

# Oregon Greenhouse Gas Reduction Toolkit: Strategy Report

## OREGON SUSTAINABLE TRANSPORTATION INITIATIVE



### Parking Pricing

This report contains information about pricing strategies for parking, particularly in downtown cores, that are intended to reduce vehicle miles traveled and encourage use of alternative transportation modes.



### What is it?

Parking is an important link between land use and transportation. Historically, so much land area has been devoted to parking that it significantly influences the design and form of development. The availability and cost of parking are determining factors in whether or not people choose to drive to a destination rather than use other modes of transportation. Parking pricing encompasses a variety of strategies used to influence travel behaviors by strategically managing the cost of parking, particularly in downtown core areas. These strategies may include:

- » Charging higher public parking fees in central business districts or employment areas, particularly where alternative transportation modes are available
- » Introducing new fees on previously free public lots
- » Implementing a residential parking permit system
- » Implementing dynamic fee structures based on time-of-day (higher parking fees during peak traffic times to discourage driving)

The decision to implement a new parking pricing program can be controversial and should be done carefully. Generally speaking, areas with high parking occupancy (and therefore high demand) are at lower risk for charging a parking fee; people are likely willing to pay to park there. The *Proper Parking* guidebook<sup>1</sup> provides useful guidelines for determining when a parking pricing program may be appropriate.

### How well does it work?

Research into the measurable impacts of parking pricing strategies on GHG emissions is somewhat limited. A 2011 study done for the Washington State Department of Transportation looked at travel data from the 2006 Puget Sound Regional Council Household Activity Survey to assess the impact of urban form on travel behavior. The study indicated that parking costs had the highest association with vehicle miles traveled and CO<sup>2</sup> emissions. Per the study, increasing parking fees from \$0.28 to \$1.19 per hour resulted in a 9.9% reduction in CO<sup>2</sup> emissions from vehicles<sup>2</sup>.

More national research is needed in order to fully understand the potential range of impacts that parking pricing strategies may have on GHG reductions.

<sup>1</sup> *Proper Parking: A Guide to Effectively Managing Parking in Your Community.* Oregon Department of Land Conservation and Development, Transportation Growth Management Program and RWC Consulting. April 2013.

<sup>2</sup> Frank, Lawrence D. et al. 2001. *An Assessment of Urban Form and Pedestrian and Transit Improvements as an Integrated GHG Reduction Strategy,* Washington State Department of Transportation. Website: <http://www.wsdot.wa.gov/research/reports/fullreports/765.1.pdf>

## How can it benefit my community?

- » Fees charged for parking can generate revenue to fund public improvement projects such as street furniture, lighting and pedestrian amenities, which in turn promote more walking. Funds could also be used for marketing efforts to attract people to a destination (downtown, shopping district, etc.).
- » Successful pricing programs can help reduce congestion along corridors and in central business districts, employment areas and retail centers.
- » Parking pricing helps support transit use and other alternative transportation such as carpooling, biking and walking.



## What does it cost?

Up-front and operating expenses associated with parking pricing programs will depend on the scale of the program and its particular components. The Victoria Transport Policy Institute<sup>3</sup> provides a useful assessment (low, moderate or high costs) of capital and operating costs for a variety of pricing methods ranging from smart meters to valet parking. Depending on the scale of the parking pricing program, implementation could be accomplished in three to ten years, with benefits (reduced congestion and increased revenue, for example) being realized relatively soon after implementation. In Portland's Lloyd District (see below), the pricing program efforts began in 1997 and today, significant increases can be seen in the amount of available on-street parking and the public amenities that were funded by the parking revenue, including bike/pedestrian infrastructure, public art and marketing campaigns.

## Where has it been used?

- » **Lloyd District: A dense employment area in Portland, Oregon.** The Lloyd District Partnership Plan implemented a parking pricing strategy in 1997 to address on-street parking shortages and parking being monopolized by district employees and park-and-ride light rail commuters. The plan included new parking meters, a revenue sharing plan, ongoing tracking and enforcement, agreements with TriMet (the transit agency) and matching funds from the business improvement district (BID) for transportation investments and public safety programs. Sixteen years later, on-street parking is widely available in the Lloyd District and numerous public amenities have been funded by the revenue from parking fees.
- » **Old Pasadena: A historic downtown in California.** The downtown transitioned from free parking to paid parking, despite fears from local merchants that it would drive customers away. The pricing plan included new on-street parking meters, agreement that all revenue would stay within the district, and creation of an advisory board to manage the program and establish funding priorities. Since the program was implemented in 1993, many public amenities have been constructed and sales tax revenues have increased at greater rates than similar shopping districts with free parking.

## Where can I learn more?

- » Proper Parking: A Guide to Effectively Managing Parking in Your Community. Oregon Department of Land Conservation and Development, Transportation Growth Management Program and RWC Consulting. April 2013 .
- » Moving Cooler: An Analysis of Transportation Strategies for Reducing Greenhouse Gas Emissions. Cambridge Systematics, Inc. Urban Land Institute, July 2009.

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>3</sup> Parking Management Comprehensive Implementation Guide. Victoria Transport Policy Institute. May 2013. Website: [http://www.vtpi.org/park\\_man\\_comp.pdf](http://www.vtpi.org/park_man_comp.pdf)