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Community Case Study Series

A series of eight case studies to showcase actions that communities in the Portland metropolitan region are already taking to help reduce greenhouse gas emissions from cars and small trucks

May 2013



CLIMATE SMART COMMUNITIES SCENARIOS PROJECT

COMMUNITY CASE STUDY SERIES

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This is one of eight in a series developed for the Climate Smart Communities Scenarios Project.

- Beaverton
- Clackamas County
- Gateway (Portland)
- Hillsboro
- Rockwood (Gresham)
- Wilsonville
- Employer-based commuter programs
- Neighborhood-based travel options



Strategies

- Mixed-use development
- Active transportation
- Traffic management

Beaverton Community case study

Beaverton builds economic opportunity

Beaverton is revitalizing its downtown with targeted investments and partnerships to create jobs and civic destinations, increase housing choices, provide access to nature and expand travel options for residents and visitors. These actions are helping the city grow in a sustainable manner, create a healthy, livable community and reduce greenhouse gas emissions from transportation.

Downtown Beaverton is served by three state highways, one commuter rail line, two light rail lines and one freight rail line that connect Beaverton to other communities in the region. Since opening in 1998, TriMet's MAX light rail stations have attracted housing, employment and retail development to the area. A project known as The Round, featuring a mix of office and housing, was built around the Beaverton Central station surrounding a circular plaza that includes the MAX station.

Old Town, south of Farmington Road, offers a well connected street grid and historic buildings with small businesses and pedestrian-oriented retail. The Beaverton Central Library, Beaverton City Park and the Beaverton Farmers Market are gathering places that serve nearby neighborhoods and visitors from across the region.

The city has built strong public support for and remains committed to expanding housing and transportation choices, creating parks and natural areas, and supporting local businesses to spur downtown revitalization.

Key challenges

- Major transportation corridors divide the north and south parts of downtown Beaverton.
- An incomplete street network, high traffic volumes, long blocks and inadequate bike and pedestrian crossings limit access and mobility.
- The Round remains incomplete, contributing to the lack of downtown housing choices and job opportunities.
- Aging infrastructure and empty or underutilized development sites limit the vibrancy of the area.



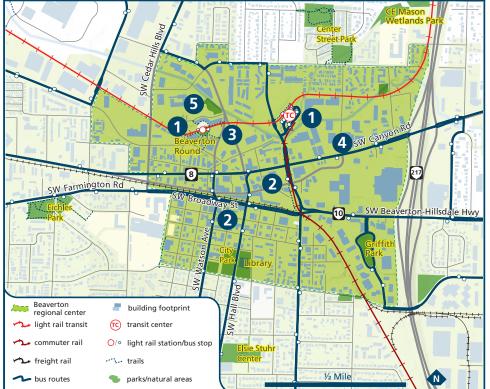
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Investments and partnerships revitalize downtown Beaverton

The City of Beaverton is leveraging its existing transportation system, infrastructure, land and financial resources to build a prosperous and vibrant community that will also help reduce greenhouse gas emissions, especially from transportation. The city has targeted policies, financial incentives and investments to support local businesses, grow local jobs, encourage more people to live and work in downtown, manage parking, make the area safer and more convenient to walk and bike, improve traffic operations, and transform Canyon Road to be more pleasant and attractive. Hosting activities such as the Beaverton Farmer's Market, regular arts and culture events like the expanded Old Town Festival, the annual International Festival, Flicks by the Fountain, and painting downtown murals attracts residents and customers to the area. The city's actions leverage local, regional, state and federal partnerships and resources that further catalyze downtown revitalization efforts.

Central Beaverton



Growing the economy with jobs, housing and transit

Nearly 1,100 businesses and more than 14,000 jobs exist within one mile of downtown Beaverton. The Beaverton Transit Center serves as the primary transit hub of Washington County and has one of the highest ridership rates in the TriMet system with two light rail lines, a WES commuter line, and eleven bus lines. While housing options in the downtown area are limited, the city is leveraging public and private investments and innovative tools to encourage people to live and work in the downtown core and attract new restaurants, shops and services that people want to visit.

Community and economic development efforts currently underway include:

- policies and investments that encourage new housing and businesses to locate downtown near transit
- an inventory of brownfield sites for potential redevelopment
- business programs and incentives for microenterprises, start-ups and target industries, including tax credits, storefront improvement grants and workforce development assistance
- financial incentives and partnerships with nonprofit organizations to build affordable housing choices
- allowing businesses to share parking spaces and removing minimum parking requirements in designated areas,

including areas located near transit, to encourage efficient use of available parking

• installing electric vehicle charging stations downtown.

Making way for biking and walking

The city has prioritized investments to:

- implement a wayfinding system that provides directional guidance to area destinations for biking, walking and taking transit
- create bicycle boulevards on lowtraffic streets, add east-west bike corridors that parallel Canyon Road, increase bicycle parking, and fill gaps in the bicycle network
- improve pedestrian access to area businesses and transit service by making street crossings safer, filling sidewalk gaps, and adding curb ramps, benches and lighting to make walking safer, more convenient and pleasant.

Improving traffic operations

Congestion along major travel corridors causes delays that increase vehicle idling and emissions. To address this, the city:

- constructed multi-modal streets that parallel state highways to provide an alternative for local traffic
- installed adaptive traffic signals that are synchronized to optimize traffic flow.

network launched

Transforming 4 Canyon Road

Canyon Road emerged as a high priority during Beaverton's Community Vision and Civic Plan process. It is a noisy and intimidating place to walk with few crossings and heavy traffic. Beaverton is collaborating with the Oregon Department of Transportation to redesign Canyon Road to be pedestrianfriendly and more attractive for development. Key investments identified to transform the corridor include:

- at key intersections
- scale lighting and stormwater treatment facilities
- biking
- multiple routes for travel

Connecting people with nature

The Beaverton Creekside District, comprising nearly 50 acres in the downtown area, is located near Beaverton's downtown creeks. It sits at the core of the area's transit system, providing a focal point for revitalization efforts.

Restoring and enhancing the downtown creeks will improve water quality and provide places for residents and visitors to enjoy the natural environment.

Timeline

2	2010	2011	2012	2015-2020	2020-2040
fo	Beaverton Community Vision calls or creating a vibrant downtown and mproving mobility	Beaverton Civic Plan emphasizes greater connectivity, economic oppor- tunity, and environmental sustainability Voters adopt \$150 million Beaverton Urban Renewal Plan	\$1 million HUD Sustainable Communities Challenge Grant awarded to help imple- ment Beaverton Civic Plan	Improvements made to Canyon Road streetscape and downtown creek, park and plaza Off-Canyon Road bicycle boulevard	Completion of the Renewal Plan proje business and hous traffic flow and pu spurs private inves

• safer pedestrian and bicycle crossings

 sidewalk improvements, landscaping, transit stop improvements, pedestrian-

• an off-Canyon Road bicycle boulevard network, providing parallel routes for

• new street connections to provide

of the Beaverton Urban an projects attracts nd housing, improves and public safety, and ite investment













Mixed-use development	****
Active transportation	****
Traffic management	****

These greenhouse gas emissions reduction strategies are an important part of what the City of Beaverton is already doing to realize its vision for the future, and provide a strong foundation for meeting state climate goals for 2035. The climate benefits shown represent the relative effectiveness of each strategy.

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Keys to success

Develop a broad strategy for revitalization

In addition to promoting a mix of new housing and businesses within a well-connected street, bicycle and sidewalk network, revitalization efforts should also provide opportunities for recreation and enjoying art. Marketing and economic development are enhanced by projects that improve storefronts and signage.

Combine community investment tools

Beaverton continues to build its toolbox of policies and investments to grow local jobs and expand downtown housing choices, provide needed infrastructure, and demonstrate the city's commitment to sustainability and revitalization efforts.

Leverage partnerships and resources

Downtown revitalization requires the cooperation of public agencies, chambers of commerce, local businesses and civic organizations, as well as leveraging local, regional, state and federal resources to build needed investments.

Build community and business champions

The ideas borne out of the Beaverton Community Vision and refined through the Beaverton Civic Plan have helped achieve successes with residents and businesses.

Regional partner

Working together to help meet Oregon's target for reducing greenhouse gas emissions from cars and trucks



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- Strategies
- Vehicle technologies and fuels
- Fleet mix
- Traffic management

Hillsboro Community case study

Addressing greenhouse gas emissions with 21st century technology

ome to more than 90,000 residents, host to dozens of high tech firms, and an employment area supporting 55,000 jobs, Hillsboro attracts more than 40,000 commuters to the city every weekday. To create a healthy, livable community where residents, visitors and employees have access to everyday needs, area attractions, and employers, the City of Hillsboro has invested in new technologies to accomplish these goals and reduce greenhouse gas emissions.

Building on a strong history of community, collaboration and leadership, Hillsboro has installed electric vehicle charging stations around the city, incorporated alternative fuel vehicles in its fleet mix, and invested in traffic signal coordination and other traffic management systems. The City of Hillsboro is using these and other new technology strategies to meet its aggressive, long-term (2030) operational sustainability goals, including an 80 percent reduction in GHG emissions and 100 percent fossil fuel-free city fleet vehicles (except for those vehicles with no fossil fuel alternative).

This case study highlights accomplishments and challenges to be addressed as new technologies, such as charging station networks, continue to grow in Hillsboro and throughout the region.

Key challenges

- The cost of new technology such as traffic signal coordination and system management is high.
- The expense of electric vehicle infrastructure relative to the number of electric vehicles in use is difficult to justify.
- There's insufficient funding for widespread electric vehicle infrastructure such as charging stations.
- There's a hesitancy to assume the risks that come with early adoption of new electric vehicle technology.



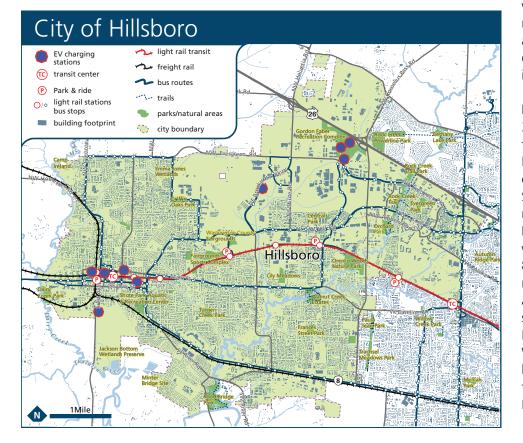
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Leading the way through installation of new technologies

The City of Hillsboro has made sustainability a high priority, demonstrated by the Hillsboro 2020 Vision and Action Plan, the city's sustainability plan and a fiveyear organizational strategic plan that supports these initiatives.

Since 2000, the Hillsboro 2020 Vision and Action Plan has engaged the broader community in developing and implementing projects that strengthen the community, create economic opportunity and protect the environment. In 2010, a 10-year review of this plan resulted in two new strategies and ten new actions for protecting the environment. This same year, the city completed its first comprehensive greenhouse gas inventory, which provided a critical baseline to measure how effective the city is in reducing greenhouse gas emissions over time. Below are three examples that help support the city's sustainability policies.



1 Installing electric vehicle charging stations

Electric vehicle (EV) charging stations are necessary to support what is expected to be a growing fleet of EVs throughout Oregon. But their popularity will only increase to the degree that there are charging stations available for owners to re-charge their cars. The charging stations must be conveniently located to ensure that EV owners have the confidence to travel around the region without the fear of being stranded with no power. Hillsboro's commitment to achieving the goals set out in its guiding documents can be seen in its EV charging infrastructure, the largest in the state.

In 2009, Hillsboro installed the first of its 35 electric vehicle charging stations in the downtown area to support existing EV users, encourage the widespread use of EVs, and spur economic development. Since then, the city has installed many more units, including the first Level III Fast Charger in Washington County which can charge an electric vehicle to 80 percent battery capacity within 30 minutes. Located near major employers and civic destinations, most of the stations are available to the public. Recently, Washington County, Clean Water Services, and several businesses have installed EV charging stations at their sites, with over 50 available in Hillsboro.

In 2012, Hillsboro's Electric Vehicle Program was one of 27 programs nationwide recognized for their innovative practices at the National League of Cities conference in Boston.

Diversifying fleet mix 2

Over a ten year period beginning in 2000, Hillsboro maintained a substantial fleet of natural gas powered vehicles. One of the city's sustainability goals is to achieve a fleet of 100 percent fossil fuel-free vehicles by 2030. With EV charging stations installed at the Civic Center, two electric vehicles were purchased for the city fleet in 2011 and 2012. Hillsboro will continue to work toward this sustainability goal by adding EVs and other alternative fuel vehicles to its fleet.

Installing traffic signal coordination/system management

Hillsboro has made a strong commitment to improving the efficiency of traffic flow within the city by installing street signal timing technology. These improvements benefit operations and have a positive impact on reducing traffic delay, idling, fuel consumption and greenhouse gas emissions.

Funded in part with U.S. Department of Energy grant funds, in 2011 the

city completed several traffic signal upgrades including the first use of the InSync adaptive signal system on the West Coast. The InSync system consists of coordinated traffic signals and video detection to optimize real time traffic flow through nine intersections on a major arterial. Also completed was the retiming of all 28 city intersection signals and a comprehensive re-work of the 185th Avenue and Baseline Road intersection. The results of these measures include an annual savings of 26,400 gallons of fuel, a reduction of carbon dioxide by 232 metric tons per year, a 10 percent reduction in traffic delays and a significant cost savings.

Next Steps

In 2012, the City of Hillsboro hosted a New Energy Cities Community Partners workshop with Climate Solutions to map the flow of energy and emissions in the community and identifying action areas for reducing fuel consumption and greenhouse gas emissions. The outcome included a community energy map and Climate Action Plan Opportunities Framework. These tools will be used in conjunction with an energy sector analysis to identify opportunities for implementation. In 2013, a Hillsboro Sustainability Task Force will be convened to take this work forward.

Timeline

2009

Hillsboro installed the first of 35 electric vehicle charging stations in the downtown area next to the Civic Center

2010

Hillsboro's award-winning intermodal transit facility opened with 13 electric vehicle charging stations and solar panel energy production

Major traffic signal timing upgrades are completed throughout the city

2011

Additional Level II electric vehicle chargers installed

Hillsboro purchased its first electric vehicle complementing the city's existing fleet of alternative fuel vehicles

2012 The first Level III Fast Charger in Washington County is installed at the Hillsboro Civic Center

As a finalist for the national Bloomberg Philanthropies Mayors Challenge, Hub concept at light rail stations which included installation of EV charging stations to better connect neighborhoods and employment centers with more travel choices

2013

Hillsboro proposed a GoPoint Mobility





Vehicle technologies and fuels	****
Fleet mix	****
Traffic management	****

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Keys to success

Demonstrate innovation Test the barriers and opportunities of cutting edge technologies to influence similar investment by other public entities, the private sector, and residents.

Promote public education Help make cutting edge technologies more accessible to the public through education about their locations, operations and efficiencies.

Form partnerships Public-private partnerships encourage widespread use of cutting edge technologies.

Build community champions Base goals and policies on community visions that make it more politically feasible to create financing mechanisms for investments and facilitate community action.

Regional partner

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Strategies

- Mixed-use development
- Active transportation
- Transit

Rockwood Community case study

Investing in a community vision

The Rockwood area is the western gateway to the City of Gresham. It is served by the MAX light rail line and five stations, and provides a variety of housing options. Most of Central Rockwood was developed after World War II when land use patterns were driven by auto-oriented development. To some extent, the area evolved from farmland and open space to a suburban land use pattern with highvolume arterial streets. Most of the older buildings and landmarks that provided a visual link to Rockwood's origins as a rural community were removed.

The result has been an auto-oriented, low-profile patchwork of land uses and activities that are often poorly integrated and visually unappealing. While the addition of light rail has provided increased opportunities for Rockwood, there are few midstation MAX line crossings, resulting in less connectivity within Rockwood. For these and other reasons, the Central Rockwood area has suffered from a lack of focus, identity, and investment. A series of planning efforts currently underway are providing direction for the Rockwood area to grow and develop in a sustainable manner to help create healthy, livable neighborhoods and reduce greenhouse gas emissions.

Key challenges

- The design quality for new construction needs to better enhance the community aesthetic.
- New investment in the area is needed to encourage new business and private developers.
- Available amenities don't meet the needs of the area's changing population.

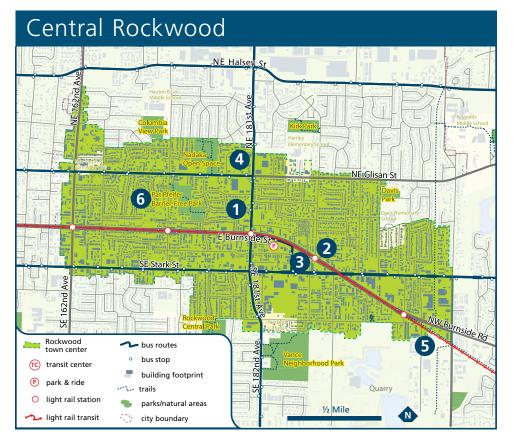


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Planning for sustainable development in Rockwood

resham annexed the Rockwood area in the mid-1980s. Since then, several igcup planning efforts have occurred including the Central Rockwood Plan adopted in 1998, the Rockwood-West Gresham Renewal Plan adopted in 2003, Design District guidelines and standards adopted between 2010 and 2012, and the East Metro Connections Plan completed in 2012. The Central Rockwood Plan was designed to be a bold yet practical guide to long-term development. It was innovative for its time as it required more urban development patterns such as twostory minimum heights for new construction with no height maximums and transitoriented, mixed-use buildings. At the same time, a human-scale was sought to reinforce walking and community engagement. The city is currently performing an assessment of the plan to determine whether it is performing as intended and if not what barriers to implementation exist. Changes will be made as needed to ensure implementation of the community's vision for a vibrant Rockwood.



Investing in revitalization

The voter-approved 2003 urban renewal plan is a 20-year plan that covers approximately 1,200 acres, extending from the central area of Rockwood to the city's industrial area north of Interstate 84. Its intent is to improve the economy and community of Rockwood through a partnership among the area residents, property and business owners, and the City of Gresham. The overall goals are to support the development of businesses that create living-wage jobs and improve the quality of housing for residents. A combination of revenue sources are used, including tax increment financing, to invest public resources to promote industrial, commercial and residential development and rehabilitation that supports the community's vision for revitalization of the area.

Launching Rockwood 2 in Motion

In 2010, the Gresham Redevelopment Commission initiated Rockwood in Motion, which improved the appearance of Rockwood, made access to the MAX light rail safer and more pleasant, and jump-started investment in the Rockwood Triangle. Elements of Rockwood in Motion include:

 improved alignment of Southeast 187th Avenue through the Rockwood Triangle to provide better and safer connectivity from the MAX station to residential neighborhoods south of Stark Street

- addition of a traffic signal at the intersection at Stark Street and 187th Avenue
- boulevard treatments along Stark Street and Burnside Road, including landscaped medians, pedestrian refuge islands, wider sidewalks, planter strips with street trees, bus shelters, and some green street amenities
- redesign and construction of the 188th Avenue MAX station by bringing the eastbound and westbound platforms together, introducing dramatic public art, and adding major upgrades for riders' safety and comfort.

Creating development 3 opportunities

A former Fred Meyer grocery store site located in the heart of Rockwood was purchased by the Gresham Redevelopment Commission to guide development opportunities at this strategic location. With the economic downturn occurring shortly after the purchase, no private party has stepped up to invest in the site. In the meantime, the city developed the area as a community gathering place with a plaza, playground and wildflower field. In 2012, the commission initiated a project to define objectives and a preferred land planning and development approach with the intent of soliciting requests for a development partner in 2013.

Ensuring public safety

The Gresham Redevelopment Commission is constructing the new two-story Public Safety Facility, located

Timeline 1998 2003 2010 2012 2013 Central Rockwood Plan Gresham residents voted to approve Rockwood Design District guidelines and East Metro Connections Plan completed adopted by Gresham City Council the Rockwood-West Gresham standards adopted to identify safe connections between Facility **Renewal Plan** I-84 and Highway 26 Rockwood in Motion begins

including:

in Rockwood

residents

the area

automobile.

options

5

on the northern boundary of Central Rockwood. This project fulfills longstanding community objectives

• improving police presence and visibility

creating a facility that is welcoming to

attracting new private investment to

• creating opportunities for new community partnerships.

Expanding transportation

Numerous activities are occurring to expand transportation options in the Rockwood community. Groundbreaking is anticipated in 2014 for a trail along the MAX line connecting the Ruby Junction station to points further east. Additionally, a segment of the Gresham-Fairview Trail was recently completed, connecting Central Rockwood to the Springwater Trail. As the trail system grows, people will have more opportunities to travel throughout their community without using an

Designing for sustainability

In 2011, the city adopted the Rockwood Design District for new multi-family, mixed-use and commercial developments in the Rockwood area. A design district is an approach that applies site and building design criteria by using discretionary guidelines and objective

Groundbreaking for the Public Safety

standards. Site criteria address elements such as sustainability, safe design, and multi-modal design. Building criteria address elements such as architectural quality, sustainable design, housing variety, and the use of high-quality materials. The overall vision for the Rockwood Design District is for a high-quality, long lasting development where residents meet their everyday needs within a 20-minute walking radius of home.







Mixed-use development	****
Active transportation	****
Transit	****

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Keys to success

Continue channeling and attracting investment to Central Rockwood The Urban Renewal District has been successful in making substantive changes to the transportation network and services in Rockwood that help attract new investments in the community.

Ensure the development code supports new investment The development code is being assessed to determine if it presents barriers to new development or redevelopment.

Expand travel options Ongoing expansion of travel options – such as the MAX Trail and extensions of the Gresham-Fairview Trail – enhance non-vehicle mobility in the community.

Foster design excellence Implementation of the Rockwood Design District will continue to elevate the quality of the built environment in Rockwood, cultivating renewed energy in the community.

Include quality of life amenities The city continues efforts to grow its parks system and partner with community organizations to address quality of life issues in Rockwood.

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Strategies

- Transit
- Active transportation
- Employer-based commuter programs
- Public education and marketing





Wilsonville Community case study

A vision for a connected community

Wilsonville's transportation system has been shaped by the vision of city and business leaders over the last twenty-four years to create a healthy community where people have easy access to transportation to meet everyday needs. The development of SMART (South Metro Area Regional Transit) in 1989, and TriMet's WES (Westside Express Service) Commuter Rail service in 2009 are examples of transportation investments that support this vision.

Over the years, SMART has evolved into a full service, dependable transit system offering a safe and convenient way to travel within Wilsonville and to other areas, including Canby and Salem. At SMART Central Station, TriMet's WES Commuter Rail offers train service to Tualatin, Tigard and Beaverton where it connects with other bus lines and the MAX light rail system. The city also made important investments to improve community walking and biking connections to transit and expand the information available to residents, visitors and businesses about their travel choices. These investments help reduce the number of vehicle miles traveled by the more than 18,000 commuters who come to Wilsonville from other communities every day to work.

As a result, people of all ages choose SMART for travel to work, the grocery store, appointments, and nearby parks and natural areas. These choices help support sustainable development in the region and meet the state mandate to reduce greenhouse gas emissions for cars and small trucks.

Key challenges

- Increasing congestion and frequent traffic backups on I-5 hamper freight movement and access to Wilsonville jobs and impacts the city's economy.
- I-5 and the Willamette River are major barriers to developing connected walking and biking networks within the community.
- Ninety percent of the employees working in the city live in other communities.

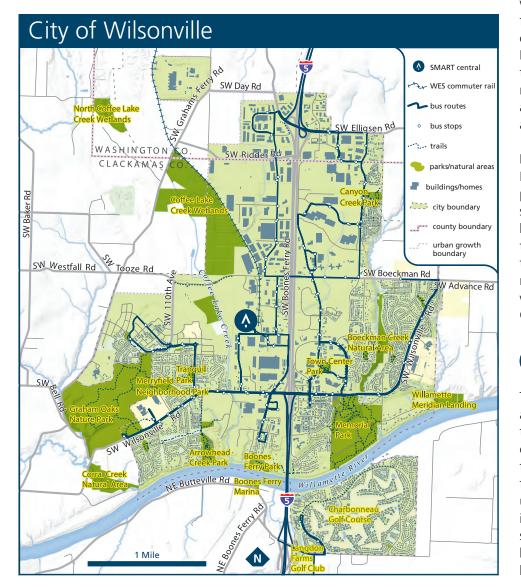


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Investing in smart travel options and public education

The community vision for city-operated SMART is to provide convenient, safe and reliable transportation services to meet the needs of Wilsonville residents, commuters, and visitors of all ages, income levels, and points of travel origin. SMART is dedicated to providing mobility for those who do not drive and creating a viable, attractive transportation option for those who do.



Connecting SMART and TriMet mobility options

SMART provides a variety of services with its fleet of over thirty-five vehicles ranging from 40-foot buses to minivans and a trolley-bus. The services are free within Wilsonville, but a fee is charged for service between Wilsonville and other cities. SMART also operates a Dial-a-Ride program that provides doorto-door service within Wilsonville, and medical transport services to Portland and other nearby cities for the elderly and disabled.

In February 2009, TriMet's Westside Express Service Commuter Rail, a selfpropelled diesel rail line servicing five stations from Beaverton to Wilsonville, began operation. Wilsonville leverages this service by having SMART buses take WES commuters to businesses and neighborhoods throughout the city as well as offering transfers to Salem and Canby.

Expanding commuter 2 information

The SMART Options program promotes alternatives to driving alone such as taking the bus or commuter train, car/vanpooling, walking, biking or telecommuting. The program provides free assistance to employers for setting up employee commuter programs. This includes help with compliance with state commuter laws and providing bus service from the WES station to businesses throughout the city. SMART

also provides buses for special citysponsored events and pre-scheduled senior lunches, shopping, and other trips.

Expanding resident and visitor information

SMART provides information to help area residents get around in healthy, fun ways and to promote its creative education programs for students. These include Bike Smart, Walk Smart and Wilsonville Sunday Streets.

Bike Smart Bike Smart is a one-stop shop for information about biking in and around the Wilsonville area. It helps residents and visitors plan commute and recreational trips, and provides maps and other information to make biking more convenient and fun.

Walk Smart Walk Smart is a free program that encourages participants to walk more by providing tools and inspiration. It provides maps, educational resources, "walk to lunch" group walks, and monthly rewards for participants.

Wilsonville Sunday Streets This event helps connect neighborhoods, parks, and people. Adults, children and seniors who bike, walk and run enjoy traffic-free streets filled with fun and interactive entertainment, music, physical activities and food.

Connecting art with transportation

SMARTArt works with Wilsonville students to link artistic creativity and

transportation. Students are asked to depict a Wilsonville road with heavy congestion and how that road looks when other travel options are used. This project helps student artists see the connection of transportation choices to their health, the environment, their community, and traffic. The winning projects are displayed on the outside of a SMART bus and other entries are displayed on the interior of buses.

Beauty and the Bridge When the Wilsonville Road interchange area was expanded to increase vehicle capacity, walking and biking also benefited from better east-west crossings under I-5. In 2012, Wilsonville's student artists created tile art that was installed as part of the project to make it an inviting, comfortable, and aesthetically pleasing environment with the goal of improving mobility and encouraging biking and walking.

Financing SMART services and programs

The city's public transportation system is funded by a payroll tax paid by Wilsonville businesses and based on total payroll or self-employment income. The tax rate is currently .5 percent (.005) of gross wages. Despite the closure of high-profile businesses in Wilsonville during the recession that resulted in the loss of nearly 1,000 jobs, a number of other businesses have either expanded or announced plans to increase employment, which has helped keep

Timeline

1988

Wilsonville Innovative Transportation Association creates independent city-owned transit system and begins service in 1989 as Wilsonville Area Rapid Transit (WART)

Now operating as SMART, the transit agency begins offering express service to Salem

1997

2002 The SMART Options program begins helping employers promote commuter benefits to employees

SMART changes bus routes and	
expands service for WES commuter	
rail; all routes now transfer at the	
SMART Central Station	

2009

SMART moves into brand new near SMART Central Station

2013

operations and fleet facility located

SMART ridership numbers and revenue relatively steady over the last few years.

Intergovernmental grants help pay for special transportation programs. bus operations and bus purchases. The amount of grants received varies from year to year based upon grant awards. Over the past decade, SMART has successfully competed for more than \$10 million in federal and state grants. The primary funding sources are supplemented by fare-box revenues and sale of surplus properties.





Transit	****
Active transportation	****
Employer-based commuter programs	****
Public education and marketing	****

These greenhouse gas emissions reduction strategies are an important part of what the City of Wilsonville is already doing to realize its vision for the future, and provide a strong foundation for meeting state climate goals for 2035. The climate benefits shown represent the relative effectiveness of each strategy.

For more information on greenhouse gas emissions reduction strategies, refer to the Climate Smart Communities Scenarios Project website at **www. oregonmetro.gov/climatescenarios**.



Keys to success

Cultivate community involvement and

support A community should develop a vision in partnership with government agencies, residents and businesses. Wilsonville's Parks and Recreation, Bicycle and Pedestrian, and Transit master plans were all created under the umbrella of one advisory committee.

Develop and foster public-private

partnerships Many Wilsonville businesses are proud sponsors of public programs such as Walk Smart, Movies in the Park, and Wilsonville Sunday Streets.

Support local businesses with transportation options Wilsonville businesses employ a skilled, diverse workforce from throughout the Portland metropolitan and North Willamette Valley regions. SMART provides a crucial service for many of the 9 out of 10 Wilsonville workers commuting from elsewhere to jobs in Wilsonville.

Leverage location within the region The southern-most city in the region, Wilsonville is located halfway between Portland, Oregon's largest city, and Salem, the state capital. With ongoing planning and investment in its transportation system, the city can continue to serve its residents, businesses and the northern Willamette Valley.

Regional partners

Working together to help meet Oregon's target for reducing greenhouse gas emissions from cars and trucks





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CLIMATE SMART COMMUNITIES SCENARIOS PROJECT

COMMUNITY CASE STUDY SERIES

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Strategies

- Mixed-use development
- Active transportation
- Traffic management

82nd Avenue corridor Community case study

Revitalizing a 1950s commercial corridor in Clackamas County

The 82nd Avenue corridor in Clackamas County is a major commercial activity center serving a large portion of urban Clackamas County. The corridor extends from Johnson Creek Blvd on the north end to Sunnyside Road on the south. While 82nd Avenue serves as a primary connection between neighborhoods and commercial and industrial centers, it also functions as a key arterial street to move people and goods. For this reason, the area is well-positioned for revitalization through the development of mixed-use neighborhoods with nearby services.

The 82nd Avenue corridor originally emerged as a distinct retail and local business hub. In 1980, the county created a revitalization plan through the Clackamas Town Center Urban Renewal District to encourage private investors to build thousands of housing units and millions of square feet of retail and commercial space in the area. Over the years, the concentration of development resulted in a rise in daily use of commercial services and traffic volume. In 2006, the North Clackamas Revitalization Area Urban Renewal District was established to promote affordable housing and development around the northern portion of the corridor. These major programs help address the transportation and land use challenges that contribute to greenhouse gas emissions.

Key challenges

- The existing multi-lane arterials (82nd Avenue and Sunnyside Road) are barriers for pedestrian crossing.
- While the backbone of the transit system is in place, there is need for a local shuttle or additional transit service to provide access to local business and jobs.
- While the zoning would allow for multi-family or more intense mixed-use commercial, redevelopment is expensive and the market is not supporting the transition at this time.



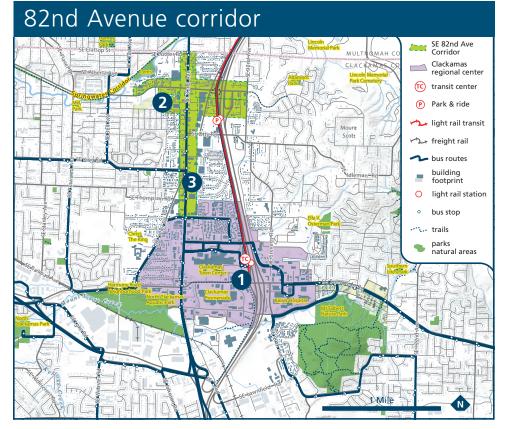
The Oregon Legislature has required the Portland metropolitan region to reduce per capita greenhouse gas emissions from cars and small trucks by 2035.



Balancing access with jobs, housing, amenities and livability

n 2009, the MAX Green Line was extended into Clackamas County, providing access to light rail at both the Fuller Road Station and the Clackamas Town Center Station. The light rail line parallels the I-205 freeway and is located about one-half mile from 82nd Avenue. In addition, fairly regular bus transit service is provided along 82nd to Clackamas Town Center. Other investments have been made to complete the road network in the area including the boulevard treatment along Monterey Avenue and beautification improvements along Sunnybrook Boulevard.

The Clackamas Town Center mall anchors the southern portion of the corridor and is an established hub for commercial activity in the area and the region. Other relatively large employers and services in the area include the North Clackamas Aquatic Park, Clackamas Community College and the Kaiser Permanente Sunnyside Medical Center. As one of the fastest growing business centers in the region, it is vital to the economic health of Clackamas County to ensure the area's long-



term success by achieving a balance of good access and amenities that attract residents, businesses and future development. This includes providing access to nearby parks, open space and public spaces, as well as transportation improvements to encourage bicycling and walking, to promote and maintain a vibrant, healthy and safe community.

Improving transportation access and connections

Improvements in the Clackamas Town Center Urban Renewal Area, created in 1980, are guided by the Clackamas Town Center Development Plan that identifies projects that address traffic circulation and capacity issues and community infrastructure needs including utility upgrades, landscaping, parks, biking pathways, and parking and transit facilities. Completed projects include:

- key roadway connections to facilitate north/south movement within the regional center
- realigning road intersections for safety and more efficient movement
- improvements to Monterey Avenue to create a Main Street standard
- Green Line light rail project with two station areas, to link the regional center and area neighborhoods to the Gateway Regional Center with high capacity transit.

Many of the significant transportation infrastructure investments that have been completed create the backbone

for the transportation network. What remains to be filled in are some critical east-west connections that allow residents and visitors to more easily and efficiently travel to and through the area. In addition, key investments are needed to improve the conditions for pedestrians and bicyclists in the area.

Revitalizing area neiahborhoods

The North Clackamas Revitalization Area (NCRA), formed in 2006, straddles the northern portion of the 82nd Avenue corridor. The neighborhoods just west of 82nd needed access to sewer and other important infrastructure. The goal of the NRCA is to support the existing affordable neighborhoods while also investing in the commercial areas along 82nd Avenue. Since its creation. NCRA urban renewal funds have been used to create a safe, clean and affordable mixed-use neighborhood with nearby services by:

- working with the community to create a neighborhood park
- providing low-cost loans for sanitary sewer hook ups
- partnering with Water Environment Services/CCSD#1 to extend sanitary sewers to the area
- working with affordable housing providers on the construction of new units, and loans and grants for repairs and renovations
- developing street improvements along key north-south facilities.

2009

County

Supporting uses essential to a vibrant, mixed-use community

Parks, schools and other important institutions all are located within a mile of the 82nd Avenue corridor. The North Clackamas Aquatic Park, Kaiser Sunnyside Medical Center, Clackamas Community College, La Salle High School, Trader Joe's, Fred Meyer and a long list of other educational, healthcare and commercial uses call this area home. Affordable housing with a mix of housing types are located in and around the area. All the ingredients are in place, but the transition from an auto-centric area to a vibrant mixed-use community has yet to take hold. Identifying the key investments will be critical, but it is also necessary to support the role of the private sector as a leader in creating this vibrant community. Recent planning efforts have identified the need to transition some parking lot areas into higher density housing, shift some key locations from redevelopment of low density housing to mixed-use development, and improve the bicycle and pedestrian systems. In addition, as funds become scarcer to improve the road system for more automobiles, there will be a need to see how we can work with developers to finance a variety of transportation facilities that support multiple modes of travel.

Working together with the development community, it will be important to continue to identify ways to encourage economic growth, foster a healthy community, and improve circulation and connections for all forms of travel.

Timeline

1980

Clackamas Town Center Urban Renewal District formed to provide transportation and community facilities to support a rapidly growing area

1996

Clackamas Regional Center Area Design Plan adopted that implements the Metro Region 2040 regional center designation

2006 North Clackamas Revitalization Area formed to implement the community's vision for the area as safe, clean and affordable, with mixed-use neighborhoods

Max Green Line opens, the first light rail line extended into Clackamas

Monterey Avenue connected to Fuller Road, expanding travel choices and access to the Clackamas Town Center and Green Line station

2013





Mixed-use development	****
Active transportation	****
Traffic management	****

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Keys to success

Leverage partnerships and resources to create a vibrant community Support cooperation between public agencies, chambers of commerce, local businesses and civic organizations, and leverage local, regional, state and federal resources to build needed investments.

Invest in sidewalks, bike lanes, multiuse trails and transit to connect people to jobs, goods, services, education and recreation Focus on the key connections identified in the recently completed Clackamas Regional Center Pedestrian and Bikeway Connections Plan to give people who arrive by light rail or bus better access to the destinations in the 82nd Avenue corridor and jobs in the area.

Maintain affordable housing and link these communities to commercial areas and light rail Improve street connections, such as the realignment of Otty Road at 82nd Avenue, to enhance the safety and create a more direct route to commercial areas on 82nd Avenue and the Fuller Road Light Rail Station.

Continue to research and develop strategies Explore additional strategies to remove development barriers and to create a more flexible and expedited approach to approving mixed-use development in the 82nd Avenue corridor.

Regional partner

Working together to help meet Oregon's target for reducing greenhouse gas emissions from cars and trucks



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Strategies

- Mixed-use development
- Active transportation
- Transit

Gateway Community case study

Building community support for redevelopment

Adjacent to two regional freeways and served by three light rail lines and 13 bus lines, the Gateway area in East Portland provides one of the region's best transportation networks. It is projected to become the most accessible location in the Portland metropolitan region in 20 years, creating a new center for jobs and the residents of East Portland. With increased activity, the area will be a destination for working, shopping and recreation, and home to thousands of people, both newcomers and longtime residents.

With this focus, it is evolving into a source of community pride as an embodiment of the values and aspirations of the East Portland community. Redeveloping a low density, suburban style commercial and retail area into a more dense, pedestrian-friendly, mixed-use community will require sustained investment. The Opportunity Gateway Concept Plan and Redevelopment Strategy, the culmination of an effort by hundreds of stakeholders over a two-year period, sets the stage for a transformation that supports sustainable development and helps the region meet the state mandate to reduce greenhouse gas emissions for cars and small trucks.

Key challenges

- Options for residents to gather and hold community events are limited due to a lack of parks and open spaces.
- There is an absence of quality affordable and market-rate housing.
- Lack of infrastructure makes it difficult to support urban development in a suburban place.
- There is a need to attract more family-wage jobs to the area, matched to the skill sets of the existing workforce.



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Planning for healthy communities and sustainable development

The Opportunity Gateway Concept Plan and Redevelopment Strategy, approved by the Portland City Council in 2000, calls for generating more activity in the Gateway area by developing retail and housing opportunities that create jobs and enhance livability. Complementing the existing transportation network with an improved local network of streets, sidewalks, and transit services will increase options for walking, biking and taking transit to meet everyday needs. The plan's proposal for a variety of amenities including grocery stores, schools, parks, and employment centers in close proximity to where people live will encourage the use of these travel options and promote a more active lifestyle.

The Gateway Transit Center will be converted from a primarily surface parking lot to a mixed-use community, complete with a public plaza, local shops, and entertainment. Proposed new street connections will reduce congestion on major



streets. Nearby street improvements including wider sidewalks, street trees, and bicycle lanes will encourage more walking and biking, help reduce the heavy reliance on automobile travel, and create a livable, healthy community. To realize this vision, the city has implemented policies and programs that leverage existing amenities while promoting redevelopment tools and opportunities. Some of the activities underway or already completed are highlighted in this section.

Growing Gateway 1 EcoDistrict

The Growing Gateway EcoDistrict was created as a pilot project by the City of Portland along with four other areas of the city in 2009. It is a community driven initiative to organize, identify and implement projects that will lead to a more sustainable neighborhood where people want to live and work. The stakeholders of the Gateway area came together and formed a committee that has been working on setting goals and identifying projects that will help create economic growth and local jobs for the community. The district includes residents, small business and property owners, and institutions that are committed to improving the environment while meeting long standing neighborhood needs for jobs, safe streets and mixed-income housing. Growing Gateway is working to help residents and businesses make energy efficiency retrofits through its program,

Re-Energizing Gateway, as well as projects that improve a sense of place and connectivity in the district.

Creating a community gathering place

The Gateway community has long desired a public gathering space to enjoy in the heart of the community. The Gateway Redevelopment and Neighborhood Park Project, undertaken in 2009, seeks to promote and reinforce the identity of Gateway as a family friendly, multigenerational, and multicultural place to live and work.

In 2008, the Portland Development Commission and Portland Bureau of Parks and Recreation purchased a 4.2acre site along Northeast Halsey Street within the Gateway Urban Renewal District. Based on previous community outreach and planning efforts, it was decided this site should be a 3-acre park and 1-acre mixed-use development. The Gateway Park property is envisioned to be an important addition to the Halsey/ Weidler commercial corridor and the entire Gateway community. Gateway has long been identified as one of the city's most park-deficient districts, making the acquisition of property for a park a priority.

Realizing a vision for sustainable development

In addition to the Gateway EcoDistrict and Gateway Park undertakings, there

have been other projects completed or planned that would facilitate the further re-development of the Gateway area, moving it toward the vision articulated by the community. Some of these actions include:

- stormwater run-off
- initiate the next phase of in 2014
- volunteer contributions from a contributions
- and Glisan Street
- future plans for development of a cyclo-cross track and urban sustainable park features.

Timeline

2009

Community stakeholders engaged by the City of Portland to discuss concept of EcoDistrict and form work group

2010

Work group becomes EcoDistrict Steering Committee and holds community meetings to solicit input for Ecodistrict vision and project priorities

2011

EcoDistrict Vision developed and MOU signed documenting commitment to launch Gateway EcoDistrict and formalize partnerships between organizations

2012

Organizational and governance structure developed; fundraising initiated for short-term staffing capacity and early projects

Fundraising and project

2013

 roadway improvements along 102nd Avenue in 2008 including street bike lanes, planted center median strip, sidewalk widening, benches and other street furniture, and bioswales for

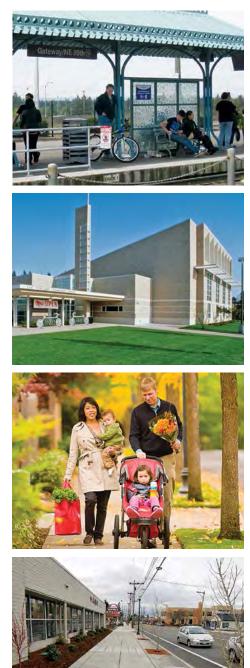
improvements on 102nd beginning

 construction of the LEED Platinum East Portland Aquatics Center in 2009, a neighborhood amenity financed through a parks levy and partnership between David Douglas School District, Portland Adventist and Multnomah County for land

 construction of Gateway Glisan, a catalytic mixed-use affordable housing and commercial project at the intersection of Northeast 99th Avenue

 relocation of a Kaiser Permanente facility in 2013 to bring additional medical services to the Gateway area Gateway Green, a 40-acre park between I-84 and I-205 that includes park amenities, and demonstrates

implementation continues







Mixed-use development	****
Active transportation	****
Transit	****

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Keys to success

Encourage grassroots community building activities The East Portland community developed the East Portland Action Plan with the assistance of the City of Portland, and received funding to hire an advocate. The advocate has expanded the capacity and improved the advocacy of East Portland and Gateway community members. The EPAP now includes many governmental partners working with community members to improve the quality of life in East Portland.

Support community involvement The Growing Gateway EcoDistrict was conceived and developed by the community, including residents and businesses, in partnership with the Portland Development Commission, City of Portland, and the Portland Sustainability Institute.

Develop and foster public-private partnerships Many Gateway businesses support civic ventures in Gateway, including the summer Movies in the Park series and the Sunday Parkways bike ride event. The Glisan Commons mixed-use project included significant public investment to meet affordable housing and revitalization goals.

Regional partner

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Strategies

- Employer-based commuter programs
- Parking management
- Public education and marketing



Employer-based commuter programs

Encouraging travel options for the daily commute

C ommuters tend to have fixed routes and schedules producing a reliable trip pattern that lends itself to the use of travel options, where available. Reducing commuter drive-alone trips is the primary focus of commute options programs, leading to reduced traffic congestion, lower transportation costs, improved air and water quality, and increased levels of physical activity – all of which help lower greenhouse gas emissions and create healthy communities across the region.

Employer-based commuter programs are a strategic approach to effectively promoting travel options such as biking, walking, transit, and ridesharing to employees in the Portland metropolitan region. Parking management, end of trip facilities and commuter encouragement programs are three strategies that reduce drive-alone commute trips in the region. These programs benefit the employer and the employee through tax and other financial savings, as well as improved employee health and morale.

Key challenges

- Gaps in walking and biking paths and facilities connecting neighborhoods to employment centers make commute options such as walking and biking impractical.
- Employers are challenged by parking constraints, ongoing costs and the need to free up parking spaces for customers and visitors.
- Factors such as families with children, non-secure bike parking, long transit times, night and weekend employment shifts not served by transit create challenges to using travel options.



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Creating healthy communities with commuter travel options

TriMet, Wilsonville SMART, Transportation Management Associations, and the City of Portland implement programs that encourage employees to use commute options. These organizations provide information and technical services to employers to make the business case for supporting and rewarding employees who commute using travel options.

The TriMet, Wilsonville SMART, and TMA employer outreach programs have made significant progress with reducing drive-alone trips and increasing the use of commute options in the region. Since 1996, the programs have served businesses of all sizes with transportation program assistance, transit pass programs, and surveys to comply with state air quality rules. These programs are in place for approximately one-third of the region's workforce. Program results show an increase in commute trips (from 26 to 39 percent) by transit, biking, walking, carpool, vanpool, and teleworking.

Employer-based commuter programs



Managing 1 parking

Creating a parking pricing and management strategy is a highly effective method for reducing the number of automobile trips coming into downtowns and centers. The Lloyd District and downtown Portland have low drive-alone rates and high transit mode shares due largely to comprehensive policies that support the area's transportation investments. Drive-alone trips to the Lloyd District decreased from 60 percent in 1997 to 41 percent in 2011, a 32 percent decrease over 15 years, and transit trips make up nearly 45 percent of all commute trips into downtown Portland. Managing parking pricing and availability, combined with promoting commute options such as biking, walking, transit and ridesharing, have increased the use of these travel options to these areas. Districts that manage parking help businesses save money on parking costs and free up parking for customers. Encouraging employees to use commute options reduces ongoing lease or maintenance costs and addresses parking constraints.

Making commute trips 2 easier

Another aspect of employer-based commuter programs is working with businesses to provide facilities that make employee work trips more attractive. For example, secure bicycle parking, showers, and changing

facilities encourage biking and walking. Businesses invest in these facilities to reduce drive-alone commute trips, free up parking spaces for customers, improve health outcomes for their employees, and foster safe and convenient biking environments. End-of-trip facilities also offer important linkages between biking and public transportation infrastructure. The close proximity of secure bicycle parking to transit stops and stations is valued by bicycle commuters.

Encouraging commute options

Programs that provide incentives, distribute information, and promote workplace competitions are effective at reducing drive-alone trips. TriMet's Universal Annual Pass Program is one example that has helped increase transit commute trips. Employers purchase annual passes at a lower rate based on employee ridership – a proven incentive for employees to take transit. Another technique that has been implemented by the City of Portland and TMAs is employer individualized marketing. These programs provide employees with maps, trip planning services, incentives, and personalized assistance for using commute options. Several examples include the City of Portland's Downtown SmartTrips, Swan Island's Going to the Island, and the Lloyd Links program. Other encouragement programs for commuters that have yielded positive results are the Bicycle Transportation Alliance Bike Commute Challenge and the Carefree Commuter Challenge.

By the numbers

248,000

One-third of the workforce, or approximately 248,000 employees, is reached by commuter programs.

39 percent

Employee trips using commute options rose from 26% in 1996 to 39% in 2011 among employers with commuter programs.

11,745

Close to 12,000 Bike Commute Challenge participants bicycled 1.3 million miles in September 2012.

2.1 million

driven by 2.1 million in 2011.

418,090

In 2012, there were 418,090 boardings on TriMet's WES Commuter Rail.

4.5 million Lloyd TMA programs reduced total miles driven by 4.5 million in 2012.

29,125

Since 2006, the Portland SmartTrips Business program served 1,140 businesses, delivered 11,821 employee commute kits, and distributed 29,125 bike/walk maps.

Timeline

1974-1979

- TriMet rideshare project begins during fuel crisis
- Carpool signs placed along regional freeways and major arterials
- Downtown Portland Carpool Parking Permit Program

• Community Cycling Center Create a • Lloyd and Westside Transportation Commuter program initiated

2001

- Swan Island Evening Shuttle service begins

• Tualatin Shuttle begins

Alliance TMAs form

• ECO rules established

• BTA Bike Commute Challenge

• TriMet Universal Pass Program piloted

1995-1997

2004-2009

- City of Portland Bike Parking Fund established
- Carefree Commuter Challenge
- Portland SmartTrips Downtown
- TriMet WES Commuter Rail opens
- 2011 • Drive Less Connect online
- launched

Westside Transportation Alliance programs reduced the total miles

• TriMet Map Trip Planner (multimodal)













Employer-based commuter programs	****
Parking management	****
Public education and marketing	****

These greenhouse gas emissions reduction strategies are an important part of what employers throughout the region are already doing to create healthy communities and provide a strong foundation for meeting state climate goals for 2035. The climate benefits shown represent the relative effectiveness of each strategy.

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Keys to success

Manage parking to create a more balanced and efficient transportation system Strategic pricing and availability of parking in business districts and downtowns lead to significant increases in use of commute options, and savings for employers and employees.

Encourage business participation in employer outreach programs Transportation Management Associations assist local employers in commute options programs that increase employee satisfaction, decrease absenteeism and health care costs, and comply with state air quality rules.

Provide incentives for employees to make more of their trips by biking, walking, ridesharing and transit Many successful commute option programs encourage employee participation through monetary incentives and reward-based challenges.

Invest in end-of-trip facilities to encourage greater use of commute options among employees and students Secure bike parking, showers and changing rooms for employees are a few investments that employers can provide to encourage commuting by biking or walking.

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Strategies

- Active transportation
- Public education and marketing

Neighborhoodbased travel options

Choosing walking, biking, and transit for local trips

Neighborhood-based travel options programs use traveler information tools, individualized marketing and educational outreach events to inform residents of the Portland metropolitan region about their travel choices. When neighborhood residents choose to walk, bike, carpool, or use transit for their trips, they help reduce traffic congestion and greenhouse gas emissions, lower transportation costs, improve air and water quality, and increase levels of physical activity – all of which help create healthy and vibrant communities across the region.

Programs offered at the neighborhood level provide the ideal scale for promoting and encouraging greater use of travel options. A majority of the trips residents make throughout the day are for shopping, leisure activities, or recreation, and begin and end at home. Programs that provide traveler information and education contribute to reducing auto trip lengths and miles traveled by informing choices, providing materials to help implement those choices, and motivating residents to try available travel options.

Key challenges

- Geographic barriers such as freeways, arterials, hills, and rivers separate neighborhoods from access to jobs, schools, services, and amenities.
- One in six of all trips in the region are now made by active transportation, yet conditions for safe and comfortable walking and biking vary widely across the region.
- Residents have challenges to using travel options, including safety concerns, families with children, and transit services that are difficult to access.

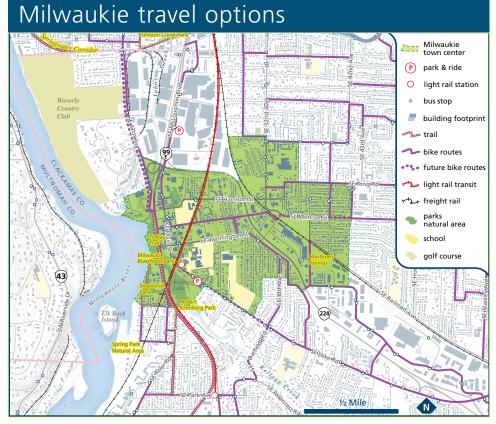


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Tools and outreach programs encourage travel options

Traveler information tools, individualized marketing projects, and neighborhood travel options events foster more frequent use of active travel modes such as walking, biking, and transit. Tools such as bike and walking maps, transit trip planners, mobile applications for locating carsharing services, and wayfinding signage are available to help residents make safe and informed travel choices. Some of these travel resources are the foundation of individualized marketing projects, which target entire neighborhoods and encourage residents to make more of their trips using active travel modes. Individualized marketing projects are highly effective when launched in conjunction with transportation investments such as a new transit service. Travel options events such as Sunday Parkways in Portland and Sunday Streets in Wilsonville are effective strategies for promoting active transportation to residents. These events close off car traffic on designated routes, allowing residents to have positive experiences biking, walking, and trying out other fun ways to get around their neighborhoods.



Timeline

1983-1996

- Bike There! Map
- Federal policy resulting in funds for non-auto transportation (ISTEA)
- Bridge Pedal event

Providing travelers with tools

The ability to plan routes and navigate safely is a critical component to increasing the use of travel options. Both static and dynamic means of providing information can help achieve this outcome. Biking and walking maps identify safe routes to popular destinations such as parks, shopping areas, and employment centers. Wayfinding signage installed along biking and walking paths and neighborhood greenways encourage more frequent and longer biking and walking trips. Online trip planning services and real-time information displays offer a convenient and mobile way to plan and undertake a trip, using either one or multiple modes of travel. Carpooling in the region is supported by Drive Less Connect, a multi-state ridematching database that allows residents to find carpool matches for a variety of trips.

Informing travelers 2 of options

Individualized marketing projects identify people who want to change the way they travel. Outreach staff contacts households to offer educational materials that motivate residents to drive less and use other travel options. These projects are successful by focusing only on people who are interested in receiving information. They are most effective when combined with transportation improvements, such as light rail. Individualized marketing is cost effective and and consistently reduces drive-alone trips by 9 percent.

In 2004, the City of Portland launched the Interstate TravelSmart individualized marketing project in conjunction with the opening of the MAX Yellow Line. Households that received individualized marketing made nearly twice as many transit trips compared to a similar group of households that did not participate in the marketing campaign. In addition, transit use increased nearly 15 percent during the SmartTrips project along the MAX Green Line in 2010. Followup surveys show that household travel behavior is sustained for at least two years after a project has been completed. A total of 12 individualized marketing projects have been conducted in the Portland metropolitan region since 2003.

Leveraging transportation investments

TriMet's MAX Orange Line will connect Southeast Portland and Milwaukie neighborhoods to downtown by a new bridge across the Willamette River dedicated to transit, biking, and walking. When service begins in 2015, there will be approximately 22,000 households and 85,000 employees within walking distance of MAX Orange Line stations. The City of Milwaukie has allocated resources to improve biking and walking facilities, develop trails and wayfinding signage, and enhance transit stops and stations by providing new bike parking. When the MAX Orange Line opens in 2015, Milwaukie will have regionallyconnected travel options consisting of auto, high capacity transit, biking and walking paths, trails and facilities, and pedestrian connectivity to downtown.

An individualized marketing project conducted shortly after the opening could increase ridership and promote other travel options, further leveraging this resource and capital investment.

Offering community 4 outreach events

Community outreach programs such as Portland Sunday Parkways and Wilsonville Sunday Streets encourage residents to use travel options by exploring their neighborhoods on foot and bike without motorized traffic. These events enhance the health, transportation, air quality, recreational opportunities, and public safety interests of neighborhoods and communities. Providing recreational opportunities in a low or no-car environment is a key element for changing travel habits among residents These events work well in suburban as well as urban areas and are an important strategy for motivating residents to try out new and active ways to travel. Sunday Parkways events have attracted 400,000 attendees since 2008 and the Wilsonville Sunday Streets event attracted more than 5,000 participants in 2012. Forty percent of residents in the region are aware of these programs. Other examples of valuable community outreach and educational programs include the Community Cycling Center's program to reduce barriers to biking and Metro's Vámonos program, both of which provide communities across the region with the skills and resources to become more active by walking, biking, and using transit for their transportation needs.

2008-2010

- City of Portland Sunday Parkways
- Metro Walk There! Guidebook
- Gresham wayfinding signage and individualized marketing projects

2011

- Discover Wilsonville individualized marketing project
- Drive Less Connect online tool

• Metro's Vámanos project

2012-2013

projects

individualized marketing projects • Drive Less Save More campaign

marketing pilot and large-scale

2002-2006

projects

• TravelSmart individualized

• City of Portland SmartTrips

• Wilsonville Sunday Streets event • Tigard and Tualatin Hills Parks and Recreation wayfinding signage





Active transportation	****
Public education and marketing	****

These greenhouse gas emissions reduction strategies are an important part of what neighborhoods throughout the region are already doing to create healthy communities and provide a strong foundation for meeting state climate goals for 2035. The climate benefits shown represent the relative effectiveness of each strategy.

For more information on greenhouse gas emissions reduction strategies, refer to the Climate Smart Communities Scenarios Project website at **www. oregonmetro.gov/climatescenarios**.

Keys to success

- Invest in transportation systems that give residents options Provide residents with safe and reliable travel options with good connectivity to employment centers and neighborhood amenities and services.
- Ensure residents are informed of, and confident using, their travel options Remove barriers by identifying and addressing concerns through direct outreach.
- Complement walking, biking and transit investments with direct outreach to nearby residents Leverage large transportation investments by funding strategically-located individualized marketing projects.

About Metro

Metro crosses city limits and county lines to build a resilient economy, keep nature close by and respond to a changing climate. Representing a diverse population of 1.5 million people in 25 cities and three counties, Metro's directly elected council gives voters a voice in decisions about how the region grows and communities prosper. Metro works with communities, businesses and residents to make the Portland metropolitan area a great place to live, work and shape the future.

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