

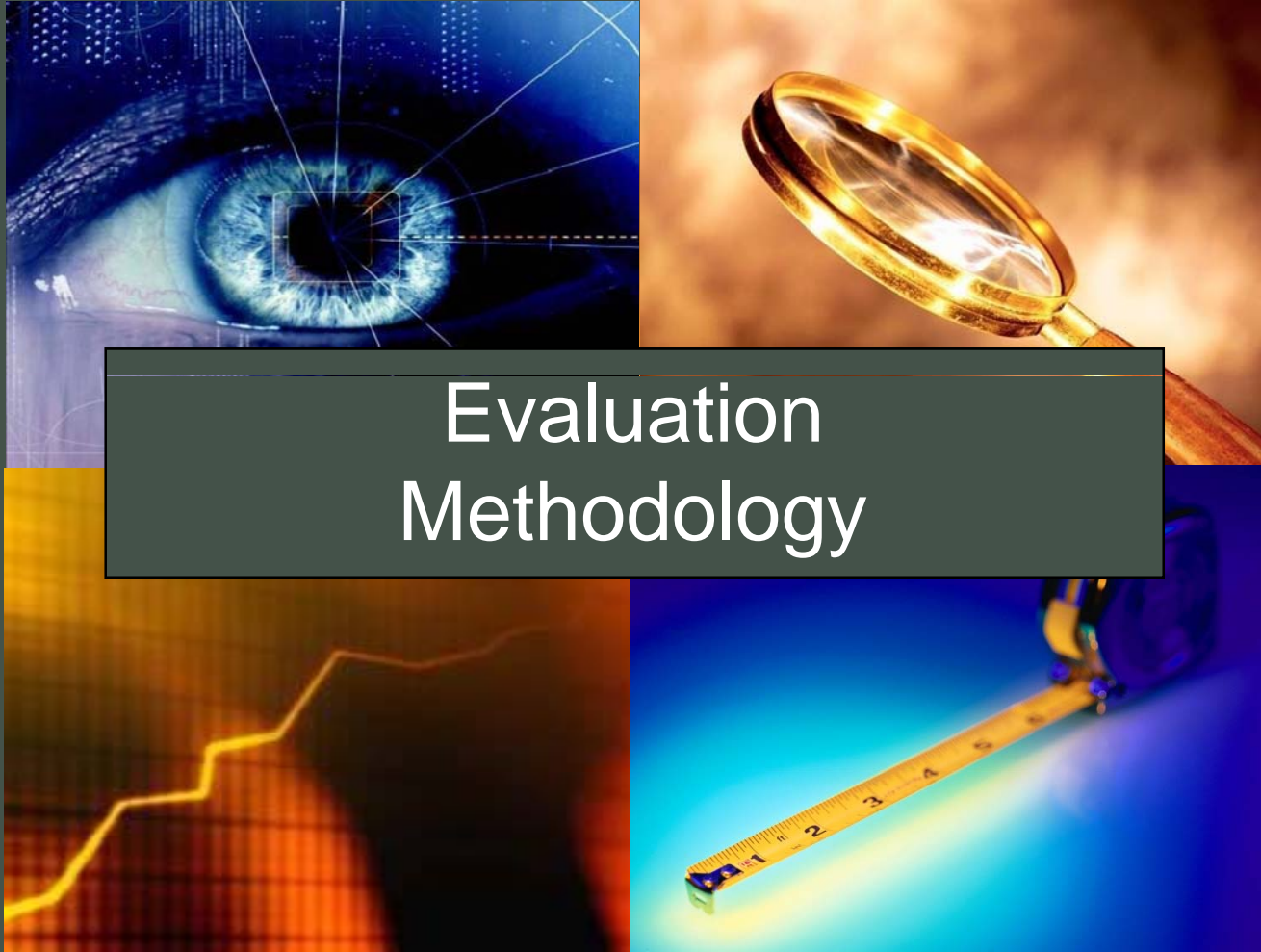
ITEM #4A

Commuter Connections TERM Evaluation 2008-2011 Results



**Presentation to
Commuter Connections
Subcommittee
November 15, 2011
LDA Consulting
with
ESTC, CIC Research, CUTR**





Evaluation
Methodology



Objective of Evaluation

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





Overall TERM
Results



Impacts for All TERMS – 7/08-6/11

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

	<u>Goal</u>	<u>Impact</u>	<u>Net</u>
<u>Trips reduced</u>	107,224	125,661	<u>18,437</u>
<u>VMT reduced</u>	2,100,061	2,418,265	<u>318,204</u>
NOx reduced	1.067 T	0.870 T	(0.198) T
VOC reduced	0.637 T	0.537 T	(0.100) T

Met vehicle trip and VMT reduction goals

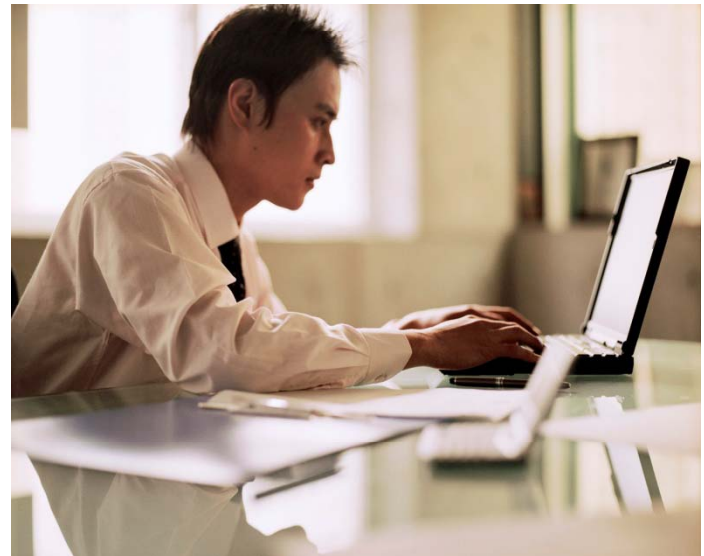
Shortfall in emission goals due to reduced emission factors
for 2011 (cleaner cars)



MD / VA
Telework

MD and VA Telework

- Two impact components
 - Teleworkers who cited CC / COG as source of TW info in SOC survey
 - Teleworkers whose employers received info / assistance from CC / COG
- 35,237 teleworkers influenced by CC / COG



MD / VA Telework Impacts

	<u>Goal</u>	<u>Impact</u>	<u>Net</u>
<u>Number of TWs</u>	31,854	35,237	<u>3,383</u>
<u>Trips reduced</u>	11,830	12,499	<u>669</u>
<u>VMT reduced</u>	241,208	241,834	<u>626</u>
NOx reduced	0.122 T	0.099 T	(0.023) T
VOC reduced	0.072 T	0.062 T	(0.011) T

Met participation, vehicle trip, and VMT goals

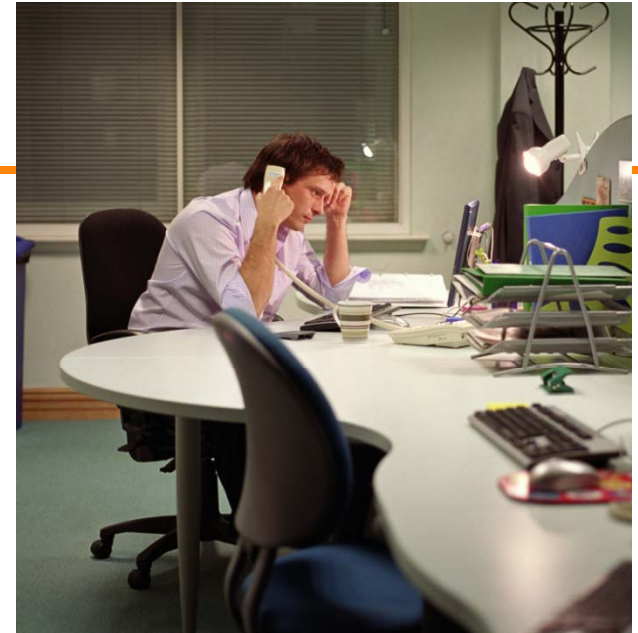
Impacts represent only MVTW contribution to regional TW (about 6% of regional TW trips reduced)



Guaranteed Ride
Home

GRH TERM

- 22,984 GRH registrants in 6/11
- 15,369 new registrants from 7/08 – 6/11
- 40% of registrants started new alt mode
- GRH results were discounted:
 - Count only VMT within the MSA – registrants who live outside the MSA received only partial credit
 - Share 11% of credit with Mass Marketing TERM



GRH Impacts

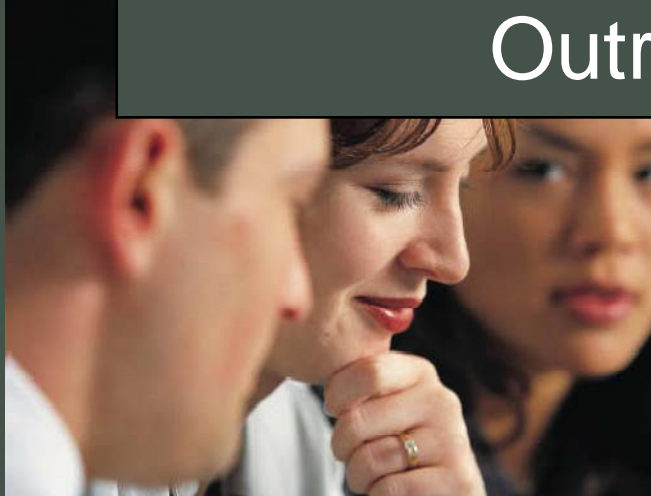


	<u>Goal</u>	<u>Impact</u>	<u>Net</u>
GRH participants	36,992	22,984	(14,008)
Trips reduced	12,593	7,983	(4,610)
VMT reduced	355,135	208,346	(146,790)
NOx reduced	0.177 T	0.076 T	(0.100 T)
VOC reduced	0.097 T	0.042 T	(0.055 T)

Did not meet vehicle trip or VMT reduction goals – due to lower than anticipated GRH participation



Employer Outreach



Employer Outreach



- Impacts calculated for:
 - Employers “maintained” in EO from June 2008
 - Employers with new / expanded programs since 6/08
 - Employers with bike services
- Employers deleted since 2008 were replaced in the overall impact calculation

Employer Participation

<u>Employer Group</u>	<u>Employers</u>	<u>Employees</u>
Counted in impacts		
■ Maintained (no chg)	568	184,660
■ Expanded	267	173,346
■ New	284	108,516
Total in impact	1,119	466,522
Not counted in impacts		
■ Deleted since 6/08	182	34,404



EO – Employers by Jurisdiction*

<u>Jurisdiction</u>	<u>Employers</u>	<u>Employees</u>	<u>New Empl</u>
- Alexandria	50	10,133	22
- Arlington	160	38,557	33
- DC	330	146,167	234
- Fairfax	196	161,860	155
- Frederick	4	3,468	3
- Loudoun	11	7,138	4
- Montgomery	343	73,310	96
- Prince George's	18	23,099	2
- Prince William	5	2,590	2
- Tri-Co Council	2	200	0

*Counts of Level 3 and Level 4 employers included in impact calculations
– totals will not match self-reported quarterly conformity statement

EO Impacts – Overall



	<u>Goal</u>	<u>Impact</u>	<u>Net</u>
<u>Employers</u>	581	1,119	<u>538</u>
<u>Trips reduced</u>	64,644	90,350	<u>25,706</u>
<u>VMT reduced</u>	1,065,851	1,657,809	<u>591,958</u>
<u>NOx reduced</u>	0.549 T	0.578 T	<u>0.029 T</u>
<u>VOC reduced</u>	0.343 T	0.367 T	<u>0.024 T</u>

Met all goals

Very small share of EO impacts (<1%) were assigned to MD/VA TW

EO Impacts – New / Expanded

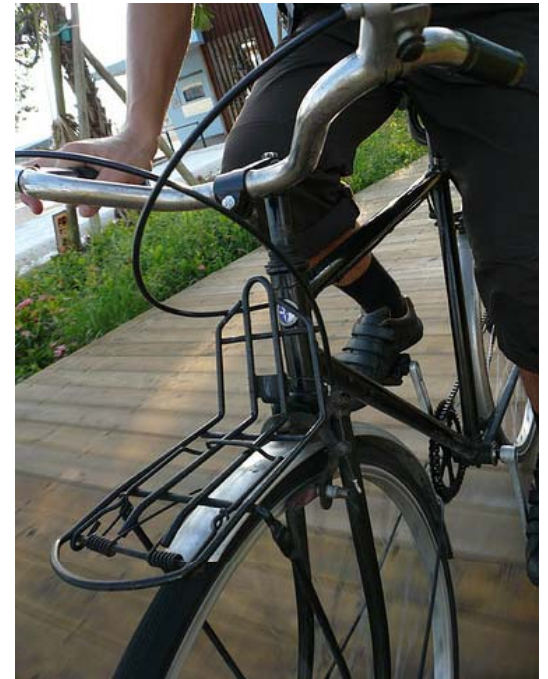
	<u>Goal</u>	<u>Impact</u>	<u>Net</u>
<u>Employers</u>	96	551	<u>455</u>
<u>Trips reduced</u>	8,618	28,098	<u>19,480</u>
<u>VMT reduced</u>	140,622	461,250	<u>320,628</u>
<u>NOx reduced</u>	0.072 T	0.177 T	<u>0.105 T</u>
<u>VOC reduced</u>	0.046 T	0.108 T	<u>0.062 T</u>

Met all goals



EO – Bike

- 274 employers offered bike service – well above the goal of 61 employers
- 178,119 employees at bike worksites
- 0.1% vehicle trip reduction from bike
- **EO Bike impacts met goals**
 - 180 vehicle trips reduced
 - 1,083 VMT reduced
 - 0.001 tons NOX
 - 0.001 tons VOC



Mass Marketing



Mass Marketing



- Direct Influence
 - Commuters shifted to alt mode after hearing / seeing ad; no other CC influence = **7,177 placements**

- “Referred” Influence – MM ads generated:
 - 2.2% of new COC (rideshare) apps = **174 placements**
 - 11% of new GRH apps = **612 placements**

- Pool Rewards Carpool Incentive
 - **171 participants** - 93% continued CP after program ended

- Bike to Work Day Events
 - 11,794 “unique” participants
 - 32% started / increased riding = **1,878 new bike trips per day**

Mass Marketing Impacts

	<u>Goal</u>	<u>Impact</u>	<u>Net</u>
Placements	11,023	10,438	(585)
Trips reduced	7,758	6,922	(836)
VMT reduced	141,231	78,297	(62,934)
NOx reduced	0.072 T	0.031 T	(0.041) T
VOC reduced	0.044 T	0.021 T	(0.023) T

MM fell slightly short of participation and trip goals

MM was well under VMT goals, because bicycle shifts were a much larger component of new mode use than expected

76% of vehicle trip impact from “direct influence,” 13% from BTW Day; 8% from “referred influence” and 2% from Pool Rewards



COC and Software Upgrades



Commuter Operations Center

- 81,675 commuters assisted from 7/08–6/11
 - 35% placed into new alt modes
 - = 30,816 new alt mode users
- Software upgrades
 - RS apps recalled receiving transit/P&R info and used info to start new alt mode = 3,373 placements
- VMT results discounted for apps who live outside the MSA
- COC impacts reduced to account for overlap with GRH and MM



COC Impacts – Basic

	<u>Goal</u>	<u>Impact</u>	<u>Net</u>
Total apps	N/A	81,675	N/A
Trips reduced	10,399	6,190	(4,209)
VMT reduced	296,635	180,409	(116,226)
NOx reduced	0.147 T	0.066 T	(0.081) T
VOC reduced	0.081 T	0.036 T	(0.045) T

Did not meet goals – participation well below 2008 TERM level

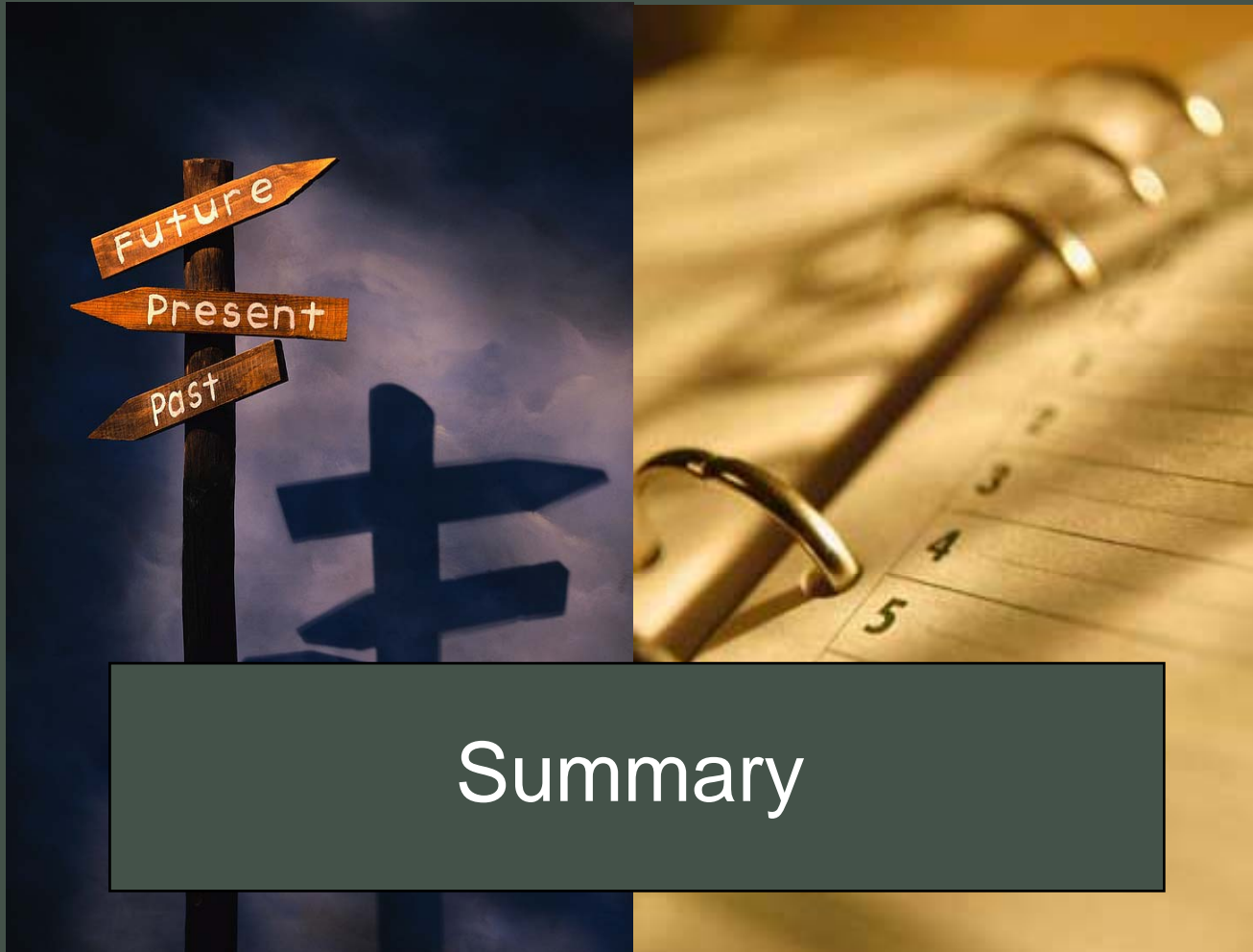


Software Upgrade

	<u>Goal</u>	<u>Impact</u>	<u>Net</u>
Placements	N/A	3,354	N/A
Trips reduced	2,370	1,717	(653)
VMT reduced	62,339	51,569	(10,770)
NOx reduced	0.031 T	0.020 T	(0.012) T
VOC reduced	0.017 T	0.010 T	(0.007) T

Did not meet goals – participation below 2008 TERM level






Summary



TERM Analysis Observations

- TERMS met the collective goal for vehicle trips reduced and VMT reduced goal
 - CC programs overall (TERMs + COC) met vehicle trip and VMT reduction goals
 - TERMS did not meet emissions goals, but this was due to a reduction in the 2011 emission factors, compared to the 2005 factors used when the goals were established
 - Shortfalls in individual TERMS were generally related to lower than expected participation
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