

# COMMUTER CONNECTIONS EMPLOYER OUTREACH PROGRAM ELEMENT IMPACTS FY2021 – FY2023

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September 19, 2023 Draft TDM Program Analysis  
Report

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Employer Outreach Committee  
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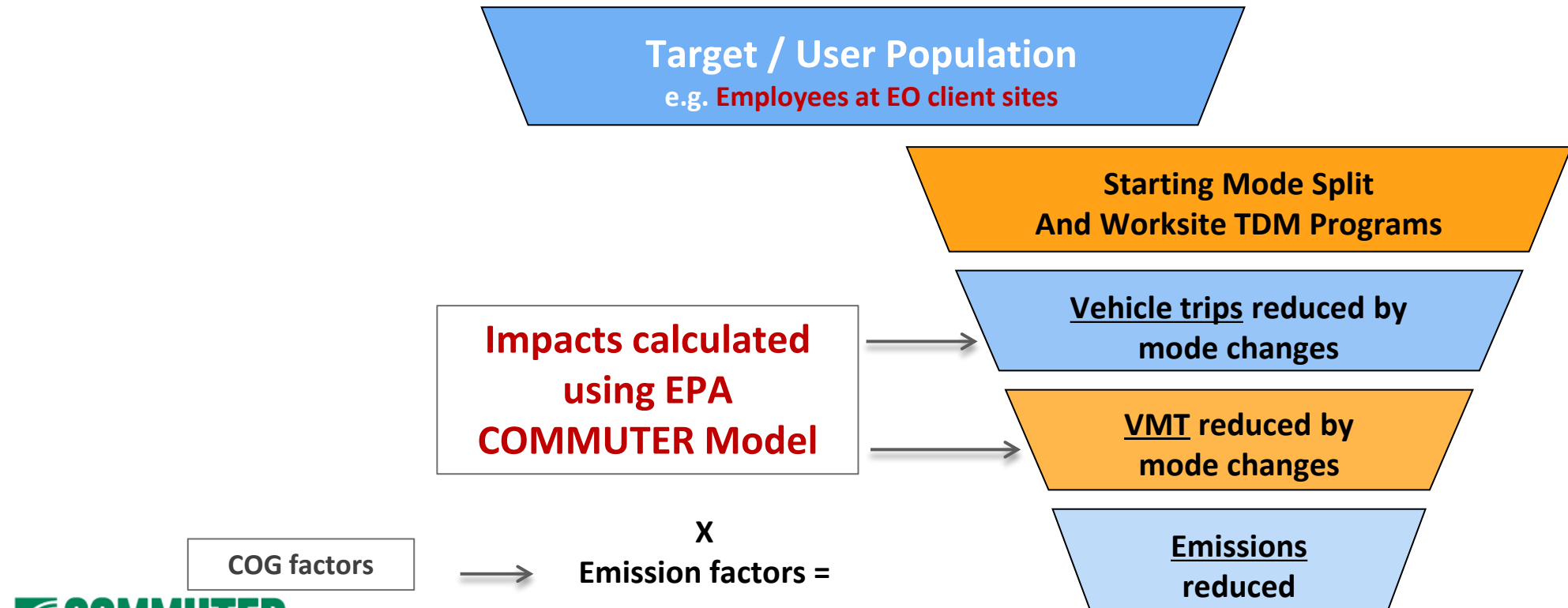
# Commuter Connections TDM Evaluation

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- Triennial impact analysis of Commuter Connections' TDM activities to estimate impacts and communicate program value to funders and regional policy-makers
- Estimate impacts for:
  - Telework
  - Guaranteed Ride Home
  - **Employer Outreach**
  - Mass Marketing
  - Commuter Operations Center
- Impacts:
  - New alternative mode “placements”
  - Vehicle trips reduced
  - VMT reduced
  - Emissions reduced
  - Energy saving
  - Societal cost savings (\$ benefits)

# Impact Calculation Approach – Employer Outreach

We can't easily survey employees, so we estimate vehicle trips and VMT reduced using a predictive model for the specific services offered by each EO client. This requires an understanding of how individual TDM services influence travel behavior change and the extent of change that are likely for each service.



# EPA COMMUTER Model – Inputs

## Model Inputs

- Number of employees at worksite
- “Office”/“non-office” employer type – proxy for job types, schedules, employee incomes
- Level of transit service (low, moderate, high)
  - Reflects likely influence of transit incentives
  - Also proxy for “urban-ness” – urban settings provide greater SOV disincentives and greater alt mode motivations
- Starting mode split
  - Actual mode split – if employer has conducted baseline survey
  - Average for employer/transit combo if no survey available
- Travel distance for each mode
- Specific package of TDM strategies offered at the worksite

# Model Estimates Mode Change for Strategies

- Directly assesses cost strategies – by mode
  - Subsidies/incentives – represented as daily cost saving by mode
  - Pre-tax subsidies calculated as 40% of subsidy value (tax saving)
  - Parking charges – represented as daily cost to SOV
- Directly assesses time strategies – also by mode
  - Transit (in-vehicle or access/wait) – daily minutes
  - CP/VP (e.g., HOV, access time, other strategies)
- Estimates impacts of telework and compressed schedules
  - Actual count of employees using schedules or average %
- Other strategies grouped into mode support packages with larger number of services equaling higher levels of support
  - Carpool/vanpool (e.g., GRH, ridematching, preferential parking)
  - Transit (e.g., GRH, transit info, on-site transit pass sales, flextime)
  - Bike/walk (e.g., storage, showers, bikeshare, bike club, route planning)

# Typical Model Results – Cost and Time

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- Cost strategies:
  - 5%-7% for \$40-\$60 per month value
  - 15%-20% for \$100 or more value
  - Higher impacts for sites with conducive site characteristics – lower income, non-office, high transit access, urban location
- Time strategies:
  - Difficult for employers to influence substantial time saving with worksite strategies; would need 10 minutes or more time savings to register individual impact

# Typical Model Results – TW/CWS and Support

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- Telework and compressed schedules:
  - Impact related to % of employees using TW/CWS and average frequency
  - If 10% of employees TW 1 day/ week, trip reduction would be 2%-3%;
  - Higher participation/frequency would have proportionately larger impact
  - CWS has a similar impact, determined by the % of employees involved and type of CWS – e.g., 4/40, 3/36
  - Eliminate trips from all modes, in proportion to starting mode split
- Mode support packages:
  - Important complement to cost, time, availability strategies
  - Some of these strategies serve valuable functions, but research has shown these strategies have modest impacts when implemented alone
  - Model assigns 1% - 3% additional trip reduction for support services on top of reductions for other services

# Employer Outreach FY2021 – FY2023 Impact Analysis

- Three impact components
  - Overall program
  - New / expanded programs
  - Bike services
- Impacts calculated for:
  - Employers who “continued” in EO from June 2020
  - Employers with new / expanded programs since June 2020
- Expanded program category was further divided in 2023 into expanded non-TW services and expanded only TW – this was to adjust the calculation so the large TW increases due to the pandemic were not credited entirely to EO
  - Only 10% of impacts for Expanded TW was assigned to EO; 90% was attributed to “the pandemic”
- Employers deleted/archived since June 2020 were removed from calculation
- EO is evaluated using EPA’s COMMUTER Model v2.0 to estimate VT and VMT reductions from packages of TDM strategies in various settings of transit accessibility.



# Employer Outreach – By Jurisdiction

<u>Jurisdiction</u>	<u>Total Employers</u>	<u>Employees</u>	<u>New/Expand</u>
- Alexandria	167	24,421	78
- Arlington	328	51,331	137
- DC	302	73,480	79
- Fairfax	659	215,646	514
- Frederick	32	12,056	22
- Loudoun	30	18,271	19
- Montgomery	496	79,913	211
- Prince George's	45	14,930	27
- Prince William	44	10,974	32
- Tri-Co Council	63	11,923	58

\*Totals are official counts for impact calculations – totals will not match self-reported quarterly conformity statement

# Employer Participation – 1,177 New/Expanded Employers

<u>Employer Group</u>	<u>Employers</u>	<u>Employees</u>
Counted in impacts		
■ Continued (no change)	989	264,819
■ Expanded non-TW services	54	21,562
■ Expanded only TW services	378	116,688
■ New in 2023 analysis	<u>745</u>	<u>109,876</u>
2023 Total in impact	2,166	512,945
2020 total in impact	1,964	630,369
Not counted in impacts		
■ Deleted since June 2020*	573	106,406

\* Reflects CC effort to clean EO database, out of business, moved, and dropped out

# Employer Outreach Overall Impacts

<u>Indicator</u>	<u>Goal</u>	<u>Impact</u>	<u>Net</u>	<u>% VS Goal</u>
Employers	2,031	2,166	135	<b>+ 7%</b>
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Trips reduced	90,776	69,498	(21,278)	<b>- 23%</b>
VMT reduced	1,533,161	1,247,480	(285,681)	<b>- 19%</b>
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NOx reduced	0.6170 T	0.25771 T	(0.3599) T	<b>- 58%</b>
VOC reduced	0.3850 T	0.2056 T	(0.1794) T	<b>- 47%</b>

Met participation goal; 745 new employers more than offset deleted (573)

But EO did not meet VT or VMT goals

- Deleted employers typically had more robust TDM services than did new employers
- To be conservative, only 10% of new TW was counted in impacts
- Impacts for non-TW strategies were applied to a smaller base of employee commute days, because TW days were excluded



# Next Steps

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- FY2021 – FY2023 TDM Analysis Report Comment Period – October 25, 2023
- FY2021 – FY2023 TDM Analysis Report Endorsement and Release – November 21, 2023
- Review Inputs to the Data Analysis Process – Nov/Dec 2023
  - Levels of Participation
  - Employer Survey
- Review Employer Outreach Cost Effectiveness
- Review Employer Outreach Goals – Nov/Dec 2023
- Incorporate Changes to FY2024 – FY2026 TDM Analysis Framework Methodology



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