# The case for an active transportation strategy

## WALKING AND BIKING OFFER AN IMMEDIATE OPPORTUNITY TO TACKLE KEY CHALLENGES.

Congestion, climate change, burdensome fuel costs, lack of funding to even maintain roads, concern about making sure our transportation investments build, rather than destroy, communities—these challenges make it plain to each of us in our daily lives that the times are changing.

The good news is that we can take one relatively small step that will attack every one of these problems. It won't work overnight and it won't solve everything, but it will set us on a path towards a transportation network that is truly earth and community friendly. It is a policy that brings smiles to commuters, kids and communities (as well as taxpayers!)

Our region already has a good start, with Portland the most "bike friendly" city in America. But with smart investments in a network of routes and trails for biking and walking, in ten years we can more than double the number of people who choose to walk or bike. People like us in cities around the world with climates and hills as challenging as ours have done it. Their air and water are cleaner, their communities are stronger, and they are more active and healthy as a result.

**It is time. It will work.**

> "We must recognize that we are on the cusp of a new wave of transportation policy. The infrastructure challenge of President Eisenhower's 1950s was to build out our nation and connect within. For Senator Moynihan and his colleagues in the 1980s and 1990s it was to modernize the program and better connect roads, transit, rail, air, and other modes. Today, the challenge is to take transportation out of its box in order to ensure the health, vitality, and sustainability of our metropolitan areas."
>
> – *Robert Puentes, Brookings Institution, A Bridge to Somewhere: Rethinking American Transportation for the 21st Century*

Live in fragments no more… Only connect…. – *E.M. Forster, Howards End*

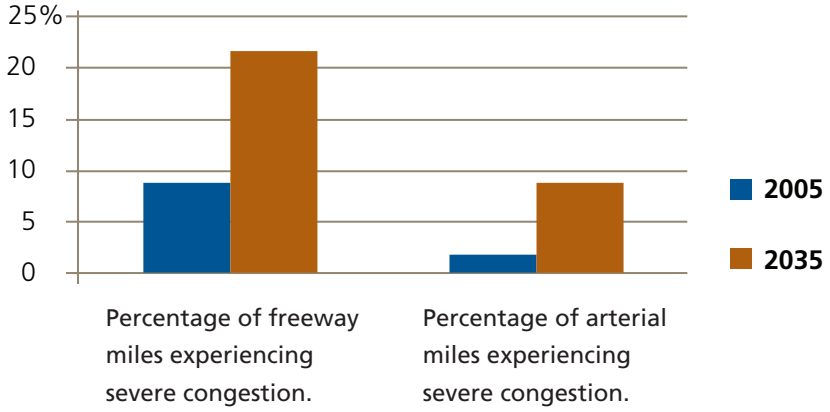
# Why encourage bike and pedestrian travel now?

## INVESTMENT PRODUCES ENVIRONMENTAL, LIVABILITY AND FINANCIAL RETURNS

### Non-motorized travel reduces congestion

Thirty years from now, one million more people are expected to call the Portland region home. During this time, car traffic is expected to grow by nearly half, while truck traffic will more than double. The percentage of roadways experiencing severe congestion is expected to quintuple from 2% today to 10% by 2035. Increasing congestion has real economic costs. Dedicated facilities for pedestrians and cyclists frees roadways for other users.

Projected congestion growth in Portland region
Source: www.gasbuddy.com



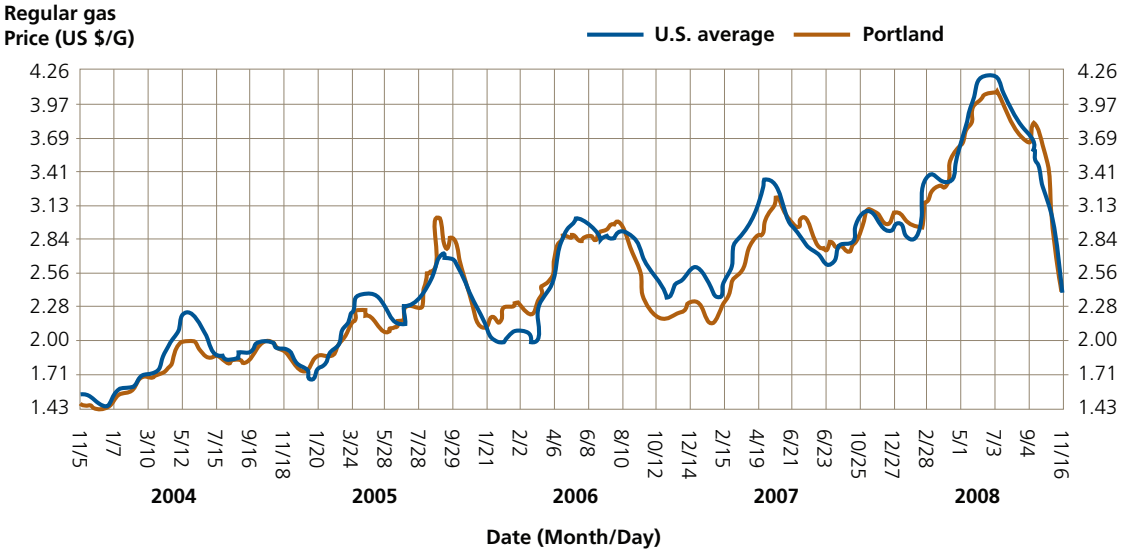

Bicycling and walking reduce congestion by replacing cars on short trips, increasing use of public transportation and by stimulating compact, mixed use development.

### Non-motorized travel is inexpensive

Transportation is second to housing as a proportion of household budgets and fuel costs have risen from 3% of household expenditures in 2002 to 8.5% as of June 2008, putting an increasing strain on resident's budgets. Bicycle and pedestrian infrastructure saves public dollars as well. A lane of roadway will accommodate five to ten times more pedestrian and bicycle traffic than driving and the cost of bicycling and pedestrian infrastructure is just a small fraction of that of building highways. Trails and paths can also be efficient connections to transit, reducing the need for expensive and land-gobbling park-and-ride stations.

Those households that rely on walking and cycling as their primary means of travel save an average of $694 per month.
– www.gasbuddy.com

60 Month average U.S. and Oregon gas prices
Source: www.gasbuddy.com

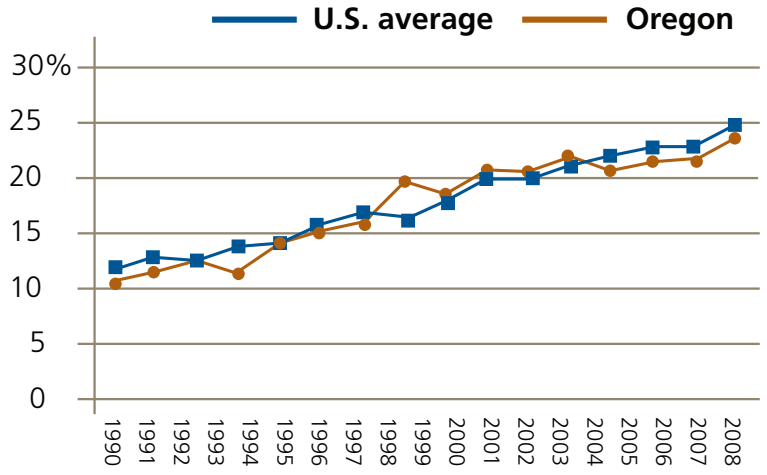



Those households living near a greenway are more likely to meet CDC health guidelines – CDC, Rails To Trails Conservancy

## Non-motorized travel improves health and reduces health care costs

Americans' lack of physical activity is leading to an increase in a variety of health conditions including hypertension, cancer, heart disease, diabetes, and obesity, which will soon eclipse tobacco as the number one preventable cause of death in the United States. Studies have shown that people living in communities with walking and cycling facilities walk and cycle more. Bicycling and walking offer a way to integrate physical activity into busy schedules, and have been demonstrated to improve these conditions as well as to contribute to emotional well-being.

Percentage of adults who obese, Oregon and U.S. 1990-2008
Source: Oregon Department of Human Services

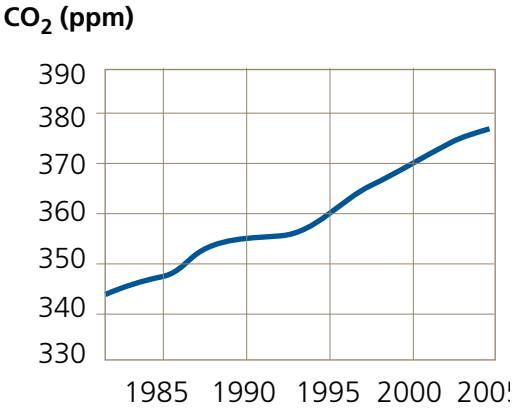


## Non-motorized travel reduces greenhouse gas emissions

Greenhouse gas emissions are causing climate change, which leads to environmental and economic disruption and threatens our health and well being. The transportation sector is responsible for 38% of greenhouse gas emissions. Any strategy to address climate change requires reducing energy consumption in this sector. Bicycle and pedestrian transportation must be a key element in our region's strategy to increase the share of total trips made by bicycle and by foot. The Rails To Trails Conservancy estimates that bicycling and pedestrian travel can offset between 3 percent and 8 percent of greenhouse gas emissions of US cars and trucks.

### Globally averaged CO2 1985 - 2005

Source: World Meteorological Organization



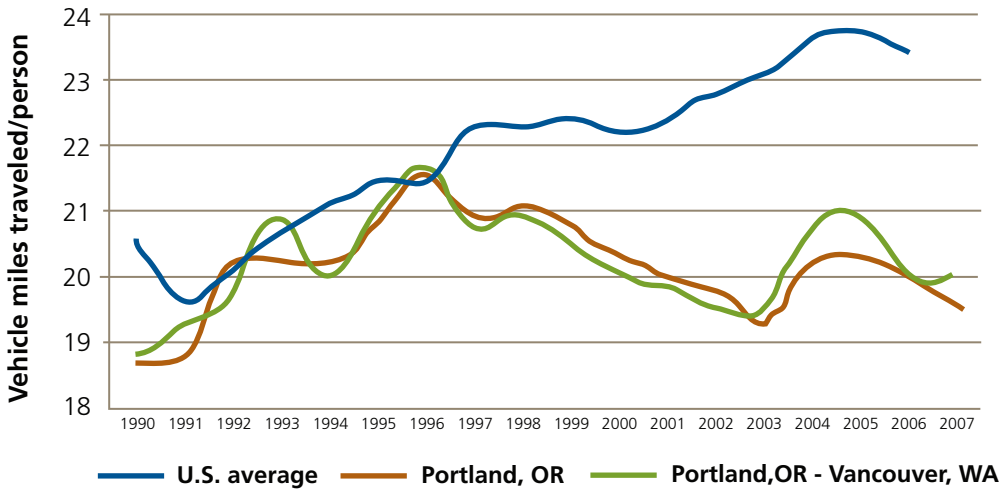

Every 1% increase in miles traveled by bicycle or on foot instead of by car reduces our region's greenhouse gas emissions by 0.4%

## Non-motorized travel fosters dynamic, mixed-use communities

Non-motorized travel encourages a diverse mix of housing, shopping, restaurants, workplaces and recreation in convenient proximity. Residents that walk or ride tend to patronize small businesses, buying in smaller quantities but making more frequent purchases than motorists. This pattern of commerce supports small, community-based businesses and leads to a dynamic community environment. Motorists in such communities also benefit from shorter distances between services, which leads to fewer vehicle miles traveled per person.

### Vehicle miles traveled per person 1990 - 2007

Source: FHWA, ODOT, WDOT




Motor vehicle miles traveled per person are increasing nationally. The Portland region has shown it is possible to counter this trend through compact growth and by providing transportation options.

# The special case for greenways

## GREENWAYS PROVIDE PREMIER ROUTES AND DISTINGUISH THE REGION

Some greenways connect population centers with a non-motorized, natural corridor that provides an unrivaled commute experience. Other Greenways connect the best natural gems our region has to offer and draw both residents and visitors for long recreational excursions. In either case, Greenways play a special role in the region's mobility strategy.

- Greenways are like parks. They are places for families and friends to be together and places to find solitude and connect with nature. But unlike parks, they facilitate travel through the urban area, from neighborhood to neighborhood, or from park to school, or from home to work.
- Greenways are like roads. They give us a way to get where we need to go. But unlike roads, they are built for nonmotorized travel and so they are safer, less stressful and truly enjoyable. They are places where you can experience the wind in your hair or the sun on your shoulders as you travel.
- Greenways are like public squares. They are places for community to gather and can be good locations for shops, restaurants, museums, benches, fountains or works of art. But unlike public squares they extend in either direction as gateways to additional urban and natural experiences.
- Greenways are like a local gym, except that the scenery is better and you can exercise while you get to work rather than before or after.

Greenways are a significant element of Connecting Green, a broad-based movement in the Portland region to create a system of parks, trails and natural areas that is second to none.

Greenways may pass through a park, natural area or stream corridor. The land may be newly developed, but usually it is redeveloped, having been formerly occupied by a railroad, highway, or other transportation route. Many greenways in urban centers or developed areas are linear parks. Greenways are the premier travel corridor for walking and riding because they are safe and fast, and because they offer a natural experience that is removed from the noise and frenzy of the urban environment.

# Why the Portland region?

## PORTLAND IS UNIQUELY QUALIFIED TO UNDERTAKE THIS STRATEGY

### Residents are choosing non-motorized transportation with increased frequency

An active, outdoor-oriented culture, sustainability consciousness, and strong civic and elected leadership position the Portland Region to lead the nation in implementing a nonmotorized transportation strategy. In the city, bicycling to work increased 146% between 2000 and 2006 despite accounting for only 0.7% of the Portland Office of Transportation's capital budget. Travel by bike and foot now makes up as much as 9% of total commute trips in the city, and just under 5% in the metropolitan region as a whole. In 2008, Portland became the first major city to be designated by the League of American Bicyclists as a platinum level bicycle friendly community. The City of Beaverton has been awarded Bronze status. The region's strong transit system is a key asset that positions the Portland region to lead a bicycle and pedestrian strategy.

Finally, Metro, local governments and nonprofit groups have proposed an exemplary network of greenways that span the region and provide opportunities for connection with the region's rich natural heritage. These routes are in varying stages of development, with many in the advanced stages of planning and ready to proceed.

# Solution requires a more integrated approach to mobility

## A FOUR PRONGED STRATEGY IS NEEDED

Our nation's overwhelming emphasis on one mode of travel has created stark inefficiencies and negative side effects. A regionwide network of on-street and off-street bikeways and walkways integrated with transit and supported by educational programs would make travel by foot and bike safe, fast and enjoyable. Such a system would take walking and cycling well beyond the exclusive domain of avid cyclists and the courageous to become a practical and preferred option for average residents. This is well within reach if we achieve four things:

### 1 Organize leadership

The strategy requires public and private leadership with interagency staff support.

**Form a Caucus of Elected Leaders.** Caucus members will make a commitment to champion the strategy. Members of the caucus agree to support the strategy's themes and direction. There will also be opportunities to help support specific proposals at the local, regional, state and federal levels.

**Establish a Leadership Council**. The council will be made up of civic and business leaders that make a commitment to support the caucus of elected leaders and serve as third party validators when the caucus is presenting proposals, making presentations, or involved in campaigns for elements of the strategy.

**Create an Interagency Staff Team**. Staff from interested cities, counties, state agencies and Metro will form an interagency team to support the work of the Caucus of Elected Leaders and the Leadership Council.

**Model Cross-Discipline Integration at Metro**. Cycling and walking, and particularly off-street trails, have in the past been treated as minor transportation facilities, with a divide between park and transportation planning. This schism reduces the functionality of the region's transportation system, limits options and increases costs. The aesthetic, recreation, health and ecological objectives associated with cycling and walking, which have been the traditional responsibility of parks bureaus and associated policy-making bodies, need to be acknowledged and fully integrated with transportation and mobility objectives, which are the purview of transportation departments. Metro should model the organizational changes that are necessary to integrate bicycle and pedestrian facilities planning with planning for other modes and encourage this integration within other jurisdictions in the region.

## 2 Demonstrate potential

There is excellent work going on across the region building trails, transit and bicycle/pedestrian facilities. Plans are in place, they are coordinated through the Regional Transportation Plan (RTP) and, as a region, our accomplishments are nationally significant. However, institutional traditions marginalize the planning, funding and development of trails and other bicycling and pedestrian infrastructure, resulting in weak coordination or even competition among these facilities.

The strategy's leadership must establish recognition among elected officials and influential organizations and committees that walking and cycling are serious transportation options. Such recognition stems from a realistic understanding of the return on investment such a system could have for our communities, our economy, and the environment. Nothing substitutes for results. Strategy leadership will showcase existing results as well as champion demonstration projects that take bike and pedestrian travel to new levels. Three pilot projects are envisioned:

**Urban.** Complete a well-designed and well-connected nonmotorized transportation project within a single urban "commute shed." Partner with area businesses to provide education and encourage use. For example, develop a trail that connects a regional center with the central city and provide associated on-street feeder routes and transit connections to substantially increase bicycle and pedestrian commuting within a targeted area.

**Suburban.** Partner with TriMet and area businesses to create an integrated bicycle/transit strategy for a geographically-defined area in the suburbs. For example, develop on and off-street bicycle and walking paths that feed a transit node. Provide safe, dry bicycle parking at the transit node. Make an agreement with area businesses to encourage their employees to use the facilities. A partnership with transit is critical in the suburbs, because distances between population and employment centers can be too long for bicycle travel (greater than 30 minutes by bike), but can be well served by transit.

**Greenway.** Identify a demonstration project that would link together key natural attractions to create a unique urban/natural experience. This would be a greenway of exceptional quality that can serve as a day or multi-day excursion for residents and visitors.

### Actions required are as follows:

**Select Demonstration Areas**. A committee will be formed to select three demonstration areas: an urban, a suburban and a recreational greenway. The areas will be based on the extensive data and research that has been compiled through the Blue Ribbon Committee for Trails process, and will draw from existing transportation plans. The committee will meet three times to complete the selection by early 2009.

**Secure Federal and State Funds**. The Caucus of Elected Officials and Leadership Council will advocate for funding for the demonstration areas in upcoming legislative sessions at the state and federal levels.

**Build Demonstration Projects.** The goal is to begin moving demonstration areas forward in 2009.

## 3 Reduce costs

Federal and state standards set up for road construction complicate the construction of off-street bicycling and walking trails and add an estimated 30% to their cost. The barriers generally relate to procedures in place to support highway construction that don't adapt well for trails, such as cumbersome acquisition requirements that give the impression that a condemnation is about to take place; time consuming change order reviews because standards for roads aren't appropriate for trails; redundancy of effort to fulfill local, state and federal requirements; and excessively time consuming paperwork for intergovernmental agreements, accounting and project closeout.

A key element of the strategy is to bring these costs into line. Federal funding is administered through ODOT. Eliminating these barriers will involve working with ODOT staff, the Oregon Transportation Commission, state legislature and federal congressional staff.

**Convene an "Oregon Solutions" style Cost Reduction Project.** Strategy leadership would convene agencies involved in trail construction to identify opportunities to streamline, fastrack and reduce costs and implement solutions.

## 4 Develop system

Strategy leadership will work towards a regional mobility strategy that fully integrates walking and cycling into the region's transportation plans. The Regional Transportation Plan (RTP) is now being updated and so the timing for such an integration is excellent.

**Refine Guiding Principles.** A work group will refine the guiding principles that will guide the development of the region's bicycle and pedestrian system. A preliminary list, developed during the work of the Blue Ribbon Committee for Trails, is provided in a later section of this document.

**Develop Mobility Strategy and Integrate with Regional Transportation Plan.** Inclusion in the Regional Transportation Plan qualifies projects for federal funding.

**Create Safe Crossings.** Work with the Oregon Department of Transportation to create a "safe crossings" initiative that addresses bicycle and pedestrian crossings. Areas where trails cross arterials or highways are particularly challenging. Crossings are in the right-of-way and so are eligible for gas tax investments and are key to protecting the safety of those who travel by bike and by foot.

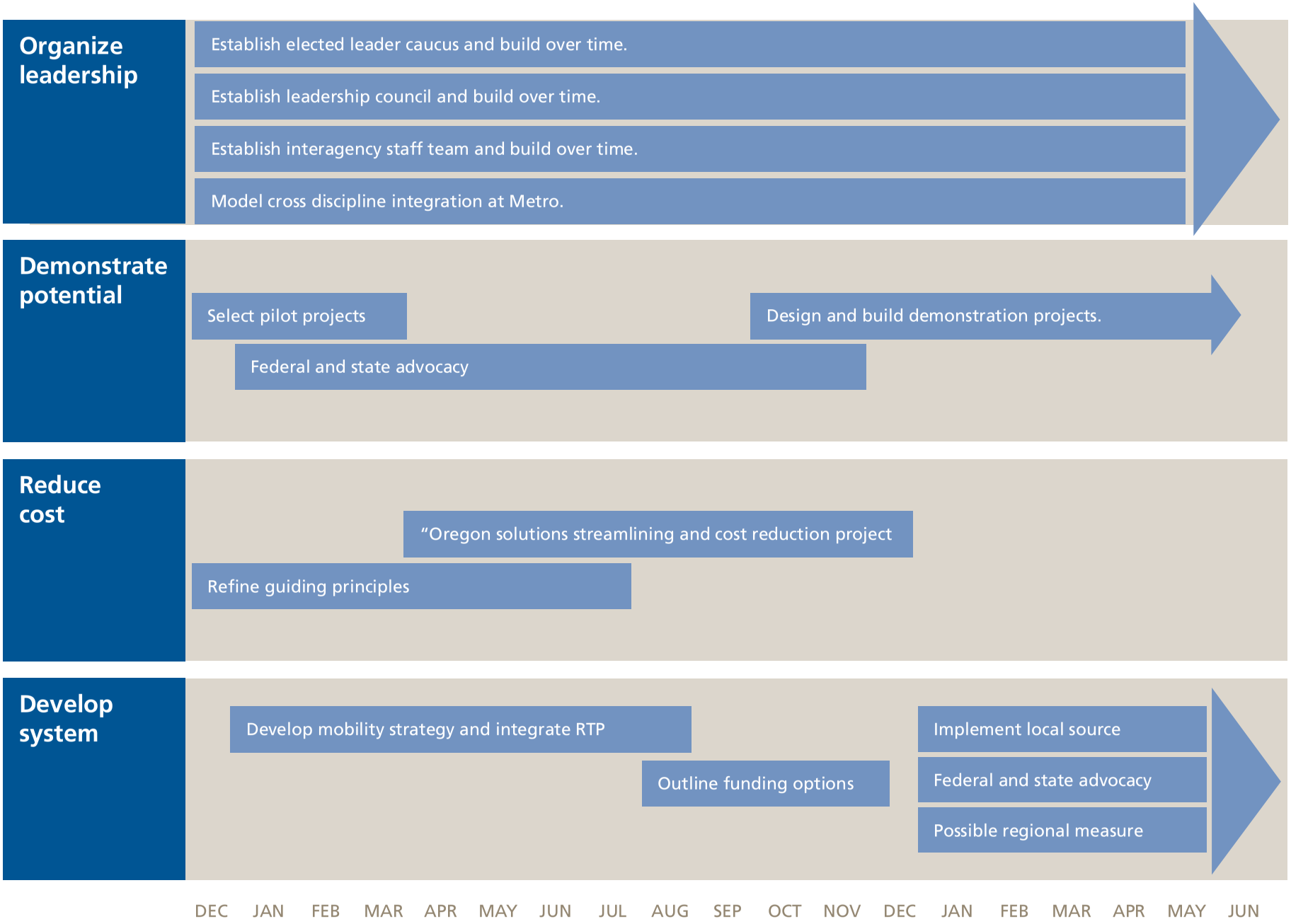
**Design Funding Package.** A staff team will outline a broad strategy for funding the mobility strategy identifying a target amount to be raised at the local, regional, state and federal levels and suggesting sources and a time frame for these amounts.

**Implement Local Source.** It is likely that the funding package will require a local match from system users. This source will need to be identified and implemented.

**Secure State and Federal Funds.** Strategy leadership will advocate at the state and federal level.

**Implement a Regional Measure.** A regional ballot measure or other source may need to be implemented.

# Portland region bicycle and pedestrian strategy



# Costs are small relative to other options

## THE FINANCIAL INVESTMENT REQUIRED IS WITHIN THE REGION'S CAPACITY

### Near term | Capacity $118,000/year

Project management and technical staff support would include:

**Project management.** Provide support to the Caucus of Elected Leaders and Leadership Committee and serve as lead staff to the Interagency Staff Team. Direct overall strategy effort and provide staff leadership to key initiatives outlined in this document.

**Demonstration areas.** Scope and Develop demonstration project proposals, support selection process.

Funding. Develop materials, coordinate with partners and orchestrate advocacy for federal and state funding.

**Fast tracking and Cost Reduction.** Provide technical and project management support to Oregon Solutions to complete an interagency cost reduction project.

**System Development.** Coordinate development of the mobility strategy, facilitate integration of bicycle, pedestrian and trail plans with plans for other transportation modes.

The above is in addition to staff currently available at Metro and other governments in the region who will participate in the interagency staff team. The roles outlined above will be needed for two years at a total cost of $236,000.

### Mid term | Demonstration areas $50 to 75 million

The urban, suburban and greenway demonstration areas have not been identified. However, a reasonable estimate for urban, suburban and greenway demonstration areas, including design, permitting, bidding, and construction is $50-75 million.

### Long term | System $300 million to $1 billion

A fully functioning bicycle and pedestrian system, built over the coming decades, is likely to cost between $300 million and $1 billion depending on the ultimate scope desired. To achieve this, the pace of investment must be increased over the current rate. For example, an average of only $2.8 million per year in regional transportation funds are spent on urban multi modal trails. In the context of the region's overall investment in public transportation facilities of approximately $630 million per year, a $300 million investment over a span of ten or more years should not be out of range.

## NOTES ON FUNDING

### A near term opportunity with the Federal reauthorization

The 2035 Regional Transportation Plan (RTP) identifies a $7B gap for capital and $6B gap for operations and maintenance of the transportation system across the region. Federal transportation funding has been the primary source of trail, bike and transit planning and construction. This funding is likely to remain key to urban mobility projects and competition for these funds is keen.

Congress reauthorizes the federal transportation bill every six years. As the next scheduled reauthorization approaches in 2009, revenues are down and needs are up. Success in obtaining an increased level of trails funding will depend on building alliances and lobbying effectively. Specifically:

- Participate in shaping Metro's federal transportation agenda in coordination with JPACT and the Regional Transportation Plan.
- Build support from a variety of constituencies across the region for urban mobility projects
- Build alliances with trail supporters in other Oregon communities
- Build on Rails to Trails Conservancy (RTC) national "2010 Campaign for Active Transportation"
- Identify federal earmarks and advocate for them with Oregon's Congressional delegation
- Participate in the Bike Summit in Washington D.C., March 2009 and 2010

Timeframe: Now through 2010. (Note: while the transportation bill is scheduled to be reauthorized in 2009, the last reauthorization bill was late, and knowledgeable observers believe it is likely that this bill will not be completed until 2010.)

Outcomes: Trails and other bicycle and pedestrian facilities are seen as integral elements of a transportation system that responds to a range of current and future challenges. The City of Portland and the Portland region are successful in lobbying for $100M from the transportation reauthorization in coordination with RTC. Traditional sources of federal trails funding (MTIP, TE) are expanded.

### State funding opportunities are worth pursuing in 2009

State funding has not been strong for either urban transportation trails or recreation trails. State gas tax revenues cannot be used outside the road right-of-way, and lottery funds, which can be used for trails, are likely to be scarce in 2009 due to the ailing economy as well as ballot measures that may have dramatic effects on the state budget. However, several factors suggest it may be timely to pursue state funding in 2009. These factors include a multi-stakeholder effort to pass a significant transportation funding package, heightened concern over gas prices and climate change, and potential reauthorization of Measure 66. There are several arenas to pursue.

### Transportation-related

- The Governor's Vision Committee is considering a proposal to allocate up to $20M annually across the state for trails and bicycle facilities.
- The Legislature doesn't necessarily follow the Governor's budget and is important to get in front of Legislative committees.
- A proposed third round of funding for multimodal transportation investments, the so-called ConnectOregon program, provides a logical legislative vehicle and funding structure for trail investments.

### Recreation-related

Measure 66 is up for reauthorization in 2014 and may be under discussion sooner, possibly in 2009. A strategic approach is needed to secure a portion of these funds for scenic greenways.

Outcomes: Active transportation and scenic greenways are recognized as legitimate elements of a complete transportation system and receive state funding accordingly. Pilot projects have been funded by the state and are successful in demonstrating the need for bicycle and pedestrian facilities coordinated with transit. Consistent funding sources, at appropriate levels, are dedicated to these projects.

### New funding

- The level of public support needs to be tested for new funding opportunities:
- Voter-approved Funding. Review the field of upcoming ballot measures and evaluate the potential for a mobility focused measure.
- Potential for Bicycle Community Contribution. Pursue a contribution or registration fee for bicycles to engage cyclists and to address concern, however mistaken, that cyclists don't carry their weight. This may be an important equity effort, rather than a key funding source.
- Potential for Regional and Local Funding. There may be traditional funding sources that could contribute to the funding mix. All have many competing priorities and the associated institutional hurdles. However, the case should be made for non-motorized mobility with sources such as urban renewal, transportation and parks systems development charges, and local gas taxes.

## Principles for development

Demonstration areas will test and refine a set of principles that can then guide the development of a region-wide system. Based on the work of the Blue Ribbon Committee for Trails and the German Marshall Fund study tour to Amsterdam and Copenhagen, the following principles are suggested as a point of departure:

- Focus on the users experience over their entire trip. Working with the "total trip" experience requires not just transportation engineering but landscape and recreational planning expertise.
- Connectivity is key. Coordinate on-street, off-street, and transit facilities within key transportation corridors. Determine a range of mobility options to serve the corridors.

- Factor health, the environment, personal and public costs, convenience, the travel experience and community health into investment decisions.
- Consider the pattern of development and respond with effective mobility strategies; urban solutions are likely to be different than suburban solutions.
- Emphasize bicycle trails and routes to connect population and employment centers that are accessed with a 30 minute ride.
- Set Priorities. Focus on completing or a few commute sheds at a time. Build regional equity into the sequence, so each part of the region gets a turn. This is similar to the way light rail was developed—first the east, then the west, then north, then airport, then south…
- Provide separated bicycle and pedestrian facilities in high-volume corridors.
- Set high standards for both the quality of the travel experience and a unified way finding system.
- Consider principles used in Europe that the system should be coherent, direct and easy, safe and secure, self-explanatory, comfortable and attractive.
- For greenways, the quality of the experience, the destinations, and the opportunities along the route to enjoy nature are all important. The process also has a focus on development of tree canopy and understory for wildlife habitat with special sensitivity to stream bank conditions. The balance between providing access to nature while preserving fragile habitat and ecosystems requires judgment that must be further developed. The Portland region will be positioned as a national model on achieving the right balance.

# Blue Ribbon Committee for Trails

CONVENED BY THE METRO COUNCIL

**Committee Chair**
Dave Yaden

**Committee Members**
Eileen Brady
*New Seasons Market*

Scott Bricker
*Bicycle Transportation Alliance*

Councilor Rex Burkholder
*Metro Council District 5*

Chris Enlow
*KEEN Footwear*

Steve Faulstick
*Doubletree Hotel*

Jay Graves
*The Bike Gallery*

Al Jubitz
*Jubitz Family Foundation*

Julie A. Keil
*Portland General Electric*

Mayor Richard Kidd
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Nichole Maher
*Native American Youth and Family*

Senator Rod Monroe

Rick Potestio

Commissioner Dick Schouten
*Washington County Board of Commissioners*

Dave Underriner
*Providence Health and Services*

Philip Wu, MD
*Kaiser Permanente*

Ian Yolles

**Ex-Officio Member**
Council President David Bragdon
Metro Council

The Blue Ribbon Committee was supported by a team led by Metro and including staff from the City of Portland, Oregon State Parks, the City of Forest Grove, and Alta Planning and Design. The composition of the staff workgroups was diverse, with expertise in transportation, trail, bicycle and parks planning, data analysis, cartography and GIS, funding, legislative process, and design. Staff worked collaboratively to serve the needs of the committee as a whole and to foster shared understanding rather than to advocate any specific position.

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Marybeth Haliski
Carol Hall
Matthew Hampton
Jane Hart
Rocky Houston
Mel Huie
Karen Kane
Heather Nelson Kent
Tom Kloster
Janice Larson
Ted Leybold
Lake Strongheart McTighe
Joanna Mensher
John Mermin
Brian Monberg
Derek Robbins
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Mike Tresidder
Randy Tucker
Patty Unfred
Lia Waiwaiole
Marlon Warren
Mike Wetter
Max Woodbury