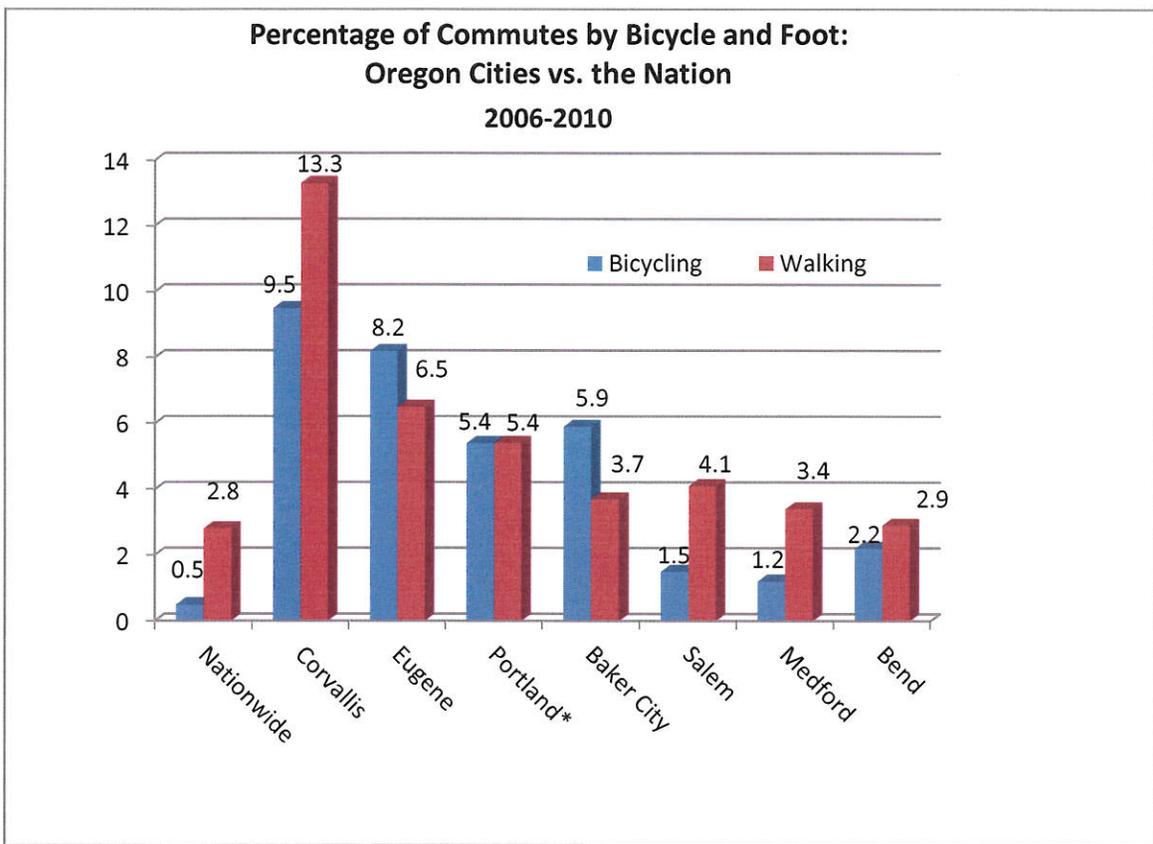


*Plans to Boost Bicycle and Pedestrian Travel in Oregon:
A Best Practices Report of the
Transportation & Growth Management Program
December 2012*

Cities like Corvallis, Eugene, and Portland typically get all the attention for their success in promoting bicycling and walking, the so-called active transportation modes.¹ The three cities are considered national leaders in bicycle commuting. With support from the Transportation and Growth Management Program (TGM), however, smaller communities around Oregon are also taking big steps to make it easier for people to get around by bike or on foot.

Salem, Roseburg, Madras and Lincoln City recently completed TGM-funded bicycle and pedestrian plans. A new plan is well under way in Baker City. And with TGM grants awarded in the fall of 2012, Amity, Cave Junction, Irrigon, and Washington and Clackamas counties are poised to lay the groundwork for expanded bicycle and pedestrian networks. This report describes these and other initiatives aimed at boosting active transportation.



Source: 2006-2010 American Community Survey (*Portland's bike share has since risen to 6%)

¹ "Active transportation" is transportation powered by human energy, such as riding a bike or walking. Public transportation is also considered active transportation because it usually involves a bike ride or walk to a transit stop.

Bicycle and Pedestrian Plan Basics

To some extent, the current bicycle and pedestrian planning initiatives represent efforts to reclaim opportunities missed during previous decades. From the 1950s to the 1970s, a period of substantial growth in Oregon, little thought went into plans for bicycle and pedestrian infrastructure. As a result, many roads today lack bike lanes and sidewalks. Even where such facilities exist, short gaps or barriers between them make bicycling and walking unsafe, impractical, unpleasant, or all of the above. In general, therefore, TGM-supported plans aim to repair these conditions and make it safe, convenient, and comfortable to get around by bike or on foot.

Infrastructure Improvements

Toward that end, bicycle and pedestrian plans typically identify gaps and barriers to non-motorized travel and recommend ways to close or overcome them. Proposed improvements include such things as bike lanes, off-road connections (including multi-use trails that offer short-cuts for bicyclists and pedestrians), bulb-outs,² special lighting, push-button signals, and median islands to make pedestrian crossings easier and safer. Increasingly, cycle tracks (bike lanes physically separated from motor vehicle and pedestrian traffic) are seen as critical if cities are to boost bicycling in a significant way.

The emphasis is on creating good connections between residential neighborhoods and popular destinations: schools, libraries, grocery stores, shops, job centers and medical hubs. “Good” here means the shortest, safest, most comfortable, and most direct route possible. Comprehensive networks with continuous sidewalks and well-connected bike lanes, paths, and boulevards are the goal.



A cycle track in Copenhagen, where 37 percent of all trips to work or school are taken by bicycle

² Bulb-outs are sidewalk extensions into the street that reduce the exposure of pedestrians to moving traffic.

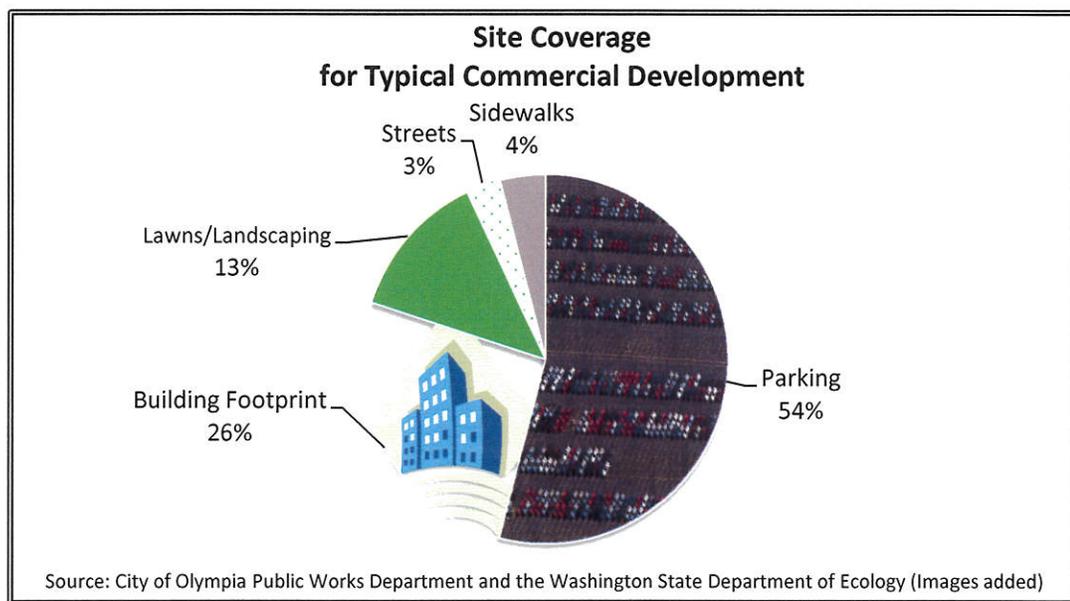
Zoning and Development Codes

But state-of-the-art bicycle and pedestrian planning doesn't end with the identification of networks and infrastructure improvements. Increasingly, plans recognize the need to revise local zoning and development codes, which can either support or undermine active transportation.

Parking standards arguably top the list of zoning policies affecting non-motorized travel. Excessive parking requirements, for example, can significantly increase the distances people must travel (and "dullify" their travel routes), thus making biking and walking less practical and less engaging.



A single parking lot can exceed a quarter square mile. Parking standards often require parking lots whose size exceeds that of the buildings they serve.



Conversely, the absence of adequate, secure, weather-protected bicycle parking can deter people from bicycling. For this reason, development codes that require bike parking at new office, shopping, housing, medical and educational complexes are becoming more commonplace.

Overall Goals

In short, the overall goals of bicycle and pedestrian plans are these: Shorten the distance between major destinations. Make bicycle and pedestrian networks well-connected, comprehensive, and continuous. Provide incentives to bike and walk. Make bicycling and walking more safe, comfortable, and engaging. And generally make our streets work for everyone: bicyclists, pedestrians, transit users and motorists of all ages and physical abilities. Some call this the Complete Streets movement.

Highlights from recent (or ongoing) TGM-funded bicycle and pedestrian plans, along with innovations in the planning process itself, are discussed below.

CONNECTIVITY IS KEY

“The only way to...increase the number of individuals who choose bicycle transportation as their primary mode of daily commuting is to make cycling the safest, fastest, most efficient method of getting around a city. A few bike lanes or separate stop lights sporadically placed about a city will do little to effectively encourage cycling; rather efforts must be focused on creating complete and continuous routes that make up a connected network of cycling infrastructure.

Without the connectivity, [bike] infrastructure has little use...[One] must be convinced that it will be safe...to [bicycle], that the cycle track or bike lane will not just end abruptly, leaving one to fend for [himself] in a car lane or on a pedestrian-crowded sidewalk....Once the foundation for cycling has been laid by a connected network of cycle tracks and lanes, small urban design elements can be added to increase the comfort and safety of cyclists.”

Source: Kyra Schneider, *Oregon Planning Journal*, September/October 2012

TGM-Funded Local Planning Initiatives

Salem

Salem’s new [Bike and Walk Plan](#) calls for greater emphasis on “family-friendly” bikeways – e.g., bike paths or bike boulevards designed to attract people who are interested in bicycling more often but who fear being hit by cars. This emphasis represents a shift from Salem’s earlier focus on bike lanes along arterial routes used by the so-called “strong and fearless” bicyclists who dare to ride almost anywhere.³

“We want to meet the needs of the less confident bikers,” says Julie Warncke, Salem’s transportation planning manager. “Creating bike lanes along major arterials remains important, but we’d like to do more to help people get where they want to go through local streets.” To create more complete and continuous bike routes, the city hopes to make greater use of pathways in public parks. The goal is to complete 70 percent of the recommended bicycle network by 2030. Salem currently has about 118 miles of bike lanes.⁴



An off-road path in Salem

For pedestrians, Salem’s plan calls for the designation of a 150-mile sidewalk network that will meet requirements of the Americans with Disabilities Act. The network is to receive priority when the city funds sidewalk improvements linking job centers, shops, neighborhoods, parks, transit stops, and schools.

Recognizing the relevance of development and site design regulations to active transportation, Salem’s plan calls for fewer parking spaces for motor vehicles in new housing and

³ A similar shift occurred in the Portland 2030 Bicycle Master Plan, another TGM-funded initiative.

⁴ [Bike and Walk Salem](#), p. 58, and Salem Bicycle, Pedestrian, and Safe Routes to School Plan Draft Memorandum #1, CH2MHILL, August 20, 2010, p. 34.

commercial projects, but recommends that such projects provide pedestrian and bicycle access to major destinations nearby.

Salem hopes to boost the percentage of commutes made by bicycle to three percent by 2020 and to five percent by 2030⁵ – and the percentage of commutes by foot to seven percent by 2020 and to 11 percent by 2030.⁶ According to the 2006-2010 American Community Survey, 1.5 percent of local commutes are taken by bicycle and four percent by foot.

Salem's new [*Bike and Walk Plan*](#) was adopted by the city council in December 2012.

Eliminate Bike Barriers

To advance a city policy calling for the elimination of barriers to bicycle travel, Salem's Bike and Walk Plan states:

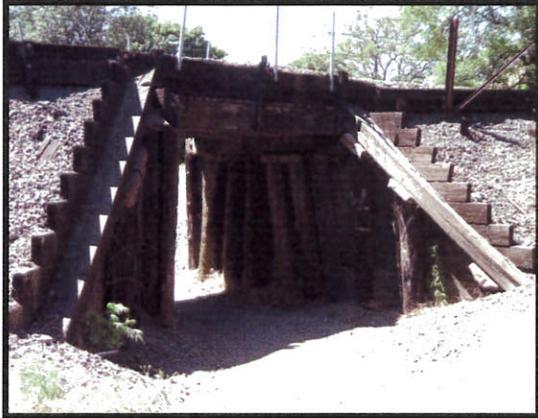
...new developments or major transportation projects will neither create new, nor maintain existing, barriers to bicycle travel. Through the implementation of development codes...the city will require the creation of pathways and connections for bicyclists to schools...[and] neighborhood shopping...

⁵ [Bike and Walk Salem](#), p. 58

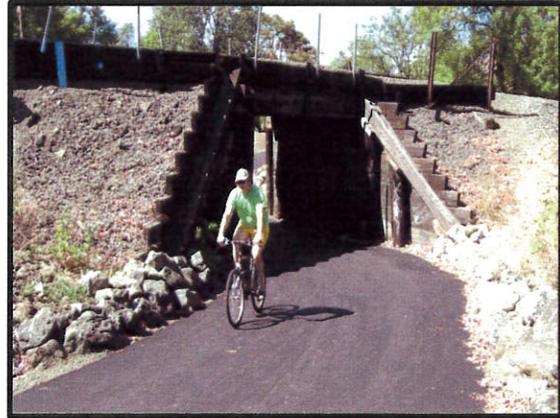
⁶ [Bike and Walk Salem](#), p. 19 and 22. See also Attachment 1, Proposed Amendments to the Salem Transportation System Plan (Salem TSP) with recommended revisions, in March 6, 2012 [memorandum](#) from Glenn Gross to the Salem Planning Commission. Pedestrian System Element, p. 8-6.

Roseburg

Roseburg has already completed several projects recommended in the [Bike and Pedestrian Plan](#) it approved in 2009. For example, the city paved a previously rough and rutted dirt path under railroad tracks and a five-lane arterial road, thereby enabling cyclists to avoid hazardous tracks and a busy street while en route to the city library and other popular downtown locations.



Roseburg Underpass Before



Roseburg Underpass After

The city also corrected a long-standing danger caused by below-grade storm water grates on West Harvard Avenue, a major road leading to three schools, a city park, and a state office building. A hotline now exists to enable cyclists and pedestrians to report road hazards they encounter.

Educating local residents about the health benefits of active transportation is important. With this in mind, in June 2012 the Roseburg Bicycle and Pedestrian Coalition partnered with local health professionals and others to sponsor a public lecture, “Designing Healthy Communities,” by Richard J. Jackson, M.D., author of a book on this topic. The partnership, a model of outreach by the Coalition, included not only the Coalition but also the Mercy Medical Center, Cow Creek Band of Umpqua Tribe of Indians, Physicians of Douglas County, Douglas County Public Health, 1000 Friends of Oregon, the Oregon Chapter of the American Planning Association, and TGM.

Jackson’s message: We can’t rely entirely on dietary or medical treatments to tackle the obesity epidemic. We must also find ways to make our communities more bikeable and walkable so that people can work physical exercise into their schedules more easily.

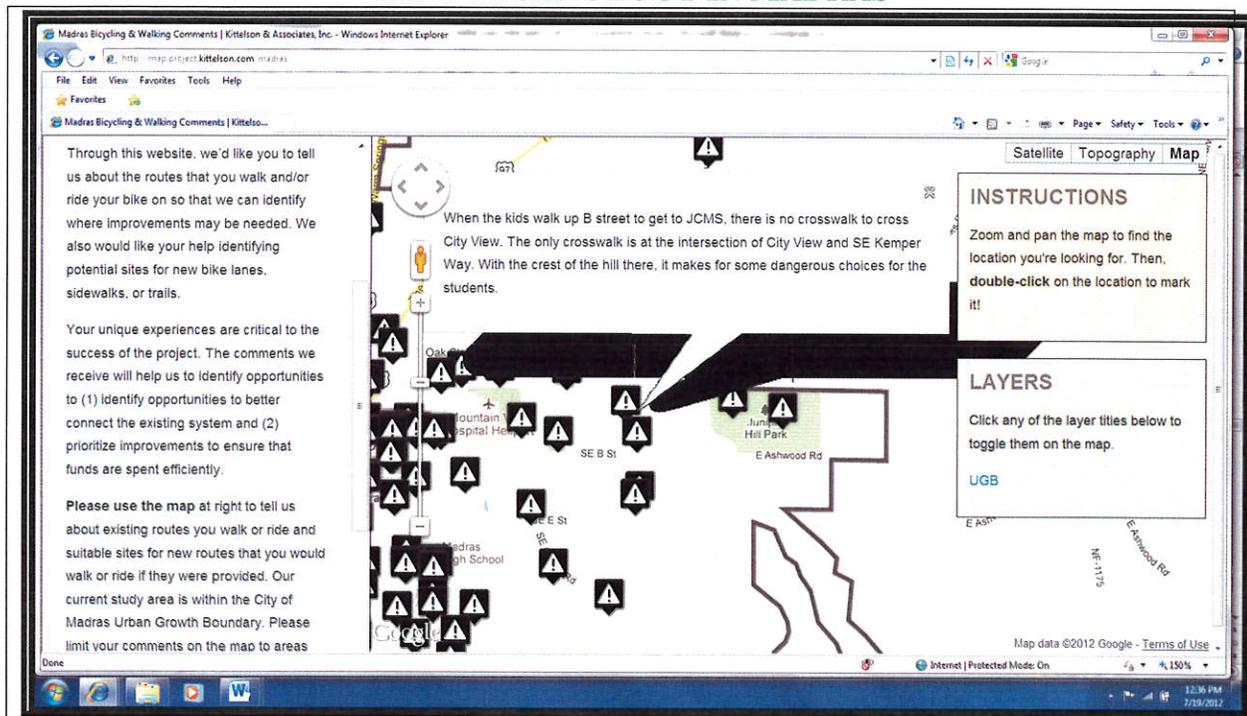
Madras

Safe routes to school feature prominently in the new bicycle and pedestrian elements of **Madras'** Transportation System Plan (TSP). In developing its plan, the city demonstrated the value of new technology to encouraging public involvement in the planning process.

Because it's often difficult to persuade time-strapped citizens to turn out in person for public meetings, the city worked with Kittelson & Associates, Inc., to develop an interactive survey for the project web site. This allowed local residents to identify sites on a Google map where bicycle facilities or sidewalk improvements are needed. (See image below.) The use of this technology encouraged input from high school students who might not otherwise have participated in the survey. Community Development Director Nick Snead met with the local high school civics teacher to enlist support in generating student participation.

The Madras City Council approved the proposed bicycle and pedestrian elements, including the safe-routes-to-school recommendations, for its TSP in April 2012, and the city is now moving forward with implementation.

USING TECHNOLOGY IN MADRAS



An excerpt from the interactive, on-line survey used by Madras to encourage public input into the city's bicycle and pedestrian plan.

Eugene

Eugene is ambitious. The city seeks to double the percentage of *all* trips (not just commute trips) taken by bicycle or foot by 2031. Toward that end, [Eugene's Pedestrian and Bicycle Master Plan](#) calls for the construction of 111 miles of new bikeways (on top of 157 miles already built) and 25 miles of new sidewalks within the next 20 years.

Eugene sees the creation of “20-minute neighborhoods” as key to a more bike- and pedestrian-friendly city. The idea behind such neighborhoods is to use density, land-use mixes, and site design to bring destinations closer together, thereby enabling people to walk or bike to stores, parks and schools within 20 minutes.

Like Salem, Eugene recognizes the relevance of zoning and development codes to active transportation goals. The city's plan calls for bicycle parking requirements for multi-family housing and transit stations as well as school district notification requirements. The latter are intended to ensure that school personnel can provide timely comments on the potential effects of proposed sub-divisions on routes used by students to get to school.

Because the Eugene Pedestrian and Bicycle Master Plan went through a thorough vetting process prior to its March 2012 approval by the Eugene City Council, local advocates for non-motorized, active transportation expect the plan recommendations to find their way into the city's 2013 Transportation System Plan. The TSP will guide long-term investments and management of the City's transportation system.

Lincoln City leveraged popular food-related events to boost public participation in its [Walking and Biking Plan initiative](#). (Call it food for thought.) For example, the city held an Open House in January 2012 in conjunction with the annual Jambalaya Cook-off. This drew some 200 people, many of whom commented on the city's draft plan. During the following summer, the city mounted a booth at the local Farmers Market and made planning staff available to answer questions and receive public comments. Visitors to the booth were encouraged to place dots on map-boards to indicate desired improvements in Lincoln City's bicycle and pedestrian networks. Pedometers, water bottles, and other favors, donated by the local hospital, Lincoln County Transit, and the

OPEN HOUSE!

Lincoln City's Walking & Biking Plan

Visit the project website at www.lincolncitypedbike.org

Date: Sunday, July 15, 2012
Time: 9:00 AM—3:00 PM

**Lincoln City Farmer's Market
Cultural Center Lawn -
540 NE Highway 101**



Coloring sheets and activities will be available for children. Supervised child care will not be provided.



- Stop by at the market to get an update on the plan.
- Vote for your priorities for improvements to make walking and bicycling in Lincoln City safer and more enjoyable.
- Tell us your preferences on how to pay for improvements.

Sponsored by:



Questions? Call 541-996-1232 (Kate) or 541-996-1226 (Timothy) for assistance.

 Lincoln City Walking and Biking Plan

Chinook Winds Casino, were handed out to those who stopped by. Over 100 local residents visited the booth, according to Debra Martzahn, senior planner with the city. The plan won city council approval in November 2012.

Lincoln City faces several major challenges as it moves forward with its effort to improve conditions for bicyclists and pedestrians: The city sits astride a busy state highway, Highway 101. A narrow right-of-way along the highway makes it hard to find space for new sidewalks and bike lanes. And steep hills on the city's east side make bicycling difficult.

In a new update of Lincoln City's Transportation System Plan, the city is working with the Oregon Department of Transportation to address these challenges as well as conflicts between the Oregon Highway Plan's emphasis on "high speed, continuous [traffic] flow" along Highway 101 and a local desire to provide for bicyclists, pedestrians, and economic activity on Main Street. Alternative mobility standards and road design concepts that better balance through-traffic with local revitalization goals will be examined through the TSP with a view to making it easier for people to get around by biking or walking.

An Ongoing Planning Initiative

While Salem, Roseburg, Madras, Eugene and Lincoln City have completed their bicycle and pedestrian plans, Baker City is in the midst of writing its.

Work on [Baker City](#)'s plan was kicked off in July 2012 with a bicycle tour around the city. The tour enabled city officials and interested citizens to identify specific problems that need fixes: sidewalk gaps, bike path ruts, poor connections, etc. Missing links in sidewalks near schools are receiving special attention. Another important item on the local to-do list is to explore a possible expansion of Baker City's riverside greenbelt to provide better connections to local destinations around town, including the YMCA.

Portland Region

A new active transportation plan for the Portland region is in the works at Metro. Among the concerns motivating this initiative:

- transportation-related greenhouse gas emissions that contribute to climate change; and
- an obesity epidemic exacerbated by a built environment that limits opportunities for such physical activity as bicycling and walking. (Nearly a third of Multnomah County residents are overweight or obese.⁷)

Through this plan, Metro hopes to create “a seamless network” of on-and off-street pathways for bicyclists and pedestrians to connect the entire region.



Bicycle commuters in Portland

The region already enjoys over 200 miles of off-road trails and over 600 miles of on-street bike lanes and boulevards.

⁷ See [Multnomah County Community Profile](#).

New TGM Grants for Bicycle and Pedestrian Modes

Still more local efforts to improve conditions for bicyclists and pedestrians in Oregon were bolstered by new planning grants awarded by TGM in the fall of 2012.

Smaller cities like Amity and Cave Junction will use their grants for a safe-routes-to-school plan, while Irrigon and Brookings will strengthen the bicycling and walking elements of their Transportation System Plans (TSP).

Washington County hopes to take advantage of a new state law giving localities more freedom to reduce speeds on neighborhood streets. The county aims to develop a Neighborhood Greenway Street network for its TSP. The goal is to identify low-speed, low-traffic residential streets that could form a well-connected network suitable for bicycling and walking if gaps were filled in. The network is intended primarily to serve local trips but may also accommodate longer regional journeys where neighborhood greenways can be connected with each other. The regional transportation goal is to triple the percentage of commutes taken by bicycling and walking.

A second grant to Washington County will help the county explore alternatives to level-of-service (LOS) standards. Auto-centric LOS standards have come under criticism recently because they focus exclusively on conditions for motorists and often make things worse for bicyclists, pedestrians, and shops. The county will examine multi-modal performance standards that allow for a more comprehensive, balanced perspective and that consider how the transportation system accommodates all modes and all users, not just motor vehicles.

Clackamas County will use its grant to identify potential active transportation corridors connecting communities within the county. The corridors may include on- as well as off-road facilities. The project will also examine design options, signage, and funding strategies aimed at enabling the county to implement its plan.

Finally, the city of Portland will use a TGM grant to improve street connections and multi-modal travel options in east Portland, an area that has received little attention in the past.

Counting Bicycle and Pedestrian Trips

One drag on local efforts – not only in Oregon but nationwide – to boosting active transportation modes is the lack of good data on bicycle and pedestrian travel. While tools for measuring *motor vehicle* travel performance are well-developed and widely accepted, those for assessing the active transportation modes are not. “Everyone assumes that bicycle and pedestrian trips are statistically insignificant,” says Sheila Lyons, a bicycle and pedestrian specialist at the Oregon Department of Transportation (ODOT). As a result, many cities don’t even count these trips. But without hard data on the demand for, and usage of, bicycle and pedestrian facilities, local governments may see them as a luxury rather than a necessity. “What isn’t counted, doesn’t count,” is how the Alliance for Biking and Walking puts it.⁸

Conventional data sources and travel models...have constrained planners and decision makers from fully incorporating bicycle and pedestrian policies, programs, and outcome into the planning process. The standard travel forecasting models...fail to incorporate bicycling and walking as modes in the planning process, and the traffic analysis zone (TAZ) geography is too coarse to relate to the shorter distances associated with walking and bicycle travel or with the relevant characteristics of the built environment.

“Walking & Bicycling in the United States: The Who, What, Where, & Why,”
by Richard Kuzmyak &
Jennifer Dill

TR News 280
May-June 2012

To gain a better understanding of how bicycle and pedestrian trips are, and could be measured, TGM commissioned Alta Planning and Design in 2011 to make recommendations for improving Oregon’s bicycle and pedestrian travel assessments. An internal working group at ODOT is now examining these recommendations to determine how the agency can improve our understanding of bicycle and pedestrian travel.

Motivations

In summary, communities throughout Oregon – not only Corvallis, Eugene, and Portland – are working to make bicycling and walking safer and more convenient. The TGM program, a partnership between the Oregon Department of Land Conservation and Development and the

Oregon Department of Transportation, and ODOT’s Active Transportation Section are supporting these local efforts through planning and transportation enhancement grants as well as other forms of assistance.

⁸ [Bicycling and Walking in the United States: 2012 Benchmarking Report](#), p. 8.

With today's high and volatile gas prices, with public health officials alarmed at the obesity epidemic linked to physical inactivity, and with the cost of many road projects well beyond the taxpayers' means, it's clear that the active transportation movement has legs.

**SHORT TRIPS:
THE LOW-HANGING FRUIT**

Approximately 51 percent of car trips in Eugene are less than three miles and 16 percent are less than one mile. Trips of these distances are potential walking and biking trips. Shifting from motor vehicle use to walking and biking can help the community address obesity and related health problems, decrease carbon emissions, reduce congestion on our roads, and further our efforts toward sustainability.

Source: Eugene Pedestrian and Bicycle Strategic Plan, January 2008

Planning Resources

- [Creating a Road Map for Producing & Implementing a Bicycle Master Plan](#), by Peter Lagerwey, National Center for Bicycling and Walking and Active Living Resource Center
- *Sustainable Transportation Planning*, by Jeffrey Tumlin (John Wiley & Sons, Inc. 2012). See “Bicycles” chapter contributed by Michael R. King
- [Urban Bikeway Design Guide](#), National Association of City Transportation Officials
- [Initiative for Bicycle and Pedestrian Innovation](#), Portland State University
- [Design Manual for Bicycle Traffic](#), a Dutch manual
- [Willamette Pedestrian Coalition](#)
- [Tri-Met Publications and Resources](#)
- [Oregon Bicycle and Pedestrian Guide](#)
- [Oregon Bicycle and Pedestrian Plan](#)
- *A Citizen’s Guide to Better Streets*, by Gary Toth, Director, Transportation Initiatives, Project for Public Spaces
- [Washington County Bicycle Facility Design Toolkit](#) (July 2012)

This report was prepared by Constance E. Beaumont for the Transportation and Growth Management Program (TGM). For more information about TGM, visit www.oregon.gov/LCD/TGM or contact constance.beaumont@state.or.us