increased by one percentage point (from five to six percent); bicycling decreased by one percentage point (from one to zero percent); car-as-driver increased by two percent (from 70 to 72 percent); car-as-passenger decreased by one percent (from 22 to 21 percent); and public transportation decreased by one percentage point (from two to one percent).

Figure 8.3 demonstrates the effectiveness of the IndiMark<sup>®</sup> (TravelSmart<sup>®</sup>) campaign in each project area. In this figure, the 'Before' survey target group (with an imposed control group effect) is compared to the 'After' survey target group in each area. This comparison allows for an evaluation of the effectiveness of the TravelSmart<sup>®</sup> campaign.

Figure 8.3 TravelSmart<sup>®</sup> Effect



The 'Before' survey results (including the control group effect) for the City of Bend show that Bend residents walk for six percent of their daily trips and bicycle for four percent of their daily trips. The car is the mode most frequently used, with 69 percent of trips by car-as-driver and 21 percent by car as passenger. Public transportation accounts for zero percent of all trips.

In the 'After' survey (With TravelSmart<sup>®</sup>), environmentally friendly modes (EFMs) showed substantial increases following the TravelSmart<sup>®</sup> campaign—the walking mode increased by two percentage points and the bicycling and public transportation modes increased by one percentage point each. In addition, the car-as-driver mode decreased by four percentage points and the car-as-passenger mode increased by one percentage point.

The 'Before' survey results (Without TravelSmart<sup>®</sup>, including control group effect) for the City of Eugene indicate that Eugene residents walk for eight percent of their daily trips and bicycle for four percent of their daily trips (Figure 8.3). The car is the mode most frequently used, with 67 percent of trips by car-as-driver and 19 percent by car as passenger. Public transportation accounts for two percent of all trips.

In the 'After' survey (with TravelSmart<sup>®</sup>), EFMs increased as a result of the TravelSmart<sup>®</sup> campaign—the walking, bicycling, and public transportation modes of travel increased by one percentage point each. Furthermore, the car-as-driver mode decreased by three percentage points and the car-as-passenger mode increased by one percentage point.

The 'Before' survey results for the Cities of Salem-Keizer (Figure 8.3) demonstrate that Salem-Keizer residents walk for six percent of their daily trips and bicycle for zero percent of their daily trips. The car represents the mode used most often, with 72 percent of trips by car-as-driver and 21 percent by car as passenger. Public transportation accounts for one percent of all trips.

In the 'After' survey (with TravelSmart<sup>®</sup>), EFMs in Salem-Keizer increased as a result of the successful TravelSmart<sup>®</sup> campaign—the walking and public transportation modes increased by one percentage point each and the bicycling mode increased by two percentage points. Single occupant vehicle (SOV) usage decreased substantially following the TravelSmart<sup>®</sup> campaign (an eight percentage point reduction), while the car-aspassenger mode increased by four percentage points.

Figure 8.4 shows the main mode share as trips per person per year without TravelSmart<sup>®</sup> and the changes that occurred following the conduct of the marketing campaign. Trips per person per year are calculated on the following standard formula: on average, a person will spend 341 days of the year in each project area, and this takes into account days that a person is away from home, for example on holidays or on business trips.

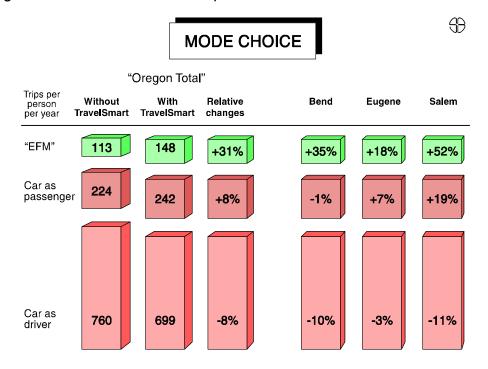


Figure 8.4 Mode Choice—Trips Per Person/Year

In Figure 8.4 the first three columns represent all three-project areas (Bend, Eugene, and Salem-Keizer). Trips for environmentally friendly modes (walking, bicycling, and public transportation) increased from 113 to 148 trips per person/year (+ 31 percent) as a result of the TravelSmart<sup>®</sup> marketing campaign. Car-as-passenger trips rose from 224 to 242 trips per person/year (+ 8 percent), and car-as-driver trips decreased from 760 to 699 trips per person/year (- 8 percent).

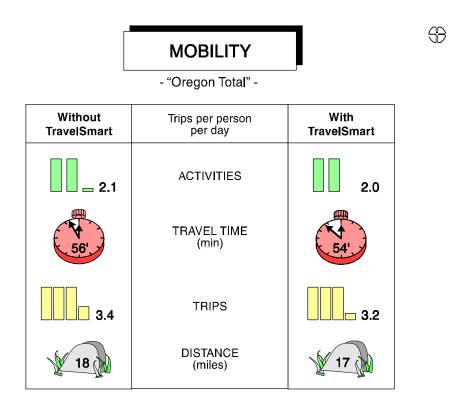
For the individual project areas, The City of Bend demonstrated a 35 percent increase in environmentally friendly modes, an 18 percent increase in car-as-passenger, and a 10 percent reduction in car-as-driver. These changes in travel behavior were due to a highly successful TravelSmart<sup>®</sup> marketing campaign.

The City of Eugene experienced positive travel behavior changes with an 18 percent increase in EFMs, a seven percent increase in car-as-passenger, and a three percent reduction in car-as-driver (Figure 8.4).

The Cities of Salem-Keizer also achieved excellent results. Environmentally friendly modes increased by 52 percent, car as passenger increased by 19 percent, and car-as-driver decreased by 11 percent (Figure 8.4).

Figure 8.5 presents mobility results for the Oregon Total. The changes in mode choice that occurred in Bend, Eugene, and Salem-Keizer had no significant impact on people's mobility. The number of activities remained relatively constant. A slight decrease was recorded in travel time along with a slight decrease in the number of trips and distance traveled following the marketing campaign. Nevertheless, mobility was not compromised as a result of this project.

Figure 8.5 Mobility—Oregon Total



On an average day of the year, Bend, Eugene, and Salem-Keizer residents spend nearly one hour traveling (54 minutes), making 3.2 trips to 2.0 activities and traveling 17 miles.

As a general rule, activities can be grouped into three main areas:

- Activities that are predetermined, such as going to work or school;
- Activities that are discretionary, such as shopping, personal business, and escorting another person;
- Leisure activities, such as traveling to conduct recreational activities, attending the movies, or dining in a restaurant.

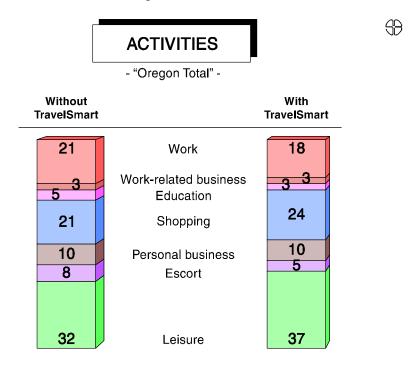


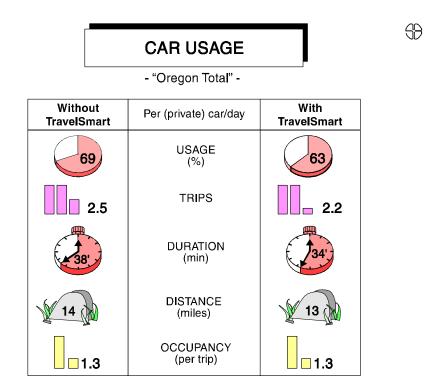
Figure 8.6 Activities—Oregon Total

The activities recorded for project participants in Bend, Eugene, and Salem-Keizer remained relatively constant before and after TravelSmart<sup>®</sup>, with a few percentage point shifts between some activities. Trips to leisure activities account for the highest number of trips, representing over one third of all trips taken. A five-percentage point increase (from 32 to 37 percent) in leisure trips occurred following the TravelSmart<sup>®</sup> campaign. Shopping trips also increased three percentage points following TravelSmart, from 21 to 24 percent.

On average, fewer than a quarter of all activities were for work or work related business (figure 8.5); around a quarter were for shopping; education, personal business, and escort trips (driving someone else to a destination such as a child to school or a spouse to work) represented approximately one fifth of all trips.

The results from figure 8.7 show that the TravelSmart<sup>®</sup> campaign influenced (private) car usage. The evaluation demonstrates that cars were used less and for fewer trips.

Figure 8.7 Car Usage—Oregon Total



Prior to the marketing intervention (Without TravelSmart<sup>®</sup>) cars were used for 69 percent of trips on an average day, making 2.5 trips. Following the TravelSmart<sup>®</sup> campaign, car usage decreased to 63 percent and car trips fell to 2.2 trips per car/day. On average, a car was used for 38 minutes per day before the marketing campaign, decreasing to 34 minutes following TravelSmart<sup>®</sup>. Distance also decreased from 14 miles driven per day to 13 miles per day, implying that residents chose to make trips to destinations closer to their homes. The average number of people occupying a car during the trips remained the same.

Figure 8.8 shows the target group (for all three areas) had a total of 3,160 cars 'Without TravelSmart®' (i.e., before the marketing campaign) and 3,180 cars 'With TravelSmart®'. Miles per car per day were reduced from 13.7 to 12.4, suggesting that the marketing campaign successfully reduced car travel.

Figure 8.8 Car Mileage—Oregon Total

CAR MILEAGE

Without TravelSmart		With TravelSmart
3,160	(Private) Cars in total	3,180
13.7	Miles per car per day (everyday mobility)	12.4
14.8 m	Total miles per year (341 days)	13.5 m

(341 uays)	
Reduction (miles per year)	- 1.3 m
Relative reduction	-9%

- "Oregon Total" -

The ODOT IndiMark<sup>®</sup> Pilot Project resulted in a nine percent reduction in vehicle miles traveled in all three-project areas. This equates to a reduction of over 1.3 million vehicle miles traveled (VMT) per year.

\$

Figure 8.9 presents changes in active travel time for all three project areas. In the 'Before' survey, (Without TravelSmart<sup>®</sup>), Bend, Eugene, and Salem-Keizer residents spent 104 hours per person/year on active modes (walking, cycling, and access/egress to public transportation or the car).

### Figure 8.9 Changes in Active Travel Time—Oregon Total

# CHANGES IN ACTIVE TRAVEL TIME

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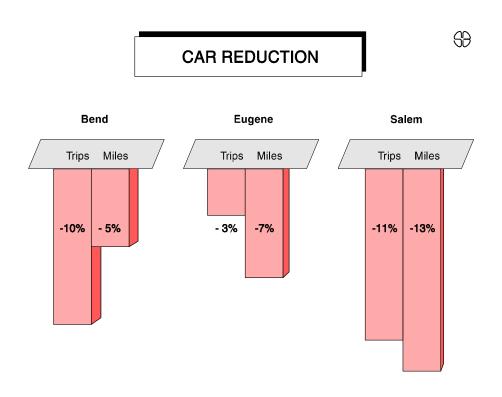
	Without TravelSmart	With TravelSmart	Change	Relative
Hours per person per year	104	112	+8	+8%

Walking, cycling and access / egress to public transportation or car (parked)

In the 'After' survey, (With TravelSmart<sup>®</sup>), residents spent 112 hours per person/year on active modes, representing an eight percent relative increase in active travel time. The TravelSmart<sup>®</sup> campaign was therefore beneficial for increasing levels of physical activity for Bend, Eugene, and Salem-Keizer residents without compromising mobility.

Figure 8.10 presents results for car reduction figures in Bend, Eugene, and Salem-Keizer.

Figure 8.10 Car Reduction



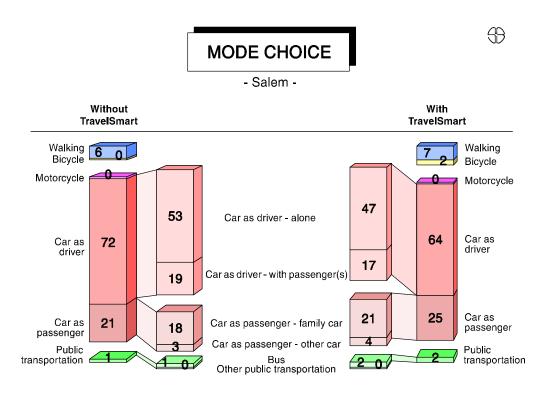
For the City of Bend, car-as-driver trips were reduced by 10 percent, representing a five percent reduction in miles (i.e., shorter car trips were changed to sustainable travel modes such as walking and bicycling). For the City of Eugene, car-as-driver trips were reduced by three percent, representing a seven percent reduction in miles (i.e., longer car trips were changed to sustainable modes). For Salem-Keizer, an 11 percent reduction in miles.

### 8.3 Salem-Keizer Project Results

Sections 8.3, 8.4, and 8.5 present results specifically for the three ODOT IndiMark<sup>®</sup> Pilot Project areas (Salem-Keizer, Eugene, and Bend, respectively).

Figure 8.11 shows mode choice for the cities of Salem and Keizer. Car trips (as driver and passenger) and public transportation trips are broken out on the inside columns to provide a more detailed account of mode choice.

Figure 8.11 Detailed Mode Choice—Salem-Keizer



The 'Without TravelSmart' column on the left hand side of Figure 8.11 shows the 'Before' survey results including a control group effect. Before the marketing intervention (Without TravelSmart<sup>®</sup>), walking accounted for six percent of all trips; bicycling for zero percent; car as driver for 72 percent (53 percent with car-as-driver alone and 19 percent with a passenger); car as passenger for 21 percent (18 percent in a family car and three percent in another car); and public transportation for one percent of all trips (one percent by bus and zero percent by other).

Figure 8.11 shows that following the marketing campaign (With TravelSmart<sup>®</sup>), the mode share of walking and public transportation increased by one percent each and bicycling rose by two percentage points. The mode share for car as driver decreased by eight percentage points (from 72 to 64 percent). Within the car-as-driver mode (broken out section), 47 percent of trips were undertaken alone and 17 percent of trips were undertaken with passengers. Compared to the results from the 'Without TravelSmart<sup>®</sup>' column for car-as-driver, the marketing campaign effectively reduced car-as-driver alone trips by six percentage points (from 53 to 47 percent). The mode share for car-as-passenger increased by four percentage points (from 21 to 25 percent), suggesting that the TravelSmart<sup>®</sup> campaign encouraged households to carpool more frequently.

Figure 8.12 presents results for mode choice in Salem-Keizer measured in trips per person and year. Trips per person per year are calculated on the following standard formula: on average, a person will spend 341 days of the year in a city/town, and this takes into account days that a person is away from home, for example, on holidays or on business trips.

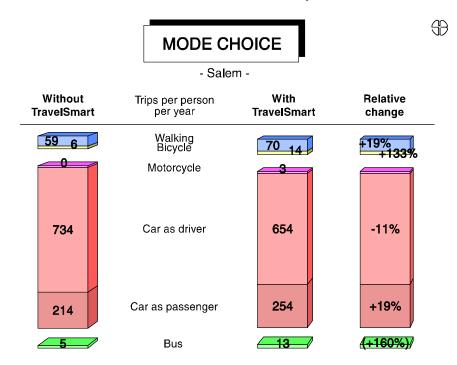


Figure 8.12 Salem-Keizer Mode Choice–Trips Per Person/Year

Without TravelSmart<sup>®</sup>, and for an average of the year, the majority of trips were made by car, 734 by car as driver and 214 by car as passenger (Figure 8.12). An average of zero trips per person/year was made by motorbike. There were a total of 70 trips undertaken by environmentally friendly modes: 59 by foot, 6 with a bicycle, and 5 by public transportation.

Following the marketing intervention (With TravelSmart<sup>®</sup>), car-as-driver trips decreased by 80 trips (from 734 to 654), representing an 11 percent reduction in car-as-driver trips (Figure 8.12). Car-as-passenger trips increased by 40 trips per person/year (from 214 to 254), representing a 19 percent relative increase. These trips were replaced by more environmentally friendly travel modes. Walking increased by 19 percent, cycling by 133 percent, and public transportation by 160 percent (Figure 8.12).

Figure 8.13 compares mobility data before and after the marketing intervention. It is important to note that the changes in mode choice that occurred in the Salem-Keizer area have not significantly impacted people's mobility.

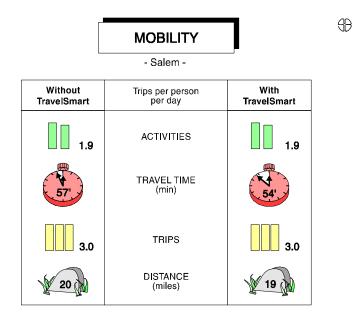


Figure 8.13 Mobility Results—Salem-Keizer

The average number of activities and trips undertaken outside the home are the same before and after the marketing intervention, with 1.9 activities undertaken during 3.0 trips per person/day. On an average day of the year (With TravelSmart<sup>®</sup>), Salem-Keizer residents spent a little less than one hour (54 minutes) traveling a distance of 19 miles.

The activities recorded for project participants in Salem-Keizer remained relatively constant before and after the marketing intervention. Trips to leisure activities account for the highest number of trips, representing approximately one third of all trips taken. A seven percentage point increase (from 31 to 38 percent) in leisure trips occurred following the TravelSmart<sup>®</sup> marketing campaign. Shopping trips also increased by four percentage points following TravelSmart<sup>®</sup>, from 22 to 26 percent (Figure 8.13).

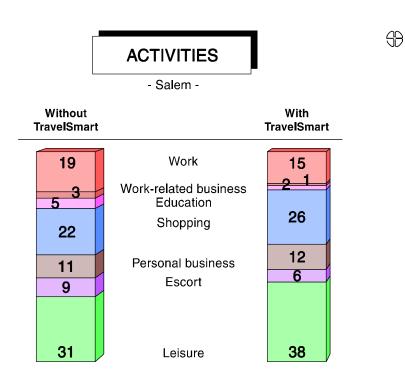
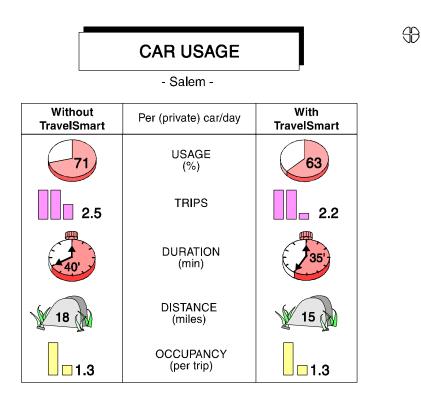


Figure 8.14 Activities—Salem-Keizer

On average, less than a quarter of the activities were for work or work related business (figure 8.14); around a quarter were for shopping and education trips; and personal business and escort trips (driving someone else to a destination such as a child to school or a spouse to work) represented approximately one fifth of all trips.

The results from figure 8.15 demonstrate that TravelSmart<sup>®</sup> influenced (private) car usage. The figure shows that cars were used less and for fewer trips.

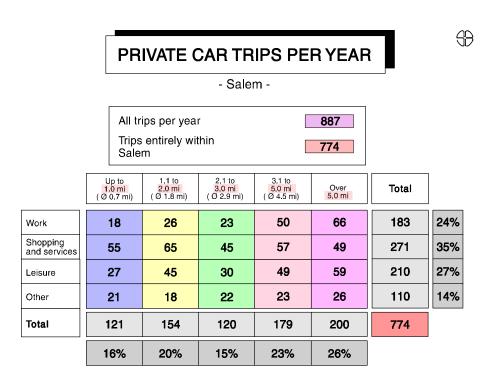
Figure 8.15 Car Usage—Salem-Keizer



Prior to the marketing intervention (Without TravelSmart<sup>®</sup>) cars were used for 71 percent of trips on an average day, making 2.5 trips. Following the TravelSmart<sup>®</sup> campaign, car usage decreased to 63 percent and car trips fell to 2.2 trips per car/day. On average, a car was used for 40 minutes per day before the marketing campaign, decreasing to 35 minutes with TravelSmart<sup>®</sup>. Distance also decreased from 18 miles driven per day to 15 miles per day, suggesting that Salem-Keizer residents chose to make trips to destinations closer to their homes. The average number of people occupying a car during the trips remained the same.

Figure 8.16 shows private car trips per year in Salem from the 'Before' survey. The car trips are broken down by mileage and activity.

Figure 8.16 Private Car Trips Per Year—Salem



Sixteen percent of all car trips within Salem are one mile or less and over one-third of car trips (35 percent) are between one and three miles. Trips of these distances are potential walking and cycling trips, provided there are no constraints such as disability, the need to carry heavy parcels or trip chaining to other activities further away. Almost one-half of the car trips (49 percent) are less than three miles and only 26 percent are further than five miles. Even a superficial glance at the individual fields of the matrix in figure 8.16 shows that there are many car trips that can be substituted with sustainable modes. The results from Figure 8.17 show that the target group had a total of 1010 cars 'Without TravelSmart<sup>®</sup>' (i.e., before the marketing campaign) and 1020 cars 'With TravelSmart<sup>®</sup>'.

Figure 8.17 Car Mileage—Salem-Keizer

	CAR MILEAGE	
	- Salem -	
Without FravelSmart		With TravelSmart
1,010	(Private) Cars in total	1,020
17.3	Miles per car per day (everyday mobility)	14.9
6.0	Total miles per year (341 days)	5.2 m
	Reduction (miles per year)	- 0.8 m

Relative reduction

Vehicle miles traveled per car/day were reduced from 17.3 to 14.9 due to the success of the marketing efforts. The ODOT IndiMark<sup>®</sup> Pilot Project resulted in a 13 percent reduction in vehicle miles traveled in Salem-Keizer. This equates to a reduction of 800,000 vehicle miles traveled per year.

-13%

Figure 8.18 presents results for changes in active travel time for Salem-Keizer. Without TravelSmart<sup>®</sup>, Salem-Keizer residents spent 94 hours per person/year on active modes (walking, cycling, and access/egress to public transportation or the car).

Figure 8.18 Changes in Active Travel Time—Salem-Keizer

# CHANGES IN ACTIVE TRAVEL TIME

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- Salem -

	Without TravelSmart	With TravelSmart	Change	Relative
Hours per person per year	94	100	+6	+10%

Walking, cycling and access / egress to public transportation or car (parked)

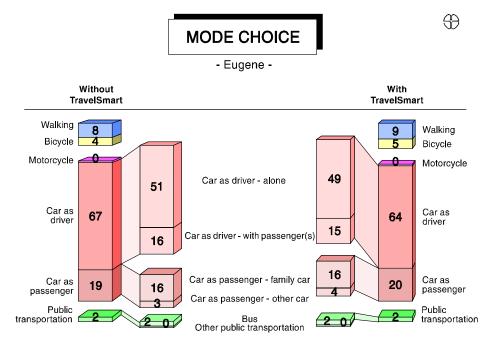
Following the IndiMark<sup>®</sup> campaign (With TravelSmart<sup>®</sup>), residents spent 100 hours per person/year on active modes, representing a 10 percent relative increase. Thus, the IndiMark<sup>®</sup> campaign was successful for increasing levels of physical activity for Salem-Keizer residents.

### 8.4 Eugene Project Results

Section 8.4 provides results for travel behavior changes in Eugene.

Figure 8.19 presents results for mode choice in Eugene. The broken out sections show the details for the car-as-driver and passenger modes.



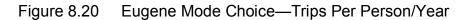


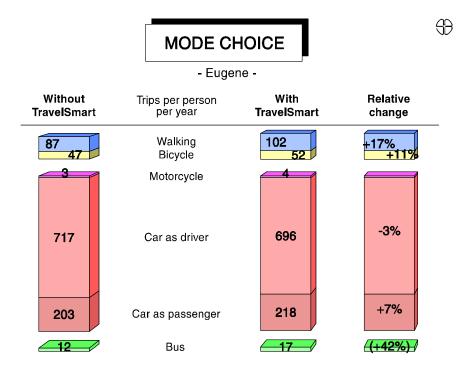
The 'Without TravelSmart' column on the left hand side of Figure 8.19 shows the 'Before' survey results including a control group effect. Before the marketing intervention (Without TravelSmart<sup>®</sup>), walking accounted for eight percent of all trips; bicycling for four percent; car as driver for 67 percent (51 percent with car-as-driver alone and 16 percent with a passenger); car as passenger for 19 percent (16 percent in a family car and three percent in another car); and public transportation for two percent of all trips (one percent by bus and zero percent by other).

Following the marketing campaign (Figure 8.19, With TravelSmart<sup>®</sup> column), the mode share of walking and bicycling increased by one percentage point each, whereas the mode share for car as driver decreased by three percentage points (from 67 to 64 percent). The mode share for public transportation remained constant. Within the car-as-driver

mode (broken out section), 49 percent of trips were undertaken alone and 15 percent of trips were undertaken with passengers. Compared to the results from the 'Without TravelSmart<sup>®</sup>' column for car-as-driver, the marketing campaign effectively reduced car-as-driver alone trips by two percentage points (from 51 to 49 percent). The mode share for car-as-passenger increased by one percentage point (from 19 to 20 percent).

Figure 8.20 presents results for mode choice in Eugene measured in trips per person and year. Trips per person per year are calculated on the following standard formula: on average, a person will spend 341 days of the year in a city/town, and this takes into account days that a person is away from home, for example, on holidays or on business trips.



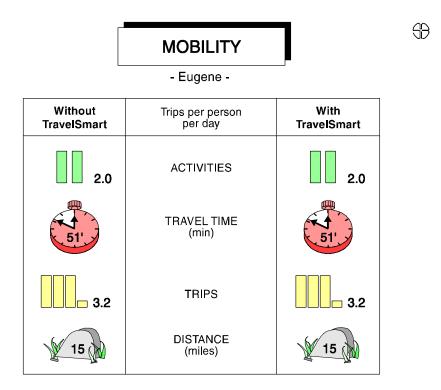


Without TravelSmart<sup>®</sup>, and for an average of the year, the majority of trips were made by car, 717 by car-as-driver and 203 by car as passenger. An average of three trips per person/year was made by motorbike. There were a total of 146 trips undertaken by environmentally friendly modes: 87 by foot, 47 with a bicycle, and 12 by public transportation.

After the marketing campaign (With TravelSmart<sup>®</sup>), car-as-driver trips decreased by 21 trips (from 717 to 696), representing a three percent reduction. Car-as-passenger trips increased by 15 trips per person/year (from 203 to 218), representing a seven percent relative increase. These car trips were replaced by sustainable travel modes. Walking increased by 17 percent, cycling by 11 percent, and public transportation by 42 percent (Figure 8.20).

Figure 8.21 compares mobility data before and after the TravelSmart<sup>®</sup> campaign. Changes in mode choice that occurred in the Eugene area had no impact on people's mobility.

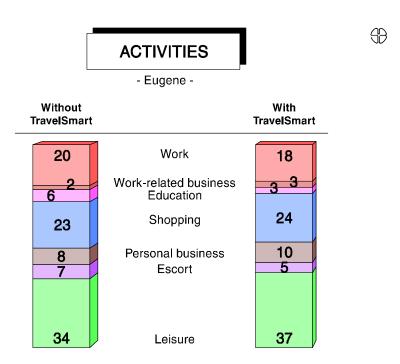
Figure 8.21 Mobility—Eugene



The average number of activities and trips undertaken outside the home are the same before and after the marketing intervention, with 2.0 activities undertaken during 3.2 trips per person/day. Travel time and distance also remained constant before and after the TravelSmart<sup>®</sup> campaign. On an average day of the year, Eugene residents traveled for 51 minutes covering a distance of 15 miles.

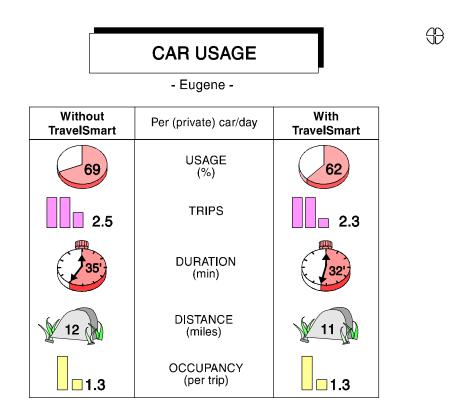
In Figure 8.22, the activities recorded for Eugene residents remained relatively constant before and after the marketing intervention. Trips to leisure activities still account for the highest number of trips, representing over one third of all trips taken. A three-percentage point increase (from 34 to 37 percent) in leisure trips occurred following the TravelSmart<sup>®</sup> marketing campaign. Shopping trips increased by one percentage point, from 23 to 24 percent.

Figure 8.22 Activities—Eugene



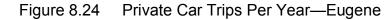
On average, less than a quarter of the activities were for work or work related business; over a quarter were for shopping and education trips; and personal business and escort trips (driving someone else to a destination such as a child to school or a spouse to work) represented approximately one sixth of all trips. The results from figure 8.23 demonstrate that TravelSmart<sup>®</sup> influenced (private) car usage. The results show that cars were used less and for fewer trips.

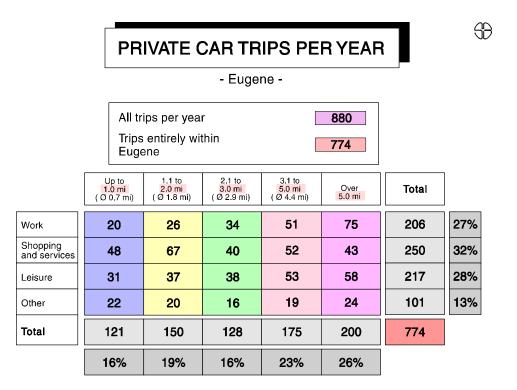
Figure 8.23 Car Usage—Eugene



Prior to the marketing intervention (Without TravelSmart<sup>®</sup>) cars were used for 69 percent of trips on an average day, making 2.5 trips. Following the TravelSmart<sup>®</sup> campaign, car usage decreased to 62 percent and car trips fell to 2.3 trips per car/day. On average, a car was used for 35 minutes per day before the marketing campaign, decreasing to 32 minutes with TravelSmart<sup>®</sup>. Distance also decreased from 12 miles driven per day to 11 miles per day, indicating that Eugene residents undertook shorter trips for their activities. The average number of people occupying a car during the trips remained the same at 1.3 persons per trip.

Figure 8.24 shows private car trips in per year in Eugene from the 'Before' survey. The car trips are broken down by mileage and activity.





Sixteen percent of all car trips within Salem are one mile or less and over one-third of car trips (35 percent) are between one and three miles. Trips of these distances are potential walking and cycling trips. Over one-half of the car trips (51 percent) are less than three miles and only 26 percent are further than five miles. The results presented in figure 8.24 show that there are many car trips that can be substituted with sustainable modes of travel such as walking, bicycling, and public transportation. Figure 8.25 shows results for changes in active travel time for Eugene. Before the marketing campaign (Without TravelSmart<sup>®</sup>), Eugene residents spent 107 hours per person/year on active modes (walking, cycling, and access/egress to public transportation or the car).

Figure 8.25 Changes In Active Travel Time—Eugene

## CHANGES IN ACTIVE TRAVEL TIME

<del>(})</del>

- Eugene -

	Without TravelSmart	With TravelSmart	Change	Relative
Hours per person per year	107	115	+8	+7%

Walking, cycling and access / egress to public transportation or car (parked)

Following the IndiMark<sup>®</sup> campaign (With TravelSmart<sup>®</sup>), residents spent 115 hours per person/year on active modes, demonstrating a seven percent relative increase. Thus, Eugene residents substantially increased their active travel time following the marketing intervention.

Figure 8.26 presents everyday mobility results for car mileage reductions in Eugene. Figure 8.26 indicates the target group had a total of 1000 cars before the marketing campaign ('Without TravelSmart<sup>®</sup>') and 1040 cars after the marketing campaign ('With TravelSmart<sup>®</sup>').

Figure 8.26 Car Mileage—Eugene



- Eugene -

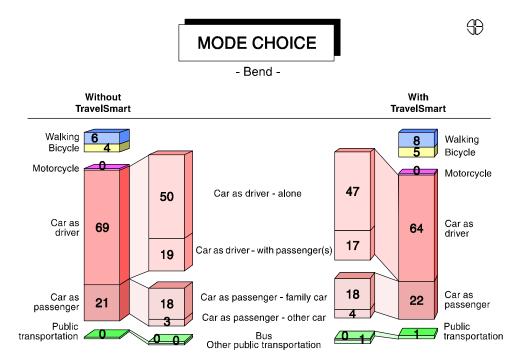
Without TravelSmart		With TravelSmart	
1,000	(Private) Cars in total	1,040	
12.4	Miles per car per day (everyday mobility)	10.9	
4.2 m	4.2 m Total miles per year (341 days)		
	Reduction (miles per year)	- 0.3 m	
	Relative reduction	-7%	

The ODOT IndiMark<sup>®</sup> Pilot Project resulted in a seven percent reduction in vehicle miles traveled in Eugene, equating to over 300,000 miles reduced per year. Vehicle miles traveled per car/day were reduced from 12.4 to 10.9.

## 8.5 Bend Project Results

Section 8.5 provides results for travel behavior changes from the City of Bend.

Figure 8.27 Detailed Mode Choice—Bend



The 'Without TravelSmart<sup>®</sup>' column on the left hand side of Figure 8.27 shows the 'Before' survey results including a control group effect. Before the marketing intervention (Without TravelSmart<sup>®</sup>), walking accounted for six percent of all trips; bicycling for four percent; car as driver for 69 percent (50 percent with car-as-driver alone and 19 percent with a passenger); car as passenger for 21 percent (18 percent in a family car and three percent in another car); and public transportation for zero percent of all trips in the City of Bend.

Following the marketing campaign (With TravelSmart<sup>®</sup>), the mode share of walking increased by two percentage points (from six to eight). Bicycling and public transportation increased by one percentage point each. The mode share for car-as-driver decreased by three percentage points (from 69 to 64 percent). Within the car-as-driver mode (broken out section), 47 percent of trips were undertaken alone and 17 percent of trips were undertaken with passengers. Compared to the results from the 'Without TravelSmart<sup>®</sup>' column for car-as-driver (Figure 8.27), the

marketing campaign effectively reduced car-as-driver alone trips by three percentage points (from 50 to 47 percent). The mode share for car-as-passenger increased by three percentage points (from 19 to 22 percent).

Figure 8.28 presents results for mode choice in Bend measured in trips per person and year. Trips per person/year are calculated on the following standard formula: on average, a person will spend 341 days of the year in a city/town, and this takes into account days that a person is away from home, for example, on holidays or on business trips.

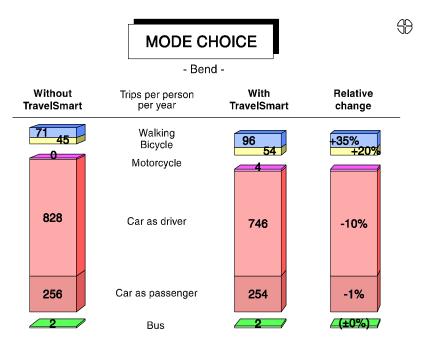


Figure 8.28 Mode Choice—Bend

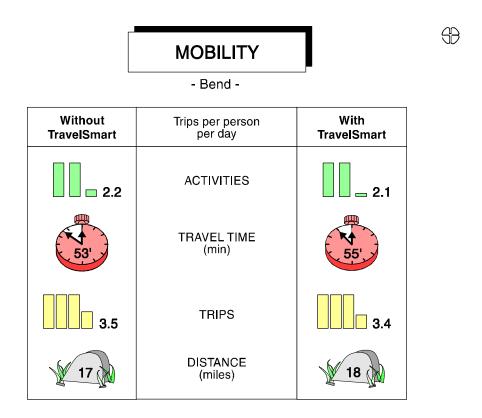
Without TravelSmart<sup>®</sup>, and for an average of the year, the majority of trips were made by car, 828 by car-as-driver and 256 by car-as-passenger. An average of zero trips per person/year was made by motorbike. There were a total of 118 trips undertaken by environmentally friendly modes: 71 by foot, 45 with a bicycle, and two by public transportation<sup>22</sup>.

After the marketing campaign (With TravelSmart<sup>®</sup>), car-as-driver trips decreased by 82 trips per person/year (from 828 to 746), representing a 10 percent relative reduction. Car-as-passenger trips decreased by 2 trips per person/year (from 256 to 254), representing a one percent relative decrease. Walking increased by 35 percent, cycling by 20 percent, and public transportation remained constant (Figure 8.28).

<sup>&</sup>lt;sup>22</sup> Public transportation trips in Bend were mostly undertaken in a school bus.

Figure 8.29 compares mobility data before and after the TravelSmart<sup>®</sup> campaign. Changes in mode choice that occurred in Bend had little impact on people's mobility.

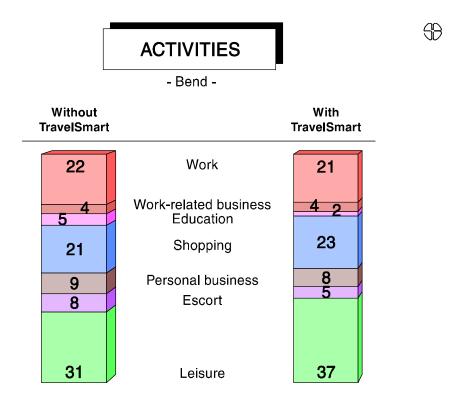
Figure 8.29 Mobility—Bend



The average number of activities and trips undertaken outside the home changed only slightly following the marketing intervention. An average of 2.1 activities (With TravelSmart<sup>®</sup>) was undertaken during 3.4 trips per person/day. On an average day of the year (With TravelSmart<sup>®</sup>), Bend residents spent a little less than one hour (55 minutes) traveling a distance of 18 miles.

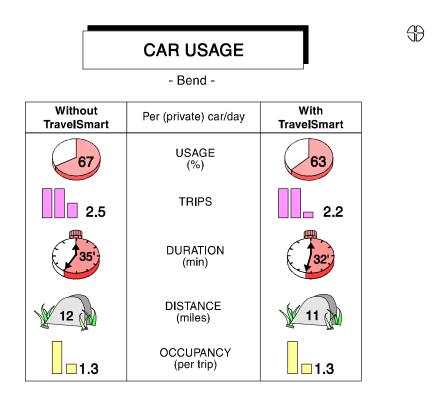
The activities for Bend residents remained relatively stable before and after the marketing intervention. Trips to leisure activities account for the highest number, representing approximately one third of all trips taken. A six-percentage point increase (from 31 to 37 percent) in leisure trips occurred following the TravelSmart<sup>®</sup> marketing campaign. Shopping trips increased by two percentage points, from 21 to 23 percent.

Figure 8.30 Activities—Bend



On average, less than a quarter of the activities undertaken were for work or work related business; over a quarter were for shopping and education trips; and personal business and escort trips (driving someone else to a destination such as a child to school or a spouse to work) represented approximately one sixth of all trips. Figure 8.31 presents results for car usage in Bend. Before the marketing intervention (Without TravelSmart<sup>®</sup>) cars were used for 67 percent of trips on an average day, making 2.5 trips.

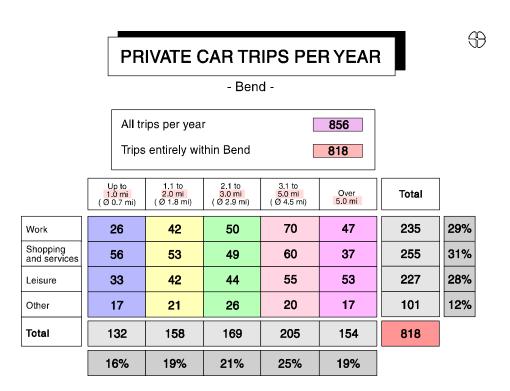
Figure 8.31 Car Usage—Bend



After the TravelSmart<sup>®</sup> campaign, car usage decreased to 63 percent and car trips fell to 2.2 trips per car/day. On average, a car was used for 35 minutes per day before the marketing campaign, decreasing to 32 minutes with TravelSmart<sup>®</sup>. Distance also decreased from 12 miles driven per day to 11 miles per day, indicating that Bend residents undertook shorter trips for their activities. The average number of people occupying a car during the trips remained the same at 1.3 persons per trip.

Figure 8.32 shows private car trips per year in Bend from the 'Before' survey. The car trips are broken down by mileage and activity.

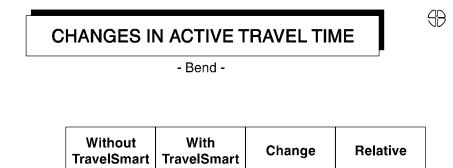
Figure 8.32 Private Car Trips Per Year—Bend



Sixteen percent of all car trips within Bend are one mile or less and 40 percent are between one and three miles. It is important to note that trips of these distances can be substituted by sustainable travel modes such as walking and bicycling. Over one-half of the car trips (56 percent) are less than three miles and only 19 percent are further than five miles long.

Figure 8.33 shows changes in active travel time for Bend. Before the marketing campaign (Without TravelSmart<sup>®</sup>), Bend residents spent 110 hours per person/year on active modes (walking, cycling, and access/egress to public transportation or the car).

Figure 8.33 Changes In Active Travel Time—Bend



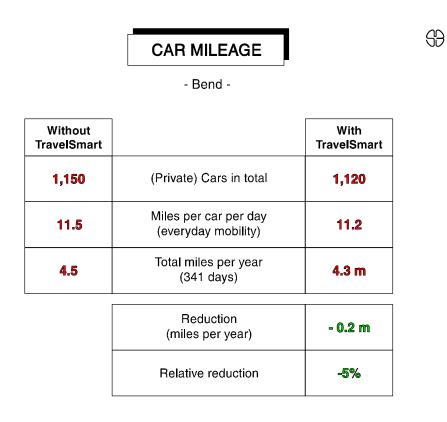
	Without TravelSmart	With TravelSmart	Change	Relative
Hours per person per year	110	120	+10	+8%

Walking, cycling and access / egress to public transportation or car (parked)

Following the marketing campaign (With TravelSmart<sup>®</sup>), residents spent 120 hours per person/year on active modes, demonstrating an 8 percent relative increase. Therefore, the marketing campaign was instrumental in increasing active travel time for Bend residents.

The results from Figure 8.34 indicate that the target group had a total of 1150 cars before the marketing campaign ('Without TravelSmart<sup>®</sup>') and 1020 cars after the marketing campaign ('With TravelSmart<sup>®</sup>').

Figure 8.34 Car Mileage—Bend



The ODOT IndiMark<sup>®</sup> Pilot Project resulted in a five percent reduction in vehicle miles traveled in Bend, equating to over 200,000 miles reduced per year. Vehicle miles traveled per car/day were reduced from 11.5 to 11.2.

## 9.0 Conclusion

Individualized Marketing—the use of direct contacts, individualized motivation, and tailor-made information to foster the use of public transportation, bicycling, and walking—has been successfully applied in the ODOT IndiMark<sup>®</sup> Pilot Project. Results from this report show that implementing a soft policy approach can activate large potentials for sustainable modes of transportation in the cities of Salem-Keizer, Eugene, and Bend, Oregon.

Direct feedback from project participants demonstrates that Salem-Keizer, Eugene, and Bend residents were highly supportive of the ODOT TravelSmart® marketing campaign. The project received high travel survey response rates and a general interest from households in each project area. The positive perception of the marketing services and the large numbers of informational materials and incentive items requested shows that personal contact can stimulate people to think about their travel behavior and use of environmentally friendly modes of travel.

During the IndiMark<sup>®</sup> campaign, 821 tote bags were personally delivered to project participants in all three-project areas. The most popular informational materials requested were: stop specific bus schedules; public transportation and Amtrak schedules; carpool/vanpool matching brochures; biking, walking, and parks maps; bicycle safety brochures; and cycling and walking store coupons. A total of 95 public transportation and bicycle trip plans were requested by project participants in Salem-Keizer, Eugene, and Bend. In addition, a total of 40 home visits were conducted during the TravelSmart<sup>®</sup> campaign to encourage residents to use sustainable travel modes more frequently.

The results from the project indicate that the ODOT IndiMark<sup>®</sup> Pilot Project was successful in changing travel behavior among project participants in Salem-Keizer, Eugene, and Bend. Environmentally friendly travel modes increased by 31 percent for the project as a whole—35 percent for Bend, 18 percent for Eugene, and 52 percent for Salem-Keizer. Car as driver trips decreased by eight percent for the project as a whole—negative 10 percent for Bend, negative three percent for Eugene, and negative 11 percent for Salem. The ODOT IndiMark<sup>®</sup> Pilot Project resulted in a nine percent reduction in vehicle miles traveled in all three-project areas, which equates to a reduction of over 1.3 million vehicle miles traveled (VMT) per year. The results prove that Individualized Marketing can be successfully applied in different types of cities throughout Oregon.

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