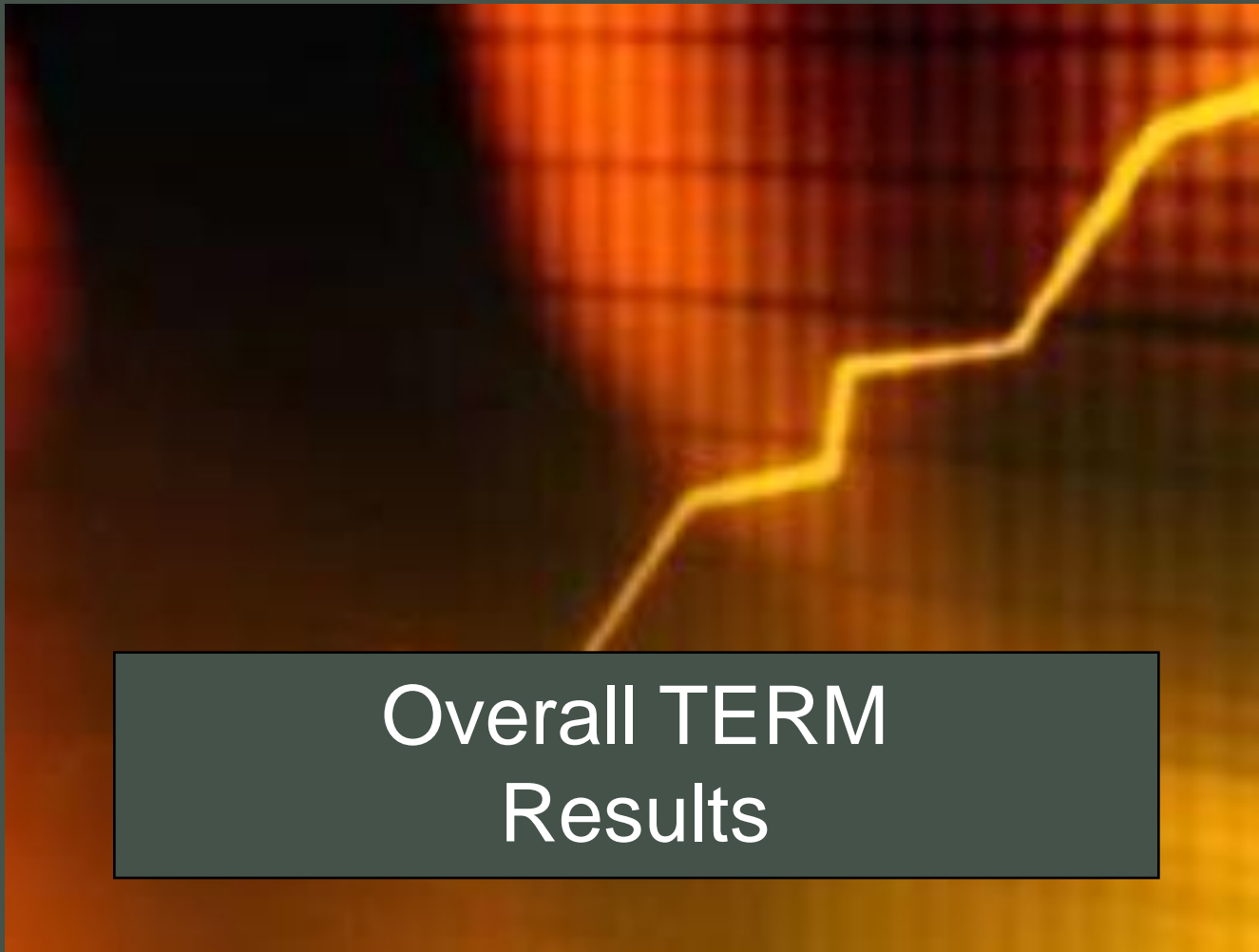


# Commuter Connections TERM Evaluation 2012-2014 Results - Updated

**Presentation to  
Commuter Connections  
Subcommittee  
September 16, 2014  
LDA Consulting  
with  
ESTC, CIC Research, CUTR**





Overall TERM  
Results



# Objective of Evaluation

- Apply methodology outlined in Evaluation Framework to:
- Estimate effectiveness of four Commuter Connections TERMS
  - Telework Assistance
  - Guaranteed Ride Home
  - Employer Outreach
  - Mass Marketing
- Document results of Commuter Operations Center
- Adjust impacts for overlap among programs



# Impacts for All TERMS + COC (Jul 2011 – Jun 2014)

Comparison of collective goals against collective impacts, including  
Commuter Operations Center

	<u>Goal</u>	<u>Impact</u>	<u>Net</u>	
<u>Trips reduced</u>	109,594	131,830	<u>22,236</u>	+20%
<u>VMT reduced</u>	2,162,400	2,473,326	<u>310,926</u>	+14%
NOx reduced	1.098 T	1.061 T	<b>(0.037) T</b>	<b>- 3%</b>
VOC reduced	0.654 T	0.533 T	<b>(0.121) T</b>	<b>-19%</b>

## Met vehicle trip and VMT goals

Shortfall in emission goals due to reduced emission factors  
for 2015 (cleaner cars) and shift to MOVES emission model



## Telework Assistance

# Telework TERM Impacts – Only MD

	<u>Goal</u>	<u>Impact</u>	<u>Net</u>	
<u>Number of TCs</u>	31,854	26,334	<b>(5,520)</b>	-17%
<u>Trips reduced</u>	11,830	9,651	<b>(2,179)</b>	-18%
<u>VMT reduced</u>	241,208	205,511	<b>(35,698)</b>	-15%

## Did not meet goals

But TW TERM goal represents old program scope, with MD, DC, and VA

Impact takes credit for only:

- TC that live or work in MD (43% of total TW) and named CC as the source of TC info (9%)
- MD employers that receive TW assistance

TERM = about 4% of regional TW trips reduced; Additional 5% of regional TW also credited to CC for non-MD TW assisted by CC; credit is assigned to the Commuter Ops Center



Guaranteed Ride  
Home

# GRH Impacts



	<u>Goal</u>	<u>Impact</u>	<u>Net</u>	
GRH participants	36,992	21,156	(15,836)	- 43%
Trips reduced	12,593	7,711	(4,882)	- 39%
VMT reduced	355,135	212,834	(142,302)	- 40%

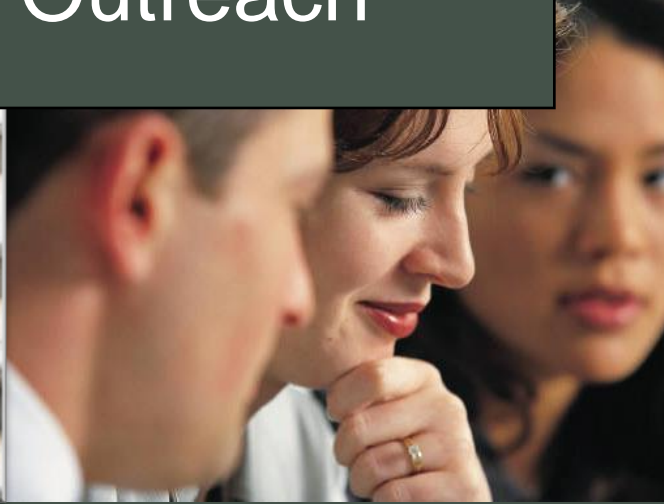
**Did not meet goals** – declining GRH participation possibly due to lower awareness; in 2013, only 23% of commuters knew a regional GRH program existed vs 59% in 2004

Counts only travel impacts that occur within the MSA; Commuters who live outside are credited only for miles traveled within the MSA



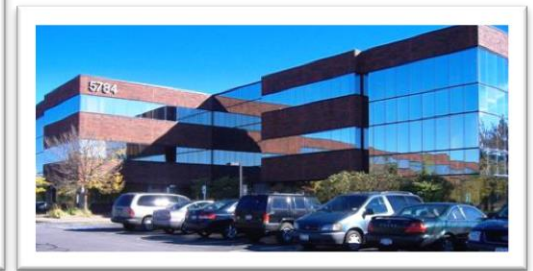


# Employer Outreach



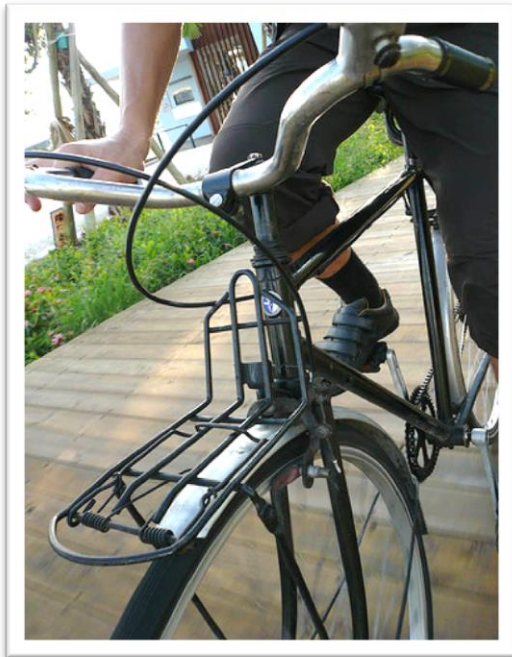
# Employer Participation – Many New Clients

<u>Employer Group</u>	<u>Employers</u>	<u>Employees</u>
Counted in impacts		
■ Maintained (no change)	626	228,720
■ Expanded	329	179,374
■ New	<u>801</u>	<u>241,354</u>
<b>Total in impact</b>	<b>1,756</b>	<b>649,448</b>
Not counted in impacts		
■ Deleted since 6/11	150	42,426



# EO – Analysis of Vehicle Trip Reduction

- Percentage vehicle trip reduction by program type
  - **Overall EO program** **8.1% reduction**
  - Maintained (base) 6.8% reduction
  - Expanded (additional) 1.5% reduction
  - New 9.2% reduction



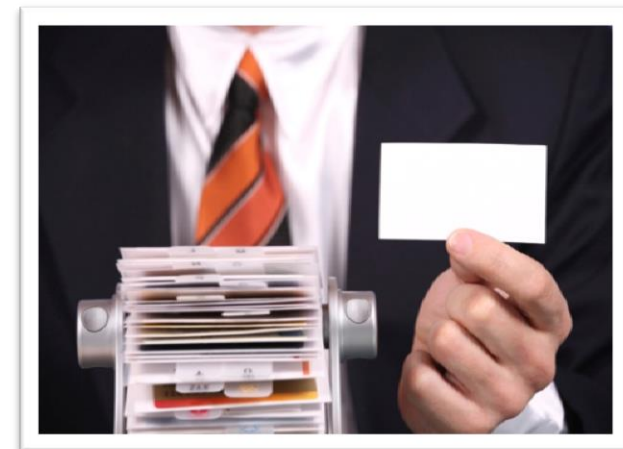
- EO – Bicycle
  - 472 employers offered bike services (298 new/expanded)
  - 315,696 employees at bike worksites
  - 1.0% vehicle trip reduction from bike

# EO Impacts – Overall

	<u>Goal</u>	<u>Impact</u>	<u>Net</u>	
<u>Employers</u>	581	1,756	<u>1,175</u>	+ 200%
<u>Trips reduced</u>	64,644	78,533	<u>13,889</u>	+ 21%
<u>VMT reduced</u>	1,065,851	1,327,044	<u>261,193</u>	+ 25%

## Met participation, vehicle trip, and VMT goals;

VT and VMT impacts are not as much above goals as is employer participation, due to a substantial drop in the coefficients of the model used to estimate impacts. The change was made to be consistent with COG's regional travel model.



# EO Impacts – New / Expanded Programs

	<u>Goal</u>	<u>Impact</u>	<u>Net</u>	
<u>Employers</u>	96	1,130	<u>1,034</u>	+ 1075%
<u>Trips reduced</u>	8,618	38,375	<u>29,757</u>	+ 345%
<u>VMT reduced</u>	140,622	568,078	<u>427,456</u>	+ 300%

## Met all goals (including emission goals)

High impact due to large number of employers with new/expanded programs - **1,130** in 2014 vs 267 in 2011 and 57 in 2008



# Mass Marketing





# Mass Marketing



## MM components

- Direct Influence – Commuter changed mode after hearing ad; no other CC contact
- “Referred” Influence – Heard ad, then contacted CC for other service – Impact calculated as a percentage of GRH and COC (rideshare app) credits

- ‘Pool Rewards carpool incentive
- ‘POOL REWARDS**  
it pays to rideshare

- Bike to Work Day



- Car Free Day

# Mass Marketing Impacts

	<u>Goal</u>	<u>Impact</u>	<u>Net</u>	
<u>Placements</u>	11,023	22,065	<b><u>11,042</u></b>	+ 100%
<u>Trips reduced</u>	7,758	10,294	<b><u>2,536</u></b>	+ 33%
<u>VMT reduced</u>	141,231	173,269	<b><u>32,038</u></b>	+ 23%

**MM met all goals except VOC**, but **VMT impact was not as much over goal as VT**, because a sizeable share of shifts were to bike/walk and transit, which have shorter than average trip lengths

- 68% of vehicle trip impact from “direct influence,”
- 12% from “referred” influence
- 20% from ‘Pool Rewards, BTW Day, and CF Day events





# COC and Software Upgrades



# Commuter Operations Center

- Three components:
  - Commuter Operations Center “base”
  - “Integrated Rideshare – Software Upgrades”
  - Non-MD TC assisted by Commuter Connections
- 87,247 commuters assisted by COC  
= 29,539 new alt mode users
- VMT results discounted for MSA
- COC impacts reduced to account for overlap with GRH and MM
- CC-assisted non-MD TC accounts for 35,346 TC and 187,465 VMT reduced



# COC Impacts – Base

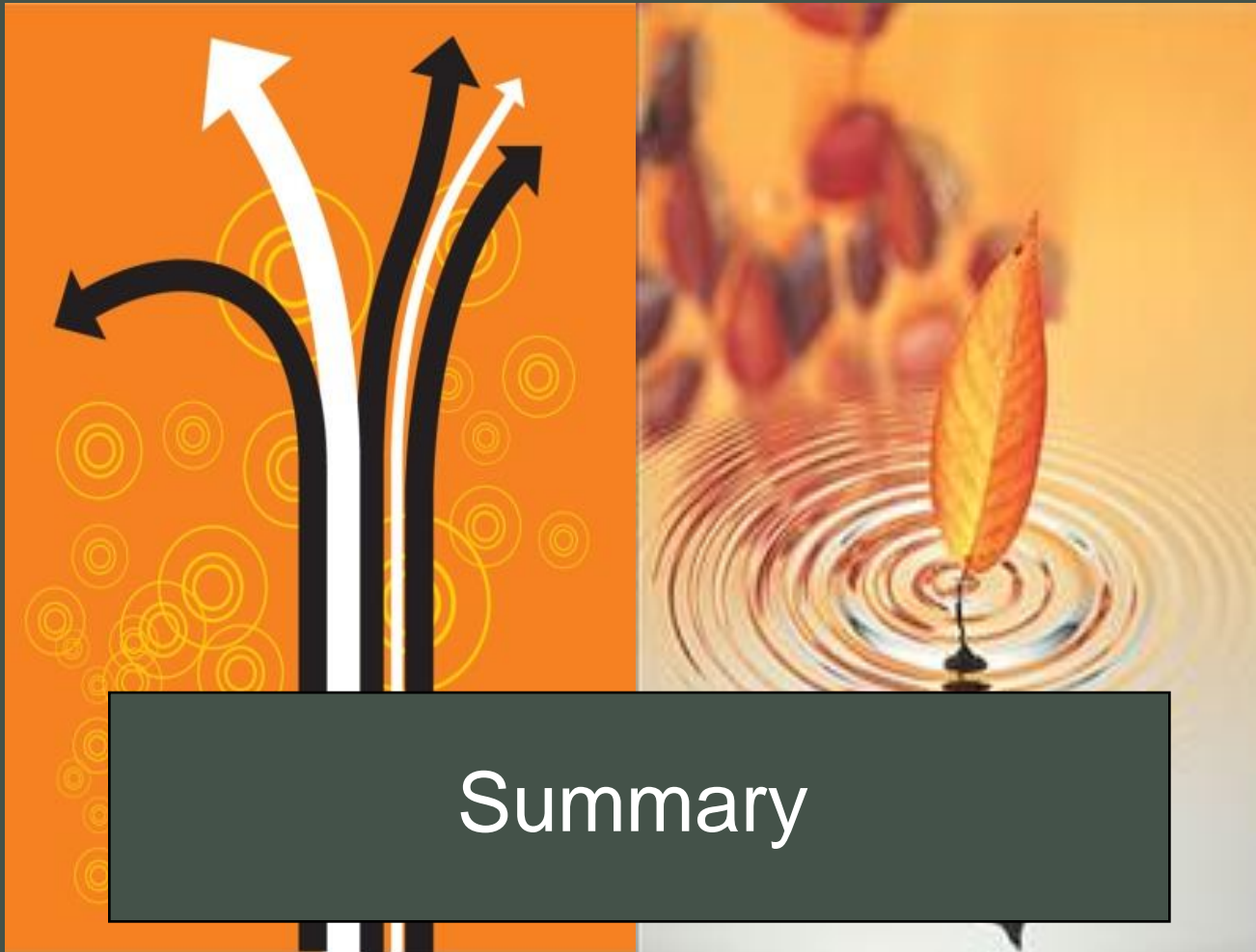
	<u>Goal</u>	<u>Impact</u>	<u>Net</u>	
Total apps	N/A	87,247	N/A	
Trips reduced	10,399	23,262	21,863	+ 124%
VMT reduced	296,635	488,226	191,591	+ 65%

**Met goals** - Base participation in COC was lower than anticipated

But addition of non-MD TC to the COC impact provided a large boost to the impacts:

- 57% of VT and
- 38% of VMT reduced





# Summary

# TERM Analysis Observations

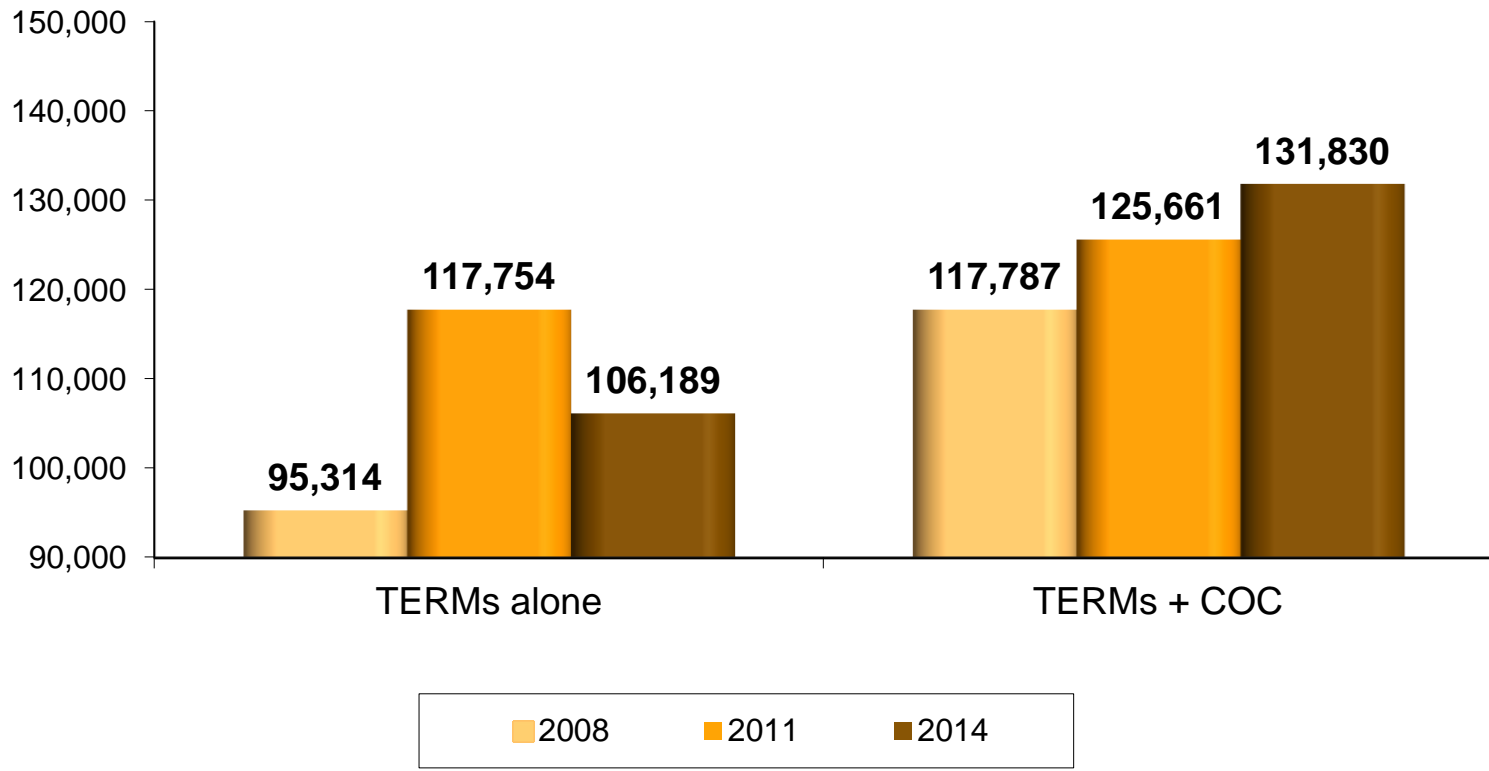


- The four TERMS met the collective goals for both vehicle trips (+10%) and VMT reduced (+6%)
- CC programs overall (TERMs + COC) exceeded the VT reduction goal (+20%) and VMT goal (+14%)
- Shortfalls in individual TERMS were generally related to lower than expected participation
- TERMS did not meet emissions goals, but this was due to a change in the emission model (MOVES) and reductions in the 2014 emission factors, compared to the factors used when the goals were established in 2005

# Vehicle Trip Reduction – 2005-08, 2009-11, 2012-14\*

## TERMs Alone and TERMs + Commuter Operations Center

Daily Vehicle Trips Reduced

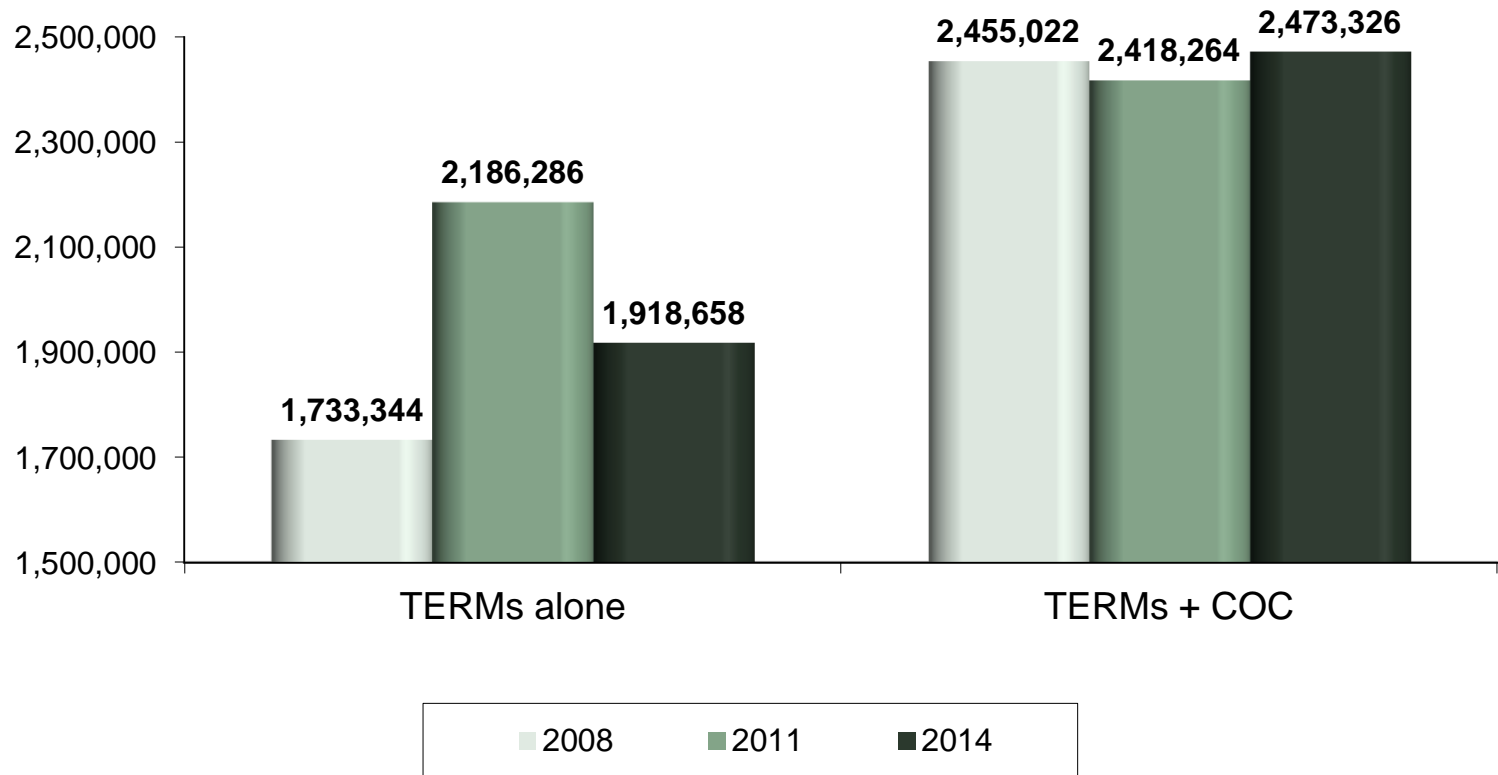




# VMT Reduction – 2005-08, 2009-11, 2012-14\*

## TERMs Alone and TERMS + Commuter Operations Center

Daily VMT Reduced





## Questions?

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