T-13. Implement Employee Parking Cash-Out

GHG Mitigation Potential

12% Up to 12.0% of GHG emissions from project/site employee commute VMT

Co-Benefits (icon key on pg. 34)

Climate Resilience

Employee parking cash-out could incentivize increased use of public transit and thus result in less traffic, potentially reducing congestion or delays on major roads during peak AM and PM traffic periods. When this reduction occurs during extreme weather events, it better allows emergency responders to access a hazard site.

Health and Equity Considerations

Non-applicable

Measure Description

This measure will require project employers to offer employee parking cash-out. Cash-out is when employers provide employees with a choice of forgoing their current subsidized/free parking for a cash payment equivalent to or greater than the cost of the parking space. This encourages employees to use other modes of travel instead of single occupancy vehicles. This mode shift results in people driving less and thereby reduces VMT and GHG emissions.

Subsector

Trip Reduction Programs

Locational Context

Urban, suburban

Scale of Application

Project/Site

Implementation Requirements

To prevent spill-over parking and continued use of single occupancy vehicles, residential parking in the surrounding area must be permitted, and public on-street parking must be market rate.

Cost Considerations

Employer costs include the recurring, direct cost for payment to program participants and labor costs for program management. Employees that participate in the program would achieve cost savings through the cash-out benefit and potentially through reduced vehicle ownership and usage.

Expanded Mitigation Options

This measure could be paired with many other commute trip reduction strategies (Measures T-7 through T-11) for increased reductions.

GHG Reduction Formula

$A = B \times C$

GHG Calculation Variables

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from project/site commute VMT	0–12.0	%	calculated
User Inputs				
B	Percentage of employees eligible	[ ]	%	user input
Constants, Assumptions, and Available Defaults				
C	Percent reduction in commute VMT from implementation of measure	-12	%	Shoup 2005

Further explanation of key variables:

▪ (B) – The percentage of employees eligible refers to the employees that would be able to participate in the program. This will usually be 100 percent. Employees who might not be able to participate could include those who work nighttime hours when transit and rideshare services are not available or employees who are required to drive to work as part of their job duties. This does not refer to the percentage of employees who end up participating in the program.

▪ (C) – A study of eight California firms that complied with California's 1992 parking cash-out law found employee commute VMT decreased by an average of 12 percent (Shoup 2005).

GHG Calculation Caps or Maximums

Measure Maximum

(A_{max}) The maximum percent reduction in GHG emissions (A) is 12.0 percent. This maximum scenario is presented in the below example quantification.

Subsector Maximum

($\sum A_{max_{T-5 \text{ through } T-13}} \leq 45\%$) This measure is in the Trip Reduction Programs subsector. This subcategory includes Measures T-5 through T-13. The employee commute VMT reduction from the combined implementation of all measures within this subsector is capped at 45 percent.

Mutually Exclusive Measures

If this measure is selected, the user may not also take credit for Measure T-12, *Price Workplace Parking*. While both measures focus on providing a price signal for employees to consider other modes for their work commute, this measure reimburses employees who

do not park, while Measure T-12 actively charges all employees to park. Users should select either Measure T-12 or T-13.

Example GHG Reduction Quantification

The user reduces project/site VMT by offering commuters the option to choose a cash payment equal to or greater than the current parking subsidy offered by their employer. In this example, all employees (i.e., 100 percent) are eligible to participate (B), which would reduce GHG emissions from employee commute VMT by 12 percent.

$$A = 100\% \times -12\% = -12\%$$

Quantified Co-Benefits

Improved Local Air Quality

The percent reduction in GHG emissions (A) would be the same as the percent reduction in NO_X, CO, NO_2, SO_2, and PM. Reductions in ROG emissions can be calculated by multiplying the percent reduction in GHG emissions (A) by an adjustment factor of 87 percent. See *Adjusting VMT Reductions to Emission Reductions* above for further discussion.

Energy and Fuel Savings

The percent reduction in vehicle fuel consumption would be the same as the percent reduction in GHG emissions (A).

VMT Reductions

The percent reduction in VMT would be the same as the percent reduction in GHG emissions (A).

Sources

- Shoup, D. 2005. *Parking Cash Out.* Planners Advisory Service, American Planning Association. Available: http://shoup.bol.ucla.edu/ParkingCashOut.pdf. Accessed: January 2021.