

## 36 Commuting Solutions | US 36 Congestion Mitigation Program Status Report February 2016

**Program Start: September 2014**

**Program End: December 2016**

The US 36 Congestion Mitigation program is reducing congestion pre & post US 36 Express Lanes Project construction utilizing a social marketing campaign, travel incentives and community education.

**Incentives:** \$75 carpool, \$75 vanpool, 10-ride RTD ticket book, US 36 RTD Master EcoPass Pilot Program (free passes in 2015, 75% subsidy for returning organizations and free for new organizations in 2016), and personal travel plans for employees and residents of Arista. January - June 2016 implement and track Most Valuable Vanpoolers program offering \$150/vanpooler at select member organizations.

### Overall Statistics and Program Results

	Participants
<b>Program Goal</b>	833
<b>Current</b>	770*

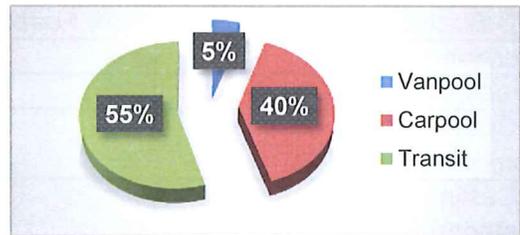
\*Received incentive

- 733 employees at 20 businesses have access to RTD EcoPass (\$100,655)
- Six new vanpools started
- 37 new vanpool riders added
- 934 MWTG applications confirmed\*

\*Registered with DRCOG MWTG rideshare program

Completed Applications		
Vanpool	57	5%
Carpool	442	40%
Transit	604	55%
<b>Total*</b>	<b>1103</b>	

\*Completed the application



### Pre vs. Post Participant Survey Results

Commute alone weekday before receiving incentive 73%

Commute alone weekday after receiving incentive 45%

*Current surveys indicate the program is resulting in a 28 percent reduction in drive alone trips.*

*Mid-term analysis indicates 4,051 VMTR; three times greater than anticipated.*

### Vanpool Stats

**6 New vanpools formed**  
**37 New vanpool riders**

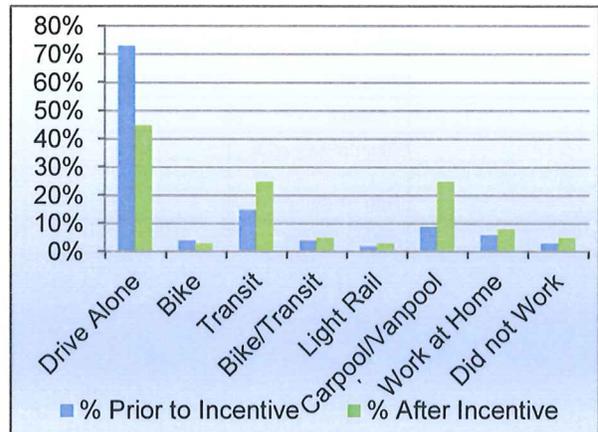
### Carpool Stats

**158 people have received carpool incentives**  
**\$11,026 total incentives distributed to date**

### Weekday Average Mode Use: Before incentive is received vs. after incentive is received

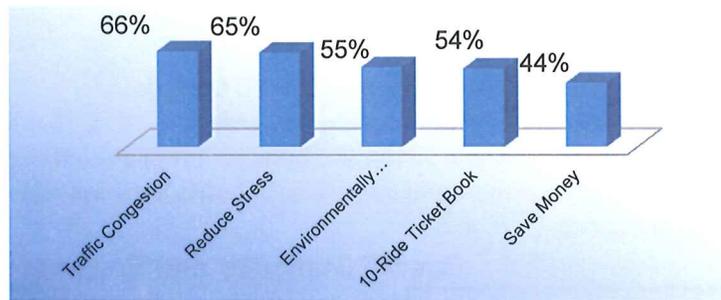
Mode	% Prior to Incentive	% After Incentive
Drive Alone	73%	45%
Bike	4%	3%
Transit	15%	25%
Bike/Transit	4%	5%
Light Rail	2%	3%
Carpool/Vanpool	9%	25%
Work at Home	6%	8%
Did not Work	3%	5%

*Drive alone rates decrease; bus, carpool, vanpool increase appreciably after incentive is received.*



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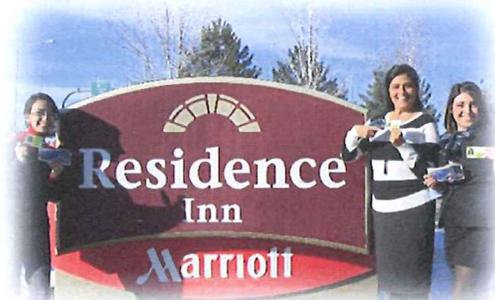
Top Reason for Participating	
Traffic Congestion	<b>66%</b>
Reduce Stress	<b>65%</b>
Environmentally Friendly	<b>55%</b>
10-Ride Ticket Book	<b>54%</b>
Save Money	<b>44%</b>



### US 36 RTD Master EcoPass Pilot Program

Offering EcoPasses to organizations and their employees who are within 1/4 mile of the Sheridan, Broomfield and McCaslin BRT stations.

RTD Station	2015 Passes	2016 Passes
Sheridan	112	359
Broomfield	302	293
McCaslin (Louisville)	135	38
McCaslin (Superior)	371	43
<b>Total</b>	<b>920</b>	<b>733</b>



Residence Inn Employees receive their 2016 passes.

2015 Participating Businesses: \$123,100				2016 Participating Businesses: \$100,665			
McCaslin-Louisville	McCaslin-Superior	Broomfield	Sheridan	McCaslin-Louisville	McCaslin-Superior	Broomfield	Sheridan
East West Wellness	Banfield Pet Hospital	Aloft Hotel	Double Tree Hotel	Ajaya	Town of Superior	Aloft	Dept. of Corrections
Executan	Buffalo Wild Wings	Arista Place	Holtzman Ent.	East West Wellness	Tutti Frutti	Arista Place	Hampton Inn
Home Depot	Great Clips	Famous Brands	Perkins	Noodles & Co.		Arista Wine & Spirits	Lowe's of Westminster
US Bank	Panda Express	Loftea Café	RSA			Colorado Keg House	Olive Garden
	Panera Bread	Return Path	Twinstar			Donnelson Barry	Residence Inn
	Petsmart	Wohnrade Engineering				Famous Brands	RSA
	TJ Maxx					Protos	
	Town of Superior					Return Path	
	Tutti Frutti					Sustainable Supply	
	Whole Foods						

## memo

To: Audrey DeBarros, Executive Director, 36 Commuting Solutions

From: Amy Johnson, AICP and Matthew Kaufman, AICP

Date: March 4, 2016

Re: US 36 TDM Mitigation Mid-Program Impacts Analysis

36 Commuting Solutions requested that UrbanTrans North America analyze the travel behavior benefits associated with congestion mitigation efforts on the US 36 corridor. Programs analyzed were: carpool incentives, vanpool incentives, transit incentives, and EcoPass subsidies.

### Incentives

As part of the congestion mitigation efforts being implemented by 36 Commuting Solutions, individuals who commute along US 36 are eligible to receive incentives when they commit to trying a non-drive alone travel mode. Incentives are available to encourage travelers to join a carpool or vanpool or try transit. Before receiving an incentive participants are required to complete a travel survey in which they report how they commuted to work during the previous seven-day period. Approximately three months after participating in the program commuters are asked to again report how they commuted to work during the previous week. 173 individuals had responded to both the initial and follow up surveys when this analysis was conducted.

UrbanTrans reviewed the survey data collected by 36 Commuting Solutions staff to determine what impact the incentives are having on vehicle trips and vehicle miles of travel (VMT). The data were analyzed in aggregate and by incentive type. Table 1 shows pre- and post-incentive commute behavior.

Table 1: Commute Behavior Before and After Receiving Incentive

Mode	All		Vanpool		Carpool		Transit	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Drive Alone	69%	41%	63%	20%	84%	42%	66%	45%
Bike	2%	3%	0%	4%	0%	0%	3%	3%
Ride the bus	11%	19%	7%	0%	2%	1%	14%	27%
Bus/Bike Combo	4%	5%	0%	0%	1%	4%	5%	5%
Ride light rail	1%	2%	2%	4%	0%	0%	1%	3%
Carpool or Vanpool	5%	20%	22%	65%	8%	46%	1%	6%
Walk	2%	2%	0%	0%	2%	2%	3%	3%
Work From Home	6%	8%	6%	6%	2%	5%	8%	9%

Table 2 shows estimates of vehicle trips reduced (VTR) and VMT reduced (VMTR) per participant and in aggregate. VTRs were estimated using reported mode split data. VMTRs were estimated by multiplying average commute trip distances as reported by participants by the number of VTR. Annual reductions assume 240 commute days per year. All vehicle trip reductions are one-way trips.

Table 2: Incentive Impacts on Vehicle Travel

	VTR/Year/ Participant	VMTR/ Year/ Participant	Avg. Trip Distance	Program Participants	Annual Trips Reduced	Annual VMT Reduced
All	105	2,426	23	527	55,290	1,278,382
Vanpool	210	5,038	24	32	6,717	161,212
Carpool	123	2,830	23	103	12,673	291,484
Transit	92	2,106	23	392	35,899	825,686

### EcoPass Subsidies

Another element of the congestion mitigation effort is the subsidization of EcoPass purchases by employers within walking distance of certain Bus Rapid Transit (BRT) stations along US 36. Prior to receiving their EcoPasses employees at participating employers were asked to complete a travel survey in which they reported how they commuted to work during the previous seven-day period. Employees were also asked to report the distance they travel from home to work. Approximately nine months after the distribution of EcoPasses employees were asked to complete a second survey in which they again reported how they got to work during the previous week. 431 individuals responded to the initial survey and 228 individuals responded to the follow-up survey. A total of 919 EcoPasses were distributed.

UrbanTrans reviewed the survey data collected by 36 Commuting Solutions staff to determine what impact the distribution of EcoPasses is having on vehicle trips and VMT. Table 3 shows pre and post-EcoPass commute behavior.

Table 3: EcoPass Mode Split Change

Mode	Pre	Post
Drive Alone	75%	61%
Bike	1%	2%
Ride the bus	9%	19%
Bus/Bike Combo	3%	3%
Ride light rail	1%	2%
Carpool or Vanpool	5%	4%
Walk	3%	5%
Work From Home	4%	4%

The program resulted in a 14 percentage point (19%) reduction in the drive alone rate. Table 4 shows estimates of vehicle trips reduced (VTR) and vehicle miles of travel reduced (VMTR) per participant and in aggregate. VTR were estimated using reported mode split data. VMTR were estimated by multiplying average commute trip distances as reported by participants by the number of vehicle trips reduced. Annual reductions assume 240 commute days per year. All vehicle trip reductions are one-way trips.

Table 4: EcoPass Impacts on Vehicle Travel

	VTR/Year/ Participant	VMTR/ Year/ Participant	Avg. Trip Distance	Program Participants	Annual Trips Reduced	Annual VMT Reduced
EcoPass	69	1,861	27	919	63,356	1,710,616

## Combined Benefits

The combination of the incentives and EcoPass programs results in an annual vehicle trip reduction of approximately 119,000, which is equivalent to almost 500 vehicle trips per weekday. The combined annual vehicle miles of travel reduction is 2,989,000, which is equivalent to approximately 12,500 miles per weekday. Table 5 provides a summary of the total program impacts.

Table 5: Combined Program Impacts on Vehicle Travel

	VTR/Year/ Participant	VMTR/ Year/ Participant	Avg. Trip Distance	Program Participants	Daily Trips Reduced	Daily VMT Reduced	Annual Trips Reduced	Annual VMT Reduced
EcoPass	69	1,861	27	919	264	7,128	63,356	1,710,616
Vanpool	210	5,038	24	32	28	672	6,717	161,212
Carpool	123	2,830	23	103	53	1,215	12,673	291,484
Transit	92	2,106	23	392	150	3,440	35,899	825,686
Combined	---	---	---	1,446	494	12,454	118,646	2,988,998

The US 36 TDM Construction Mitigation Plan included estimates regarding the likely impact the Transportation Demand Management (TDM) mitigation efforts would have on vehicle travel. The estimates were developed utilizing the TRIMMS model and case study data. During the construction period TDM efforts were expected to reduce daily vehicle trips by 1,520. Daily reductions in VMT were estimated to be 4,050. Table 6 summarizes program impacts as compared to anticipated impacts.

Table 6: Actual Versus Anticipated Program Impacts

	Actual		Anticipated	
	Daily Trips Reduced	Daily VMT Reduced	Daily Trips Reduced	Daily VMT Reduced
Combined	494	12,454	1,522	4,051

Actual program impacts exceed VMT estimates, but fall short of vehicle trip reduction estimates. The variation is due to the modeled impacts anticipating a shorter trip distance as compared to actual results.

## Next Steps

A final evaluation of the program will be conducted upon its conclusion. Annualized program benefits are likely to increase as additional incentives and EcoPasses are distributed and benefits accrue from improvements to the corridor. The arrival of BRT service is likely to make riding the bus more appealing and the full roll-out of High Occupancy Toll (HOT) lanes should increase the rate at which commuters carpool.

When the final analysis is conducted it is recommended that the behavior of actual EcoPass users (i.e., individuals who use transit at least once a week) be compared to incentive recipients. The benefits of the EcoPass program are spread across numerous employees, many of whom do

not use transit. An analysis of only individuals who end up using their EcoPass to individuals who received an incentive will provide an interesting study in behavior change.

It is also recommended that the behavior change that occurs at companies that chose to renew their participation in the EcoPass program be compared to that of companies that chose not to renew their participation. It is possible that behavior change is more significant at companies that are more "bought into" the EcoPass program, which would be indicated by their choice to renew their participation. If large variations in behavior change are seen it may inform future decisions regarding how EcoPasses are subsidized and employers are enrolled in the program.