

# Welcome SmartTrips 2019

## Impact Summary

### Output – How much did SmartTrips do this year?

SmartTrips interacted with **53,169 new mover households** in 2019. This is a 7% increase in total number of households as there were 49,647 households in 2018.

The new mover households received five mailers promoting transportation options within Portland and the opportunity to learn more about how to get around.

Out of the over 50,000 new mover households, we received **5,500 orders** of transportation materials and resources. These people are called ‘participants’ within our program as they received further information and communications from us. In 2018 we had a total of 5,093 participants. Therefore, this year we experienced **8% increase** in the number of orders and participants.

Last year the response rate for placing an order of materials was 10.2% and this year that rate held steady as 10.3% of our new mover households chose to take up our offer.

60% of people placed their order online by going to [portlandsmartrips.org](http://portlandsmartrips.org) as instructed on their mailers and 40% of people utilized the paper order form that was sent to them.

### Stages of Change Segmentation results

This year marks the first year that we segmented our participants using the Stages of Change model as the segmentation criteria. We asked participants to answer 3-4 questions when they placed their orders that then determined where they land in the Stages of Change for each transportation mode.

	Transit	Biking	Walking	Driving	
Precontemplation		13%	21%	8%	3%
Contemplation		18%	22%	9%	16%
Preparation		27%	27%	19%	29%
Action		12%	8%	19%	18%
Maintenance		28%	18%	41%	18%
no answer		4%	4%	4%	n/a

We did not ask the Driving segmentation question on the paper order form because of lack of space, thus the high percentage of ‘no answer’ for that mode. Here are the biggest insights as we look towards planning next year’s program:

- 27% of participants are in Preparation stage to take transit, meaning that they are getting ready or are ready to take transit but just haven’t taken the action.
- A total of 49% are in Contemplation and Preparation stage to bicycle, meaning that they want to do it and either need help preparing or just haven’t taken the action.

- 60% of participants are already walking for some of their trips (in Action and Maintenance stage).
- Only 3% of our online order participants are in Precontemplation for driving, meaning most people who take up our service for more information have an open mind to changing their behavior.

### What did people order?

Out of all our participants:

- 82% ordered at least one map
- 66% ordered at least one item related to bicycling
- 66% ordered at least one item related to walking
- 52% ordered at least one item related to taking transit

Here is a breakdown of how many people ordered each individual item we offer:

	Participants ordered	% of total
<b>Information</b>		
North map	1793	36%
Northeast map	2344	47%
Northwest map	2349	47%
Southeast map	2605	52%
Southwest map	1828	36%
Citywide map	2811	56%
Walk Guide	2435	48%
Bike Guide	2050	41%
OR Bike Manual (ODOT)	1816	36%
Family Bike Guide	743	15%
Safe Routes to School	551	11%
TriMet Service map (TriMet)	2203	44%
Streetcar (Portland Streetcar)	1631	32%
Honored Citizen Guide	938	19%
Rideshare	1139	23%
Drive Less Connect (ODOT)	813	16%
<b>Free Incentive</b>		
Pedometer	2365	47%
Waterbottle	4191	83%
<b>Choose-One Incentive</b>		
Hop FastPass with 1 Day Pass	1687	34%
Safety Lights	2026	40%
Bike Map Bandana	1076	21%

## Delivery Method

The primary method of delivering participants' orders is by bicycle because it is both cost-effective, given the volume of orders, and allows our staff to interact with participants in-person to answer questions and provide a human element.

About 70% of all orders are delivered by bicycle by two staff members, and the other 30% delivered by postal mail or picked up in person at the PBOT office. In addition to regular SmartTrips orders, our staff members also delivered to 765 additional homes for the SmartTrips to School programs, which provided transportation information and incentives to kindergarteners, 2<sup>nd</sup> graders, 6<sup>th</sup> graders and their parents. In total we estimate that **our staff members visited 4,325 homes**—an average of 17 homes per work day.

## Newsletters

We distributed a total of nearly **112,000 newsletters** to our new mover households. Each new mover household received at minimum two newsletters and those who chose to participate further in the program by ordering materials received additional newsletters – up to a total of five newsletters through the year. The initial or invitation SmartTrips newsletter provided us with an opportunity to communicate with all new movers about the transportation options available to them and to inform new movers about infrastructure elements that might be unique to Portland or new to them.

In addition to mailed newsletters, we also engage our participants via digital emails that offered them tips for getting around, reminded them of the resources available to them, and listed upcoming events to get them biking, walking, and taking transit.

Finally, both the mailed and email newsletters also allowed us to build a trustworthy relationship and maintain ongoing communication with our participants about the many benefits of active transportation - whether they be health, safety, environmental, financial, or benefits to livability – and to keep them engaged in the change process throughout the year.

## Outcome – How well did SmartTrips do on its goal to reduce driving and increase active trips this year?

### Survey Methodology Overview

We surveyed three groups of people to evaluate the program:

- A control group made up of a small subset of the new movers list. These people are isolated and not placed in the program at all. They are surveyed twice to capture a pre and post look, below they are labeled as Cpre and Cpost.
- The new movers households group, which are the people that we send mailers to and offer our service of more information and incentive. They are only surveyed once in October, below they are labeled as HH.

- The participants group, which are the people who placed an order for more information and experienced the full program. They are surveyed twice to capture a pre and post look, below they are labeled as Ppre and Ppost.

Most respondents completed the survey online, but paper copies were made available for those who requested one.

Here are the response rate for the surveys:

Survey Group	# of eligible participants	# of respondents	Response Rate
Cpre	2854	195	7%
Cpost	2835	143	5%
HH	29600	971	3%
Ppre	2486	1379	55%
Ppost	3747	605	16%

*Given low sample sizes of the control groups, travel behavior data for those groups is less accurate and does not represent the entire group.*

### Findings from Trip Diary questions

We asked all survey respondents to tell us about the trips they took the previous day, the purpose of each trip, and how they traveled for each trip. For simplicity of reporting the data, modes were combined as follows:

- Driving combined: Driving alone, driving with others, driving to transit, carpooling, using a ride-hailing service.
- Active combined: Driving to transit, walking or biking to transit, biking, walking or using mobility device, e-scooting

	Cpre (no program)	Cpost (no program)	HH (some program)	Ppre (some program)	Ppost (full program)	ACS 2017
<b>Driving Combined</b>	<b>57%</b>	<b>65%</b>	<b>58%</b>	<b>58%</b>	<b>52%</b>	68%
<b>Active Combined</b>	<b>42%</b>	<b>32%</b>	<b>41%</b>	<b>41%</b>	<b>48%</b>	25%
Transit	11%	9%	12%	12%	15%	12%
Bike & E-Scooter	15%	8%	11%	8%	11%	7%
Walk	16%	15%	18%	21%	22%	6%

Control group trip diary data gives us the ability to measure what would be the mode shift impact if people do not go through any intervention in the form of a SmartTrips program. The data shows that driving trips increased by 8% points between pre and post surveys, and active trips decreased by 10% points. Because of low sample sizes, this data should just be used for internal purposes and not reporting as the data is not representative of the entire control group.

Households trip diary data show us the mode split for those new mover households that received some program intervention but chose not to order additional information. Driving trips are 10% points lower than Portland average according to ACS 2017 data, and active trips are 16% points higher. Anecdotally you can also compare the HH data with Cpre, and see that even doing *some* program intervention reduce driving at a higher rate than no program intervention at all.

Participants trip diary data lets us measure the mode shift impact for those people who experience the full SmartTrips program since they had chosen to order information and incentives. Compare this control group mode shift where an opposite effect is happening; driving trips reduced and active trips increased instead of the other way around.

**SmartTrips participants drive less by 6% points since taking up our service offering**, and 14% points less when compared to the control group. SmartTrips participants **use active modes by 7% point more since taking up our service offering**, and 17% more when compared to the control group.

Compared to the Portland average, SmartTrips participants are driving less by 16% points and using active modes more by 23% points.

### Findings from Self-Report questions

We asked all survey respondents how do they commute to work or school and how do they get around for neighborhood trips. For each question, we gave them an option to select multiple modes and indicate the frequency of each mode (1-2 times per week, 3-4 times per week, entire week, etc.)

The data tallied below shows the % of people who report that they use a driving mode or active mode at least once during the week. Totals do not add to 100% because people may have selected multiple modes in different frequencies for their weekly commute.

#### Commute Trips

<i>The rate at which mode is used <u>at least once</u> during the week</i>	Cpre (no program)	Cpost (no program)	HH (some program)	Ppre (some program)	Ppost (full program)
<b>Drive</b>	<b>59%</b>	<b>66%</b>	<b>60%</b>	<b>61%</b>	<b>53%</b>
<b>Active</b>	<b>48%</b>	<b>54%</b>	<b>52%</b>	<b>54%</b>	<b>54%</b>
Transit	27%	34%	29%	32%	30%
Bike and Scoot	25%	20%	25%	22%	24%
Walk	15%	15%	18%	42%	22%
Work from home	17%	18%	16%	20%	16%

- Again, data size for this group is small, so less accurate. Control group respondents reported that they increased their use of an automobile for commute trips since they moved, while active modes remain the same.
- With some program intervention, 60% of household respondents were using an automobile at least once a week to commute and 52% used active modes at least once to commute.
- With full program intervention, driving modes decreased while active trips remained the same. This could be because people increased the frequency of their active trips.

## Neighborhood Trips

<i>The rate at which mode is used <u>at least once</u> during the week</i>	Cpre (no program)	Cpost (no program)	HH (some program)	Ppre (some program)	Ppost (full program)
<b>Drive</b>	<b>84%</b>	<b>92%</b>	<b>85%</b>	<b>83%</b>	<b>79%</b>
<b>Active</b>	<b>72%</b>	<b>67%</b>	<b>72%</b>	<b>75%</b>	<b>79%</b>
Transit	29%	27%	30%	34%	39%
Bike and Scoot	32%	28%	31%	28%	33%
Walk	52%	52%	54%	68%	60%

- Again, data size for this group is small, so less accurate. Control group respondents their use of an automobile for their neighborhood trips since they moved, and active modes decreased.
- With some program intervention, 85% of household respondents were using an automobile at least once a week and 72% used active modes at least once to get around the neighborhood. Using Cpre data as baseline, compare the shift between it and the households versus the control group. Households only experience a 1% point increase in driving instead of 8% points, and households active modes held steady instead of dropping 5% points. This shows that even *some* intervention makes desired impact compared to doing nothing at all.
- With full program intervention, 79% of participants were using an automobile at least once a week and 79% used active modes at least once to get around the neighborhood. The use automobile for these trips reduced by 4% points and active modes increased 4%. **SmartTrips program helped convert 4% of non-commute trips done by car into ones done by transit, biking, or walking.**
- Looking at specific modes, SmartTrips helped increase the number of non-commute trips done by transit and bicycle by 5% points each.

## Who are our participants (people who placed an order)?

Based on our survey responses, which was taken by about 12% of our total participants, 64% of our participants are females and 58% are between the age of 25-44 years old. About 77% of our participants are White, 9% Asian, 5% Hispanic, 3% Black, and 3% Native American.

Income is spread evenly across groups with the largest group making \$90,000 and above of income. Participants are highly educated with 39% having a Bachelor's Degree as the highest level of education completed and 37% having a Graduate Degree completed.

70% of participants are employed, 10% unemployed, 15 % are retired, and 4% are students.

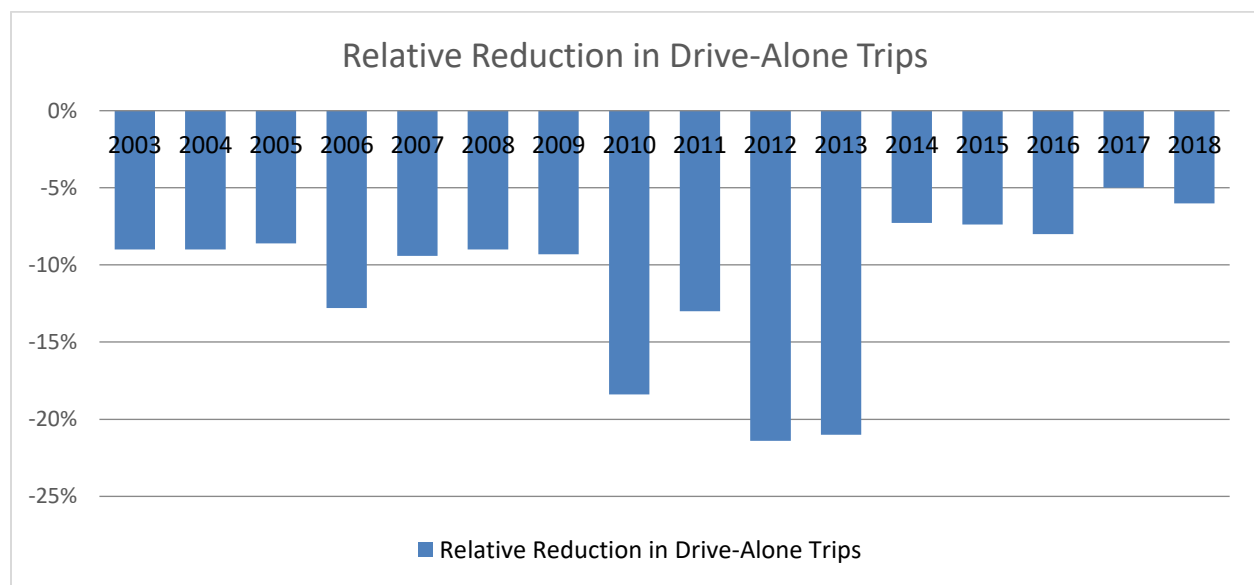
## Impact – Is the city better off from SmartTrips’ work this year?

Yes. In addition to data shared above, we calculated the impact that the program is estimated to have on vehicle miles within the city.

A household who has been sent some materials from SmartTrips is likely to drive 0.21 miles less than a household who did not go through the program, and with over 44,000 households served by the program, the annual total VMR for households is 6,071,900 miles.

A SmartTrips participant is likely to drive 0.62 mile less than a household who did not go through the program, and with 5,093 households participating in the full program, the total annual VMR for households is 2,045,250 miles. **The combined total of Vehicle Miles Reduced in 2018 can be estimated at 8.1 million miles reduced.**

## SmartTrips Year-to-year reduction in SOV



2003-2014: Work was done in specific areas of Portland so the reduction rate was generally higher because of more focused work and fluctuates depending on the area.

2015: Smart Trips New Movers begins, surveyed only participants. Posted number is reduction between pre and post trip diary result.

2016: Introduced Control group but only for Pre survey. Posted number is the difference between Control Pre and Participant Post driving rates.

2017: From 2016 experience, the takeaway was that a Control Pre and Post survey is needed to compare apples-to-apples in terms of driving reduction. Posted number is the difference between the reduction in the Control group versus in the Participants group.

2018: If we were going with 2017 metric, the number would have been -14%, but the number of Control respondents were too low and therefore not representative of the entire group. Posted number is the driving reduction just in the Participants group.