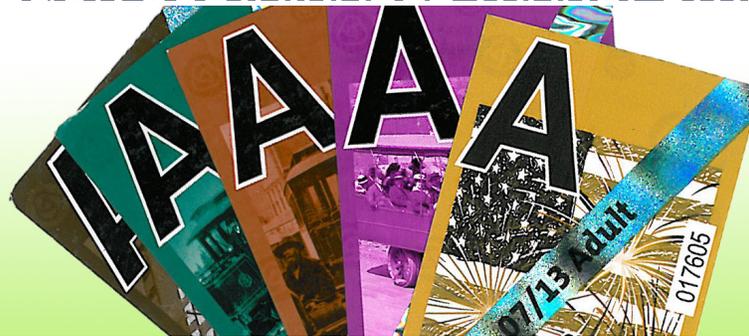


# Oregon Greenhouse Gas Reduction Toolkit: Strategy Report

## OREGON SUSTAINABLE TRANSPORTATION INITIATIVE



## Transportation Demand Management (TDM)

*This report describes how employers and jurisdictions can partner to create effective TDM programs.*



SUPPORT DOWNTOWNS  
AND MIXED-USE AREAS



MANAGE PARKING



SPUR ECONOMIC  
DEVELOPMENT



EMPHASIZE  
EARLY RESULTS



EMPHASIZE  
COST EFFECTIVENESS

### What is it?

We all make daily choices about transportation based on price, timing, convenience, weather, habit, and many other variables. TDM is a broad term that encompasses measures aimed at guiding our travel choices so that they reduce the “demand” on transportation infrastructure. TDM is often implemented as an alternative to adding capacity to the roadway system.

Commuting is responsible for a large portion of the single occupancy vehicle (SOV) travel and peak-hour congestion in Oregon. Employers and cities, especially when working together, can implement various policies and programs to reduce SOV commutes, such as:

- » Transit passes and other financial incentives for employees
- » Flexible work week and work-from-home opportunities
- » Parking cash-out programs to reimburse employees who do not use parking spaces
- » Provision of bicycle parking stalls and changing rooms
- » Building awareness of travel choices through education and outreach campaigns
- » Free or discounted carpool parking spaces
- » Trip reduction ordinances that provide incentives to businesses who reduce the SOV trips
- » District parking schemes to reduce the attractiveness of SOV travel
- » Transportation management associations (TMAs) that form public/private partnerships to implement TDM policies tailored to particular geographic area

### How well does it work?

Employer-based TDM strategies have been shown to produce significant beneficial transportation effects. Financial incentives and provision of transportation services (i.e. vanpool or subsidized transit service) are generally more effective at reducing commute trips than outreach or flexible work schedules.<sup>1</sup> A 2010 study in the Minneapolis-St Paul metropolitan area showed that office buildings with TDM plans generated 27-37% fewer trips than a typical office building.<sup>2</sup> Transportation accounts for 28% of GHG emissions in the US<sup>3</sup>, so this reduction in trips translates into a significant reduction in GHG.

<sup>1</sup> Transportation Research Board. *Public Agency Guidance on Employer-Based TDM Programs and Employer Technical Memorandum Characteristics of Effective TDM Programs*. December 2002. Accessed 5/28/2013. [http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp\\_webdoc\\_22-a.pdf](http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_webdoc_22-a.pdf)

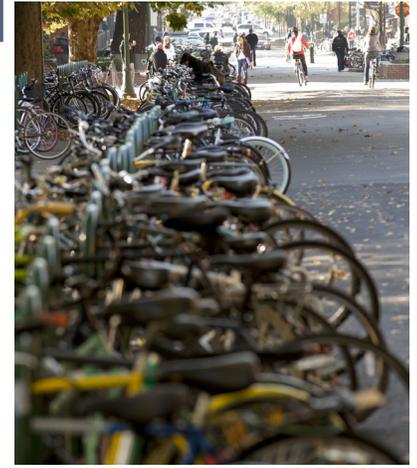
<sup>2</sup> Spack, Mike et al. *Travel Demand Management: An Analysis of the Effectiveness of TDM Plans in Reducing Traffic and Parking in the Minneapolis-St Paul Metropolitan Area*. January 22, 2010. Accessed 5/28/2013. <http://mikeontraffic.typepad.com/files/travel-demand-management-effectiveness-report.pdf>

<sup>3</sup> US Environmental Protection Agency. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2011*. <http://www.epa.gov/climatechange/ghgemissions/usinventoryreport.html>

## How can it benefit my community?

In addition to reducing GHG emissions, TDM programs can:

- » Provide greater opportunities for active transportation and benefits associated with an active lifestyle
- » Reduce the need for roadway expansion, thereby lowering capital and maintenance costs
- » Reduce peak-hour congestion
- » Manage parking-related problems (i.e. students parking in neighborhoods surrounding a campus)
- » Generate revenue through fees
- » Help achieve equity objectives by increasing transportation access
- » Implement non-regulatory strategies and buy-in from participating employers and employees



## What does it cost?

TDM is ultimately a cost-saving tool, particularly useful in instances where it would be expensive or impossible to “build your way out” of congestion problems. TDM strategies vary in scope, effort, and cost, and projects may be eligible for state or federal funding.<sup>4</sup> TDM funding can also come from parking revenues, fuel taxes, impact fees, or grants.

## Where has it been used?

TDM is commonly used in transportation planning today. Examples include:

- » **Oregon State University** has been designated one of the “Best Workplaces for Commuters” by the National Center for Urban Transportation Research for their outstanding efforts to provide transportation options.
- » The Nike Corporation has a history of supporting alternative modes, dating back to 1991. Today its transportation benefits program is considered a national model for employer-based TDM programs.
- » **The Lloyd District** – an office and commercial center in a transit-rich part of Portland – formed a TMA in order to meet regional transportation goals and get the most out of their transit assets. Since its creation in 1997, the TMA has negotiated for discounted transit passes, implemented district-wide metering and revenue sharing, eliminated minimum parking requirements, and prohibited new surface parking. These efforts helped reduce the drive-alone commute rate to the district from 60% in 1997 to 41% in 2011 and increase the share of transit commute trips by an average of 5.8% each year among other accomplishments.
- » **The Westside Transportation Alliance** is another TMA that offers workplace services and programs that help employees in Washington County commute to work by transit, carpool, vanpool, walking and biking.

## Where can I learn more?

- » TDM Encyclopedia – Victoria Transport Policy Institute: <http://www.vtpi.org/tdm/tdm12.htm>
- » A Case Study of Nike’s Employer-Based TDM: [http://www.ops.fhwa.dot.gov/publications/mitig\\_traf\\_cong/nike\\_case.htm](http://www.ops.fhwa.dot.gov/publications/mitig_traf_cong/nike_case.htm)
- » Oregon State University Transportation Options: <http://oregonstate.edu/sustainability/transportation>
- » Lloyd District TMA: <http://www.lloydtma.org/>
- » Westside transportation Alliance: <http://www.wta-tma.org>
- » City of Seattle – Best Practices in Transportation Demand Management. <http://www.seattle.gov/transportation/docs/ump/07%20SEATTLE%20Best%20Practices%20in%20Transportation%20Demand%20Management.pdf>
- » Drive Less Save More – Employer Toolbox: <http://drivelessavemore.com/pages/employer-toolbox>

*The Toolkit is a component of the Oregon Sustainable Transportation Initiative (OSTI), which was formed to address the requirements of Senate Bill 1059 (2010).*

*For more information, please visit:*

<http://cms.oregon.gov/ODOT/TD/TP/pages/ghgtoolkit.aspx>



<sup>4</sup> See: ODOT Transportation Options. [http://www.oregon.gov/ODOT/PT/pages/programs/trans\\_options\\_program.aspx](http://www.oregon.gov/ODOT/PT/pages/programs/trans_options_program.aspx) and