

Metro | Agenda

Meeting: Metro Technical Advisory Committee
 Date: Wednesday, May 1, 2013
 Time: 10 a.m. – 12 p.m.
 Place: Metro Regional Center, Council Chamber

| Time | Agenda Item | Action Requested | Presenter(s) | Materials |
|------------|---|--------------------------|---|------------|
| 10 a.m. | CALL TO ORDER / ANNOUNCEMENTS | Information | John Williams, Chair | |
| 10:05 a.m. | CII Development-Ready Communities Pilot Project: Preliminary Findings <i>Objective: Inform MTAC of preliminary findings and gather feedback on potential for regional program</i> | Information / Discussion | Joel Schoening Lorelei Juntunen, ECONorthwest | At meeting |
| 11:05 a.m. | Climate Smart Communities Scenarios Project <ul style="list-style-type: none"> ▪ Watch a brief video on community leader perspectives ▪ Learn about the Opt In survey results ▪ Receive three completed community case studies ▪ Provide final input on the updated Phase 2 scenarios assumptions and evaluation criteria <i>Objective: MTAC provides recommendation to MPAC to move forward with the Phase 2 evaluation.</i> | Recommendation | Kim Ellis | In packet |
| 11:35 a.m. | Eco-Efficient Employment <i>Objective: Learn more about eco-efficient projects in the region's employment areas and discuss additional opportunities for applying these strategies</i> **Please note: This topic was removed from the agenda due to lack of time. This item has been moved to the May 15th agenda instead.** | Information / Discussion | Miranda Bateschell | In packet |

| | | | | |
|------------|----------------|--|--|--|
| 12:00 p.m. | ADJOURN | | | |
|------------|----------------|--|--|--|

MTAC meets on the 1st & 3rd Wednesday of the month. **The next meeting is scheduled for May 15, 2013.**

For agenda and schedule information, contact Alexandra Eldridge: 503-797-1839, Alexandra.Eldridge@oregonmetro.gov.

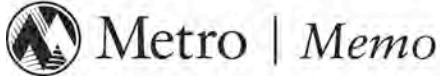
To check on closure or cancellations during inclement weather, please call 503-797-1700#.

Metro's nondiscrimination notice

Metro respects civil rights. Metro fully complies with Title VI of the Civil Rights Act of 1964 that bans discrimination on the basis of race, color or national origin. For more information on Metro's civil rights program, or to obtain a Title VI complaint form, visit www.oregonmetro.gov/civilrights or call 503-797-1536.

Metro provides services or accommodations upon request to persons with disabilities and people who need an interpreter at public meetings.

All Metro meetings are wheelchair accessible. If you need a sign language interpreter, communication aid or language assistance, call 503-797-1536 or TDD/TTY 503-797-1804 (8 a.m. to 5 p.m. weekdays) 7 business days in advance of the meeting to accommodate your request. For up-to-date public transportation information, visit TriMet's website at www.trimet.org.



Date: April 17, 2013
To: TPAC, MTAC and interested parties
From: Kim Ellis, Principal Transportation Planner
Re: Climate Smart Communities Scenarios Project: Summaries of Community Leader Workshops and Focus Groups

This memorandum transmits summaries of a series of workshops and focus groups conducted to inform the Climate Smart Communities Scenarios project.

BACKGROUND

Working together with city, county, state, business and community leaders, Metro is researching how land use and transportation policies and investments can be leveraged to help us create great communities, support the region's economy and meet goals for reducing greenhouse gas emissions. In summer 2013, Metro and local partners will test three scenarios that represent what the region could look like in 2035, if various transportation and land use strategies are pursued, and what it could mean for how we live, how we work and how we get around. The workshops and focus groups informed development of the evaluation approach to be used, including the investment choices framework and evaluation criteria.

SUMMARIES OF WORKSHOPS AND FOCUS GROUPS

Summaries of workshops and focus groups with community leaders have been prepared for your consideration. The summaries have already been provided to the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Policy Advisory Committee (MPAC).

Full reports documenting the Environmental and Equity/Environmental Justice workshops can be downloaded from the project website – www.oregonmetro.gov/climatescenarios.

A full report of the business focus groups will be prepared upon completion of the final focus group with developers, and will be made available in May.

This page intentionally left blank.



www.oregonmetro.gov/climatescenarios

Business focus groups

Date conducted December 2012 and early 2013

Focus group goal The goal of the focus groups was to gain an understanding of what business owners viewed as the most significant challenges to the growth of their businesses and the region's future economic growth, and what they considered priorities for investment.

Participants Clackamas County Business Alliance, Westside Economic Alliance, Columbia Corridor Association, East Metro Economic Alliance, Portland Business Alliance Small Business Council, and the Oregon City, North Clackamas, Tualatin, Wilsonville, and Greater Hillsboro chambers of commerce.



Primary outcome Participant feedback indicated that the most significant challenges to business growth stem from regulations and policies that hinder efficiency and competitiveness, the region's growing congestion, inefficient use of infrastructure and lack of available financing to improve the existing transportation system. They identified investment in infrastructure, business development and reliable transit options as essential for future business growth.

Recommendations Participants suggested potential metrics that Metro can use to evaluate the greenhouse gas reduction strategies and investments under consideration in terms of their ability to help existing local businesses grow and attract new businesses to the region. They highlighted the importance of implementing incentives and strategies that allow for flexibility while maintaining the viability of businesses in the region. Participants encouraged more coordination and cooperation between jurisdictions and developing consensus around a shared set of local and regional goals. They noted the importance of continuing to engage stakeholders in the planning process to carefully think through the consequences of different actions and to ensure support for the preferred scenario selected at the end of the process.



Emergent focus group themes

Challenges/barriers to future growth

- Congestion that is in part caused by people living and working in different communities
- Regulations that cause inefficiency and hinder competitiveness
- Inefficient use of the existing transportation system and infrastructure
- Transit connectivity and frequency (service does not connect people directly from home to work or the services hours available do not match the shift schedules for many employees)
- Lack of sustainable long-term financing for transportation – e.g., existing funding sources are not indexed to inflation (e.g., gas tax) or that are tied directly to job growth (e.g., payroll tax)
- Lack of coordination between public agencies
- Health insurance costs for employees
- Workforce does not have the education needed for the types of traded-sector jobs the region has been seeking
- Lower per capita incomes relative to other metropolitan areas
- More diversity of the “business ecosystem” needed – e.g., larger traded-sector businesses rely on more local small and medium-sized businesses

Evaluation metrics

- Maintaining businesses’ viability and competitiveness
- Attracting business to the region
- Consider whether the policy is practical and helps businesses be more sustainable
- Equity, access, mobility
- Cost of doing business
- Number and type of jobs created

Investment priorities

- Investments in business development
- Creating reliable transportation options
- More coordinated and interconnected planning and implementation
- Maintaining and improving existing infrastructure
- Education, trade programs and training to attract traded-sector businesses and expand work force opportunities
- Expanding supply of development-ready land
- Attracting smaller businesses to business corridors to help expand services available to nearby neighborhoods

For more information

Sign up to receive email updates about additional public events, forums, and web surveys at www.oregonmetro.gov/climatescenarios or by calling 503-797-1551.



Environmental workshop

Date conducted Summer 2012

Workshop goal The goal of the environmental workshop was to inform and engage community leaders about the Climate Smart Communities Scenarios Project and foster collaboration, mutual learning and relationship building between Metro



planning staff and environmental community leaders. The desired outcome of the workshop was to gain an understanding of what outcomes are most important to consider from an environmental perspective and prioritize land use and transportation strategies in the context of advancing environmental goals.

Participants Metro partnered with the Oregon Environmental Council and 1000 Friends of Oregon in developing the workshop agenda and activities, and creating the participant list of community leaders. Workshop participants represented the following organizations: Oregon Global Warming Commission, Environment Oregon, Upstream Public Health, Association of Oregon Rail and Transit Advocates, Clackamas County Urban Green, Willamette Pedestrian Coalition, Bicycle Transportation Alliance, Earth Advantage Institute, Clean Water Services, Oregon Department of Environmental Quality, The Intertwine, and staff from TriMet, Oregon Department of Transportation, the cities of Tualatin, Gresham, Hillsboro, Beaverton and Clackamas County.

Primary outcome A theme highlighted throughout the workshop was maintaining the right perspective on outcomes. Participants noted that increasing transit service can be both a strategy and an outcome in that it supports other strategies and goals such as equity and environmental justice. They also stated that equity and environmental justice are high priority outcomes that should be used as a lens for evaluating other desired outcomes.

Recommendations There was significant discussion regarding how the project can move from strategies to outcomes – including prioritizing strategies that link and address economic, equity and environmental issues. Participants noted that many of the strategies can have negative or positive impacts, depending on how they are implemented. For example, strategies involving changing fuels or changing to more electric vehicles might have a positive impact on reducing GHG emissions locally, but could have a negative impacts at the source of power/fuels production and it is important for the project to fully consider these impacts as strategies are implemented. Participants in the workshop cited the importance of the project establishing both short- and long-term implementation goals and to measure the short and long-term impact of

strategies. Participants agreed implementation of strategies will need to be tailored to be most effective and that a one-size-fits-all approach would not work.

Emergent workshop themes

- **Impacts of strategies** Many of the strategies can have negative or positive impacts, depending on how they are implemented.
- **Community design** Local connectivity and access to essential services, transportation choices, parks and natural areas is important.
- **Marketing incentives** More transit-related marketing and incentives are needed.
- **Pricing strategies** The impacts of all pricing strategies depend on how the revenue is used – pricing strategies can be a burden on smaller communities and those who commute to work, which is an equity concern.
- **Implementation timeframe** Include short- and long-term goals and monitoring system to track progress.
- **Financing concerns** More funding needed to pay for transit service, sidewalks, bicycle facilities, etc.
- **Levels of transit** Increased transit service is a strategy for getting to environmental and social equity goals related to clean air and water and improved access to services and jobs.

Evaluation metrics

- Water supply/quantity
- Social equity across all outcomes
- Access to services and transit
- Affordability – housing and transportation
- Connectivity
- Clean air and water
- Public health
- Protection of farms, forestlands and natural areas

For more information

Sign up to receive email updates about additional public events, forums, and web surveys at www.oregonmetro.gov/climatescenarios or by calling 503-797-1551.



www.oregonmetro.gov/climatescenarios

Equity and environmental justice workshop summary

Date conducted Summer 2012

Workshop goal The goal of the equity and environmental justice workshop was to inform and engage community leaders about the Climate Smart Communities Scenarios Project and foster collaboration, mutual learning and relationship building between Metro planning staff and equity and environmental justice community leaders. The desired outcome of the workshop was to gain an understanding of what outcomes are most important to consider from a social equity perspective and to prioritize land use and transportation strategies that could advance equity and environmental justice in the region while meeting greenhouse gas emissions reduction goals.

Participants Metro partnered with the Coalition of Communities of Color and the Coalition for a Livable Future in developing the workshop agenda and activities, and creating the participant list of public agency staff and community leaders. Participants included Albina Ministerial Alliance, Oregon Environmental Council, Ride Connection, Verde, Environmental Professionals of Color, Community Cycling Center, Upstream Public Health, OPAL Environmental Justice Oregon, NAYA Family Center, Oregon Tradeswoman Inc., Urban League of Portland, Northwest Health Foundation, Familias en Accion, Rose Community Development, APANO, 1000 Friends of Oregon, Reach Community Development, Inc., Community Housing Fund, East Portland Action Plan, Portland Community College ETAP Program, Portland State University, Multnomah County Health Department, TriMet and the cities of Gresham, Hillsboro and Portland.



Primary outcome Participants recommended that, in developing scenarios for reducing greenhouse gas emissions in the region, project staff should expand discussions of strategies and outcomes to include building a shared understanding of existing disparities and their root causes.

Recommendations Workshop participants suggested broadening the scope of proposed land use and transportation strategies to include education, racial prosperity and neighborhood stability. They stressed the importance of including community leaders and members as an integral and visible component of the

project as the process moves forward. Participants encouraged project staff to consider what is already being done by communities and organizations and build on these existing relationships and efforts. They suggested that the strategies implemented need to address both the reduction of greenhouse gas emissions as well as the reduction of existing disparities.

Follow up One-on-one follow-up meetings were scheduled with eight of the participants to further discuss and gain clarification on issues and concerns expressed during the workshop.

Emergent workshop themes

- **Diversity** Respect the value of different communities.
- **Inclusivity** Invite people of color and members of other communities as contributors, speakers and panel members in future meetings. Begin working with community leaders and members earlier in the process.
- **Networks** Build on existing relationships with communities and organizations.
- **Follow up** Invest in one-on-one follow up with equity and environmental justice community leaders.
- **Meaningful engagement** Foster difficult but honest conversations on inclusionary zoning, reducing gentrification, and maintaining transit services.
- **Transit** Deepen understanding of who transit riders are, how dependent are they on transit, and the extent to which they have safe and convenient access to transit service that connects to where they need to go.
- **Demographics** Use data and community discussions to improve understanding of existing disparities.
- **Community investments** Creating communities where everyone is able to safely walk, bike or use transit and implementing land use and transportation strategies in ways that do not displace vulnerable communities will be key to creating a prosperous region.
- **Measuring social equity** Measure the achievement of outcomes at a community level to better connect policy choices and community impacts. Bring neighborhood stability and education into the evaluation.

Evaluation metrics

- Neighborhood stability
- Education
- Racial prosperity
- Investment across population groups
- Reduction of existing disparities through implementation

For more information

Sign up to receive email updates about additional public events, forums, and web surveys at www.oregonmetro.gov/climatescenarios or by calling 503-797-1551.

Climate Smart Communities Scenarios Health Impact Assessment Summary

Oregon Health Authority

March 2013

Health Impact Assessment

Health impact assessment (HIA) provides decision-makers with information about how a proposed policy, program or project may affect the health of people, with a specific focus on equity. HIA differs from traditional public health assessment in one important way - the health impacts of a proposal are assessed before a final decision is made, allowing the results of the HIA to be considered in the decision-making process. HIA provides objective information that can be used to increase the positive health impacts of a project or policy and mitigate negative impacts.

The Climate Smart Communities Scenarios HIA aims to support Metro and its partners in the consideration of public health and health equity in the selection and implementation of transportation and land use decisions related to GHG reduction policy in the Portland metropolitan region. OHA's recommendations apply to the selection of the three Phase Two scenarios to be further tested in 2013, as well as the development and adoption of a preferred scenario in 2014.

Findings

Through modeling and an extensive review of current literature, OHA found:

1. That almost all of the policies under consideration could be positive for health, and that certain policies were more beneficial than others.
2. The majority of the health benefits result from:
 - a. increased physical activity,
 - b. followed by reductions in road traffic crashes and
 - c. lower exposure to particulate air pollution.
3. Strategies that meet GHG reduction goals by decreasing vehicle miles traveled (VMT) will have the most positive impact on human health by
 - a. increasing physical activity through active transportation and
 - b. reducing injuries and fatalities from collisions.
4. Strategies supporting the highest increases in active transportation may also be the most successful in decreasing air toxics emissions and exposures because of lower VMT.
5. The scenarios found to be the most health-promoting in our quantitative comparison all had similar elements which led to the most positive health outcomes: most ambitious levels of community design policies, intermediate and ambitious levels of pricing and incentives, highest levels of active transportation (including transit), lowest levels of single occupancy vehicle driving, and lowest levels of particulate air pollution.

CSCS HIA Recommendations

Develop and implement a preferred scenario that meets or surpasses the greenhouse gas emissions reduction target set for the region. Further:

- **Prioritize strategies that lead to decreases in air pollution exposure for all populations in the region;** in particular for low income communities, children, seniors, people with low incomes, and people with chronic health conditions or disabilities. An example strategy may be creating and promoting walking and biking routes adjacent to low-traffic roads specifically to these groups).
- **Follow through with implementation of the recommendations identified in the [Portland Air Toxics Solutions Report](#).** The report identifies a number of recommendations that will reduce air pollution from light vehicles and have also been linked to reducing GHG emissions.

From the report: “Low-income communities and communities of color are more likely to live in close proximity to high-traffic roads and have higher exposures to harmful air pollution as a result. These groups may also live in lower quality housing with poor indoor air quality. Their cumulative exposure to indoor and outdoor air pollution may be significantly higher than other groups.”

To maximize public health benefits and meet the state target, emphasize strategies that best increase active transportation and physical activity: community design, pricing and incentives. Further:

- **Implement active transportation strategies with an understanding of existing local health conditions and inequities.** Metro and partners should implement strategies in ways that do not worsen these health conditions and inequities, such as planning for necessary safety infrastructure. Increasing the number of people biking and walking could cause a small increase in injuries and deaths from collisions. Additionally, not all Portland Metro region residents have equal access to active transportation opportunities.
- **Prioritize strategies that lead to increases in active travel for all populations in the region, in particular for children, seniors, people with low incomes, communities of color, and people with chronic health conditions or disabilities.** Example strategies include marketing and incentive programs targeted to these populations, improved active travel infrastructure on routes to schools, and improved public transportation service in areas where these populations live. Engaging the highest per-capita-VMT population with active transportation strategies would have a positive impact on all residents of the region.

From the report: “People who commute by walking, bicycling or public transit are more likely to meet physical activity recommendations, and they do twice as much total physical activity (transportation and recreation combined) as those who commute by automobiles. Children who walk or bike to school are more likely to meet physical activity recommendations, and to attain healthier body composition and cardiorespiratory fitness.”

Include strategies, such as community design, that can lead to decreases in road traffic injuries and fatalities for all populations in the region, in particular for children. Further:

- **Prioritize strategies that lead to decreases in road traffic injuries and fatalities for all populations in the region;** in particular for children and older adults. The community design, pricing and incentives strategies that lead to reductions in VMT may also increase safety in the region.
- **Mitigate potential increases in pedestrian and bicyclist injuries and fatalities through proven design strategies,** such as increasing the visibility of vulnerable road users; separate facilities like sidewalks, bike boulevards or cycle tracks; and traffic calming or speed control measures (133, 135). The feeling of safety given by these mitigations may also expand the percentage of the population willing

From the report:

“Motor vehicle crashes are the leading cause of death for individuals between the ages of 5 and 24.”

Carry out additional quantitative health impact assessment of the three scenarios that are identified for further evaluation in spring 2013 to further inform development and adoption of a final preferred scenario. OHA recommends the use of ITHIM or a similar health impacts model for this future assessment. Further:

- OHA recommends that when the CSCS Project develops the preferred scenario in 2013-14, health stakeholders (in particular local health departments) should be consulted in order to take local health expertise into account and to continue building relationships between public health and planning professionals and policymakers.
- OHA recommends that future related HIAs include consideration of land use, housing affordability, location relative to employment, gentrification and displacement, or air pollution other than PM_{2.5}.
- This HIA found that the most significant health benefits of the GHG reduction policies under consideration in the CSCS project were from increased physical activity through active transportation. Future assessments should include this health determinant and should attempt to answer additional questions, such as how can policies or programs be implemented to result in increases to active transportation in the Portland Metro region? And, how can Metro and local governments assure equal access across the region to active transportation?

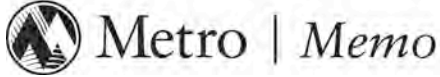
From the report:

“The healthiest scenario could result in hundreds of premature deaths prevented and years living with disability averted in the region. Health should be a key consideration in Metro’s scenario planning process.”

For more information

Jae p. Douglas, PhD, MSW, Principle Investigator Climate Smart Communities Scenarios HIA
971-673-1139
jae.p.douglas@state.or.us

Copies of the full report will be available at OHA’s website: www.healthoregon.org/hia



DATE: April 22, 2013
TO: TPAC, MTAC and Interested Parties
FROM: Kim Ellis, Principal Transportation Planner
SUBJECT: Climate Smart Communities Scenarios Project – Phase 2 Investment Choices Scenarios Evaluation

This memorandum outlines the approach staff will use to evaluate three scenarios for the Climate Smart Communities Scenarios Project during the summer of 2013. Findings from Phase 1, Phase 2 work, community leader input, and Metro Council and advisory committee discussions have informed development and refinement of this approach.

The analysis will evaluate the effects of distinct land use and transportation policy and investment choices on the future of the Portland metropolitan region. The investment choices-focused approach is based on the premise that by helping communities implement their local visions and plans for main streets, downtowns and employment areas, citizens and businesses will experience all the benefits of increased transportation and housing choice, jobs, equity, cleaner air and water, and access to nature along with the added benefit of a reduction in greenhouse gas emissions from cars and small trucks.

The results of the analysis will be released in October 2013 - launching the third, and final, phase of the project. Phase 3 will use the analysis results to stimulate a regional discussion aimed at deciding which elements from each of the three scenarios should go forward into a preferred land use and transportation scenario for the Metro Council to adopt in December 2014.

The Metro Council, Metro Policy Advisory Committee (MPAC), Joint Policy Advisory Committee on Transportation (JPACT) will be asked to support moving forward with the evaluation in May 2013.

ACTION REQUESTED

- Recommendation to JPACT and MPAC to support moving forward with the Phase 2 evaluation.

OVERVIEW OF PHASE 1 AND 2 – UNDERSTANDING AND SHAPING LAND USE AND TRANSPORTATION CHOICES

All the work in the Planning and Development Department (e.g., East Metro Connections Plan, Southwest Corridor Plan, Regional Active Transportation Plan, Industrial Lands Readiness effort, TOD program) is focused on implementing the Region 2040 Growth Concept. The Climate Smart Communities Scenarios Project has the same focus: implementation.

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

Working together with city, county, state, business and community leaders, Metro is researching how land use and transportation policies and investments can be leveraged to help us create great communities, support the region's economy and meet goals for reducing greenhouse gas emissions. The adopted land use plans and zoning of cities and counties across the region are the foundation for the scenarios to be tested, with a goal of creating a diverse yet shared vision of how we can keep this region a great place for years to come – for everyone – and meet state greenhouse gas emissions goals.

PHASE 1: UNDERSTANDING OUR LAND USE AND TRANSPORTATION CHOICES

Phase 1 focused on understanding the region's choices for reducing greenhouse gas emissions from cars and small trucks. Staff tested 144 different combinations of land use and transportation policies (called scenarios) to learn what it might take to meet the region's greenhouse gas emissions reduction target. More than 90 scenarios met or exceeded the target. In addition, staff found that current plans and policies together with advancements in fleet and technology get the region close to the target.¹

A range of choices exist to meet the region's state greenhouse gas emissions reduction target and most of the strategies under consideration are already being implemented to varying degrees in communities to achieve other important economic, social and environmental goals.

Staff also conducted sensitivity analysis of the Phase 1 scenarios to better understand the GHG emissions reduction potential of individual strategies.² and ³ The strategies tested included pay-as-you-drive insurance, traffic operations, expanded transit service, pricing, transportation demand management programs, community design and advancements in clean fuels and vehicle technologies.

Assuming adopted community plans and national fuel economy standards, the most effective individual strategies for reducing greenhouse gas emissions were found to be:

- **Fleet and technology** advancements
- **Transit** service expansion
- **Pricing of transportation** (e.g., fuel price, pay-as-you-drive insurance, parking fees, mileage-based fee, and carbon fee)

The reductions found for each strategy individually do not reflect synergistic benefits that could come from combining various strategies. It is also important to note that while some strategies did not individually achieve significant GHG reductions, such as increasing walking or bicycle mode



Phase 1 found that current plans and policies together with advancements in fleet and technology get the region close to the state target of 1.2 MT CO₂e per capita.

¹ Understanding Our Land Use and Transportation Choices: Phase 1 Findings (January 2012).

² Memo to TPAC and interested parties on Climate Smart Communities: Phase 1 Metropolitan GreenSTEP scenarios sensitivity analysis (June 21, 2012).

³ Memo to TPAC and interested parties on Climate Smart Communities: Updated Draft Scenario Options Framework (June 26, 2012).

share or participation in marketing and incentives programs, they remain important elements to complement more effective strategies such as transit service expansion and building walkable downtowns and main streets as called for in community plans.

To date, no evaluation has been conducted on the potential financial, political, social equity, environmental or economic implications of the different strategies; these implications will be considered as part of the upcoming evaluation.

PHASE 2: SHAPING OUR LAND USE AND TRANSPORTATION CHOICES

Phase 2 has focused on shaping future choices for the region to advance implementation of community visions and meet the region's greenhouse gas emissions reduction target. The Climate Smart Communities Scenarios Project made significant progress in 2012 and early 2013:

- **Engaged local governments and other stakeholders to share project information and early findings.** From January to September 2012, Metro councilors and staff shared the Phase 1 findings and other project information through briefings to city councils, county boards, county-level coordinating committees, state commissions, Metro advisory committees, regional and state conferences and other meetings. Staff also regularly convened a local government staff technical working group in 2012. The work group provided technical advice to Metro staff, and assistance with engaging local government officials and senior staff.
- **Convened workshops with community leaders on the public health, equity/environmental justice, and environmental outcomes that are most important to consider in the scenario evaluation process.** Reports documenting the Public Health, Environmental and Equity/Environmental Justice workshops can be downloaded from the project website – www.oregonmetro.gov/climatescenarios.
- **Partnered with business associations to host a series of focus groups to understand their challenges, opportunities and priorities.** The first four focus groups have been held in partnership with the Columbia Corridor Association, the East Metro Economic Alliance, the Clackamas County Business Alliance, the Westside Economic Alliance and Wilsonville and Greater Hillsboro Chambers of Commerce, and the Portland Business Alliance small business group. One focus group remains that will be held in partnership with the Home Builders Association to provide perspectives from residential and commercial builders and real estate developers. A summary report will be prepared upon completion of the focus groups in May.
- **Developed a community investment choices frame to guide development of three alternative scenarios to be tested in Summer 2013.** The project's technical work group continues to serve an important advisory role to staff and helped develop the framework. The work group will continue to assist Metro staff during the evaluation to finalize assumptions and review the results of the analysis.
- **Researched eight case studies to spotlight local success stories and the innovative strategies they have implemented to achieve their local visions and that will also help reduce greenhouse gas emissions.** Staff expects to complete the case studies in May in consultation with local planning staff.
- **Convened workshops with local staff to affirm visions for future community development using Envision Tomorrow to make sure the latest information on local land use goals is incorporated into the project.** Southwest Corridor project staff used Envision Tomorrow to develop the draft land use vision for the corridor last fall. All of these assumptions will be used as land use inputs in the scenarios tested in the summer, 2013.

- **Conducted OptIn survey to gauge public awareness of and support for GHG reduction goals, land use and transportation strategies being considered to reduce emissions, and willingness to take personal action.** Detailed results of the survey will be reported at the end of April.

OVERVIEW OF INVESTMENT CHOICES TO BE TESTED IN PHASE 2

To stimulate thinking about our choices for the future and the possibilities they present, three scenarios will be tested in 2013. The three alternative scenarios to be evaluated are conceptual in nature, and are not intended to represent a preferred scenario or future Metro Council, Oregon Transportation Commission (OTC), local government or TriMet policy intentions. The scenarios draw from the policies tested in Phase 1 and bear greater resemblance to realistic, yet ambitious policy alternatives than the 144 scenarios tested in Phase 1 of the project.

The evaluation process is consistent with OAR 660-044-0040, which requires the region to evaluate at least 3 scenarios – a reference case scenario that reflects implementation of existing adopted comprehensive plans and transportation plans and at least two alternative land use and transportation scenarios for meeting greenhouse gas reduction targets.

The adopted land use visions (as expressed in local plans and zoning codes) of cities and counties across the region are the foundation for the scenarios to be tested. The analysis will consider transportation investments together with different levels of funding, advancements to clean fuels and vehicle technologies and, to the extent possible, and emerging community visions identified through the Southwest Corridor Plan. The analysis will inform development of a preferred land use and transportation scenario and identification of the policies, tools, investment and actions needed to implement it. It is important to emphasize that the preferred scenario developed in 2014 will likely include elements from all 3 scenarios tested.

Purpose

The purpose of scenario planning is to test a range of potential futures that reflect choices policymakers, businesses and individuals might make to help answer policy questions that forecasted growth and fiscal constraints raise about our ability to protect the region's quality of life and economy for current residents and future generations, and meet state targets for reducing greenhouse gas emissions.

Major objectives of the analysis are to:

- Test distinct investment policy choices that frame the boundaries of the political landscape and public opinion to better understand the impact of different levels of investment on public health, travel behavior, development patterns, social equity, the economy, the environment and greenhouse gas emissions.
- Evaluate the relative effect and cost of different investment choices in order to recommend what combinations of investments, tools and strategies are needed to best achieve community visions and state greenhouse gas emissions reductions.
- Provide recommendations to guide development and implementation of a preferred land use and transportation scenario.

Questions to Answer with the Evaluation

The evaluation has been designed to answer several policy questions, including:

- How will our choices affect where we work and live?
- What will our choices cost and what can we afford?
- How will our choices affect public sector and household budgets, and the economic competitiveness of businesses and industry in the region?
- How will our choices affect how we get around?
- How will our choices affect climate change and energy security?
- How will our choices affect air quality, water supplies and farms, forestland and natural areas?
- How will our choices affect our health?
- Which strategies are most effective for supporting community visions and reducing greenhouse gas emissions?
- What choices are feasible and how do we implement our choices in an equitable and cost-effective manner?
- What are the risks, opportunities and tradeoffs of our choices – considering public health, social equity, environmental, economic, financial, and political implications?

General Construct and Scope

Each of the three scenarios is based on a “What if” policy-theme focus, resulting in a distinct mix and level of transit service, bike, pedestrian, road, system and demand management strategies that are linked to pricing strategies (revenues) assumed within in each scenario. The three scenarios represent what the region could look like in 2035, if various transportation and land use strategies are pursued, and what it could mean for how we live, how we work and how we get around. The adopted land use plans and zoning codes of cities and counties across the region are the foundation for the scenarios to be tested. **Figure 1** shows the general construct and timeline for this analysis.

Figure 1. Climate Smart Communities Investment Scenarios Construct and Timeline



Each scenario is initiated by a “what if” question:

- **Scenario A (Recent Trends) – What if we implement adopted plans to the extent possible with existing revenues?**

Purpose: This scenario follows the recent funding trends and shows the results of implementing adopted plans to the extent possible with existing revenues.

Scenario A represents what the future could look like if recent trends continue and we implement adopted plans with existing revenues (e.g., gas tax, payroll tax and existing local sources like urban renewal district (URD), SDCs, TIFs that have been used to fund transportation investments). Scenario A assumes the region continues to rely on existing revenues, which continue to decline in their purchasing power over time due to rising costs, inflation and improved fuel economy of vehicles. In addition, some URD are set to expire between now and 2035. This future would reflect maintaining existing TriMet service with small increases targeted to address overcrowding, delays due to congestion giving priority to routes serve the region’s most vulnerable communities – children, seniors, low-income and communities of color. Transit service growth is tied to the forecasted rate of job growth in the region, which reflects that the payroll tax continues to be the primary source of funding for transit service. Other transportation investments would also be limited as an increasing share of the revenues available are spent on maintaining the transportation system in place today. Bicycle and pedestrian investments are focused on improving access to transit, and providing safe routes to schools.

An implication of limited community investment is that cities and counties are not able to achieve their adopted plans and the region falls short of goals for maintaining an adequate supply of shovel-ready industrial lands that attract new employers, and most employment growth occurs in existing employment areas that currently have good transportation access. *This scenario is not expected to meet the greenhouse gas emissions target.*

- **Scenario B (Adopted Plans) - What if we raise additional revenues - as called for in the adopted Regional Transportation Plan – to allow us to make more progress toward implementing adopted plans?**

Purpose: This scenario counters recent funding trends and shows the results of raising additional revenues - as called for in the adopted Regional Transportation Plan – to allow the region to make more progress toward implementing adopted plans.

Scenario B represents what the future could look like if we counter recent trends and are successful implementing adopted plans with additional revenues assumed in the 2035 Regional Transportation Plan. The scenario would assume the adopted RTP levels of transit, road, operations and bike/pedestrian investment, current adopted local land use plans and planned funding as adopted in the RTP (e.g., 1 cent per year gas tax increase, increases to vehicle registration fees, some increase in the payroll tax for transit). In this scenario, TriMet is able to restore and expand frequent bus service in priority corridors and to serve the region’s most vulnerable communities, consistent with Service Enhancement Plans. Scenario B assumes the 2035 RTP Financially Constrained System of projects and programs adopted by JPACT and the Metro Council in June 2010.

An implication of this scenario is that with significantly more community investment, cities and counties are better able to achieve their adopted plans and attract new employers – as reflected in the regionally-reviewed 2035 growth distribution adopted by the Metro Council in November 2012. The region is better able to maintain its competitive advantage by helping local companies access global markets and grow local jobs. More job opportunities are likely to be available throughout the region in downtowns, existing employment areas and other

locations with good transportation access. *This scenario may meet the greenhouse gas emissions target.*⁴

- **Scenario C (New Plans and Policies)** - What if we pursue new policies and revenue sources to more fully achieve adopted and emerging plans?

Purpose: This scenario shows the results of pursuing new policies, more investment and new revenue sources to more fully achieving adopted and emerging plans.

Scenario C represents what the future could look like if we are able to fully implement adopted plans (including the full RTP) and additional transit, bike, pedestrian and road investments needed to support new plans such as the Southwest Corridor Plan, East Metro Connections Plan, and the Regional Active Transportation Plan. In this scenario, TriMet is able to further expand frequent and local bus service to more parts of the region with supporting land use and better serve the region's most vulnerable communities. Transit transfer times are extended and high school and colleges students across the region have a free, year-round transit pass. The State of Oregon implements a comprehensive intercity transit system, which includes extending WES commuter rail service from Wilsonville to Salem and Cascadia high-speed rail that connects the region to Salem and Eugene as well as other major west coast cities, including San Francisco, Seattle and Vancouver, B.C. More services, shopping opportunities and job opportunities are located near transit and where people live and work. Most major employers and commercial destinations in the region in the region have electric vehicle charging stations available for visitors and employees.

Scenario C also reflects a policy area (transportation pricing) that Metro and the region have not examined in great detail and more work is needed to understand the effectiveness and the potential benefits and impacts pricing policies bring, including effects on low-income households and businesses. This scenario tests new revenue mechanisms - a mileage-based fee and a carbon fee to maintain and operate the transportation system and fund needed investments and market incentives. This scenario is designed to explore using the carbon fee and mileage-based fee to test the effect of transitioning from the gas tax, as is currently being explored at the national and state levels.

An implication of this scenario is that cities and counties are better able to achieve their adopted plans, attract new employers, and expand local companies' access to global markets to further grow local jobs because more sustainable transportation funding mechanisms are developed to fund needed investments. Incentives and market-oriented reform are linked with investments in information and green technology to further expand access to housing, economic and educational opportunities for everyone. *This scenario is expected to meet or exceed the greenhouse gas emissions target.*

The scenarios are cumulative and for research purposes. The scenarios do not represent future Metro Council, Oregon Transportation Commission (OTC), local government or TriMet policy intentions.

⁴ The regionally-reviewed growth distribution will be used in this analysis. A draft growth distribution was used in Phase 1. In addition, the RTP financially constrained system state gas tax increase assumption of 1 cent per year increase was not fully evaluated in Phase 1. The state gas tax was assumed in the Level 2 pricing assumptions as a mileage-based fee. Many of the Phase 1 scenarios with Level 2 pricing met or exceed the state greenhouse gas emissions target.

Phase 2 Scenarios Evaluation Framework

Adopted in 2010, the region's six desired outcomes will continue to be used as the framework guiding the evaluation. For the CSC scenarios project, social equity will be addressed as a lens across all desired outcomes. The six regional outcomes are:

- Vibrant Communities
- Economic Prosperity
- Safe and Reliable Transportation
- Leadership on Climate Change
- Clean Air and Water
- Equity



The Phase 2 scenarios evaluation will measure the GHG emissions reduction potential of the three scenarios and provide policy makers with information about the implications, benefits and drawbacks of different land use and transportation policy and investment choices, relative to the region's shared social equity, economic, environmental and community goals.

Metro is creating a "scorecard" to report how well the three scenarios work to advance the region's desired outcomes. Performance of each scenario will be reported using a set of key evaluation criteria that reflects input provided by the Metro Council, MPAC and JPACT in 2011, business and community leaders in 2012 and early 2013, and the public through an Opt-In opinion survey.⁵ During the workshops and focus groups in 2012-13, the community leaders identified priority outcomes to be considered, and in some cases, potential evaluation measures. Feedback was clear that measurable outcomes are vital to the success of the scenarios evaluation and monitoring future implementation of a preferred scenario. Priority outcomes included transportation system safety and reliability, the cost of motor vehicle and freight delay, neighborhood stability, access to education, resiliency of the natural environment, environmental justice and equity, attracting new businesses to the region and protection of farms, forestlands and natural areas. These outcomes are reflected in the evaluation criteria. Metro Council and advisory committee discussions in 2013 informed additional refinements.⁶

Staff will use a combination of MetroScope, Metropolitan GreenSTEP, ArcGIS analysis and engagement activities to conduct the analysis. Planning-level cost estimates for each scenario will be developed by Metro, in partnership with ODOT and TriMet. For reference, the transportation investments assumed in Scenario B reflects the adopted financially constrained Regional Transportation Plan (RTP), which includes approximately \$14 billion (2005 dollars) in multi-modal transportation investments and programs. The adopted State RTP projects assumed in Scenario C includes approximately \$20 billion in multi-modal transportation investments and programs. Scenario C assumes more bike, pedestrian and transit investments and programs than the State RTP to reflect the Regional Active Transportation Plan and transit service enhancements identified by TriMet and SMART.

Several evaluation measures have been identified to look at the impacts on vulnerable populations, including low-income households and to the extent possible, communities of color, children, older

⁵ A series of Public Health, Equity/Environmental Justice and Environmental workshops, Business focus groups and an Opt-In survey the evaluation measures. More information is available on the project website at www.oregonmetro.gov/climatescenarios.

⁶ Memo to TPAC, MTAC and interested parties on Climate Smart Communities: Comments on draft Phase 2 Scenario Assumptions and Evaluation Criteria (April 22, 2013).

adults, people with disabilities and households with limited English proficiency. The analysis tools have limitations in that GreenSTEP and MetroScope do not forecast the future population by race or ethnicity, and the results cannot be reported at a community or neighborhood level. GreenSTEP and MetroScope account for household income, which will be a focus of the social equity evaluation. Staff will use a methodology developed for the Regional Flexible Funds process to support the analysis.

Neighborhood stability was identified in the Equity and Environmental justice Workshop as a priority outcome to measure, particularly as it relates to increased gentrification and displacement pressure on low-income households and communities of color. Gentrification and displacement pressure can occur as housing values increase in a neighborhood in response to public policies and investments. A detailed analysis of neighborhood stability is not possible due to time and resource constraints, and limitations of the Phase 2 analysis tools. However, the evaluation will include collaborating with community leaders working to advance social equity in the region. To the extent possible, this collaboration will help identify areas of potential risk for gentrification and displacement and best practices policies/tools that, if implemented, could limit gentrification and displacement pressure and help reduce existing community disparities.

Evaluation activities will also scope implementation feasibility - including political or public acceptability, legal, legislative or regulatory barriers and institutional capacity - and identify short-term and long-term actions needed to implement the scenarios being evaluated.

More detailed documentation of the assumptions and analysis methodologies will be prepared during the evaluation process. A Phase 2 Findings Report will be developed that includes a scorecard and a narrative describing the methodology, analysis and outcome for each evaluation measure for each scenario and summarize results using info-graphics and other visual tools. No weighting of the evaluation measures is proposed. Decision-makers are encouraged to determine the measures that are important to them and to include that in their decision-making.

The findings report will communicate which combination of strategies will achieve the state GHG targets and how different levels of investment and policy implementation could affect the cost of moving freight, air quality, household and business expenditures, public health, infrastructure costs, travel behavior, and other outcomes. The report will be brought forward for discussion by the region's decision-makers and community and business leaders in Fall 2013. The information is expected to assist in the identification of the preferred scenario by March 2014.

OVERVIEW OF PHASE 3 - DEVELOPMENT AND SELECTION OF A PREFERRED LAND USE AND TRANSPORTATION SCENARIO

Phase 3, the final phase of the process, will begin in Fall 2013 with release of the scenarios analysis results. Release of the findings will kick-off a broader regional discussion aimed at identifying which policies, investments and actions should be included in a preferred scenario - likely drawing elements from each of the three scenarios tested in Phase 2. Policy recommendations that result from this discussion will provide direction to Metro, ODOT, TriMet and local agency staff on the draft preferred scenario to be analyzed in Spring 2014. A draft preferred scenario concept is anticipated by March 2014 to allow sufficient time to meet state timeline and scenario selection requirements.

A final preferred scenario is required to be selected by the end of 2014 after public review and consultation with local governments and state and regional partners. The preferred scenario will not result in a one-size fits all vision or implementation strategy. It will allow for local flexibility to support the differences among the region's cities and counties and seek to advance achievement of their of their unique goals and visions. The preferred scenario will also include regional and state implementation actions.

The preferred scenario will initially be implemented through amendments to Metro's Regional Framework Plan and 2040 Growth Concept in December 2014. Implementation through Metro's functional plans, local comprehensive plans, land use regulations and transportation system plans will occur through future actions as defined by Oregon Administrative Rules adopted by the Land Conservation and Development Commission.⁷

NEXT STEPS

MPAC, JPACT and the Metro Council have provided input on the assumptions to be tested in each of the scenarios (Attachment 1) and the evaluation framework and criteria (Attachment 2) to be used.

Metro staff will request the Metro Policy Advisory Committee (MPAC), Joint Policy Advisory Committee on Transportation (JPACT) to support moving forward with the evaluation on May 8 and 9, respectively. The Metro Council will be asked to provide direction to staff on moving forward with the evaluation on May 21.

The timeline for the scenarios analysis and final adoption of a preferred scenario meets OAR 660-044-0040:

| | |
|-------------------------------|---|
| May 2013 | Metro Council, MPAC, JPACT requested to support moving forward with the analysis. |
| June-August 2013 | Project staff and technical work group analyze investment scenarios using MetroScope, Metropolitan GreenSTEP and ArcGIS. Convene workshops to support social equity evaluation and identify feasibility and actions likely to be necessary to implement scenarios. |
| August-September 2013 | Project staff and technical work group prepare Phase 2 CSCS Investment Choices Findings Report and other communication materials. |
| October 2013 | Staff release CSCS Investment Choices Findings Report for regional discussion; begin phase 3. |
| Oct. 2013 - March 2014 | Report back to communities, decision-makers and regional partners on the results and decide which elements should be included in a preferred scenario. |
| March/April 2014 | MPAC, JPACT and Metro Council confirm draft preferred scenario concept. |
| April-July 2014 | Consult with local governments, and state and regional partners on draft preferred scenario concept and implementation strategies. Analyze draft preferred scenario using the regional travel demand model and Metropolitan GreenSTEP. |
| Summer 2014 | Project staff prepare adoption package for public comment period. |
| Fall 2014 | 45-day public comment period on adoption package. |
| December 2014 | MPAC and JPACT recommendation to the Metro Council on the preferred land use and transportation scenario |

⁷ OAR 660-044-0040 and OAR 660-044-0045.

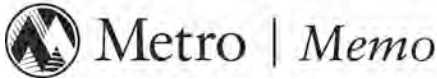
Metro Council takes action on recommended preferred land use and transportation scenario.

CLIMATE SMART COMMUNITIES SCENARIOS PROJECT

Technical Work Group Members

April 22, 2013

| | Name | Affiliation | Membership |
|-----|--|---------------------------------|---|
| 1. | Tom Armstrong | City of Portland | MTAC alternate |
| 2. | Chris Deffebach | Washington County | TPAC & MTAC member |
| 3. | Chuck Beasley | Multnomah County | MTAC member |
| 4. | Lynda David | Regional Transportation Council | TPAC member |
| 5. | Jennifer Donnelly | DLCD | MTAC member |
| 6. | Denny Egner | City of Lake Oswego | MTAC member |
| 7. | Karen Buehrig | Clackamas County | TPAC member |
| 8. | Steve Butler | City of Milwaukie | Local government staff |
| 9. | Jon Holan | City of Forest Grove | MTAC alternate |
| 10. | Katherine Kelly/ Jonathan Harker/Stacey Humphrey | City of Gresham | TPAC member/MTAC member |
| 11. | Nancy Kraushaar | City of Wilsonville | TPAC member |
| 12. | Alan Lehto/ Eric Hesse | TriMet | TPAC/MTAC member TPAC/MTAC alternate |
| 13. | Mary Kyle McCurdy | MTAC citizen/community group | MTAC member |
| 14. | Ben Bryant | City of Tualatin | Local government staff |
| 15. | Barbara Fryer | City of Beaverton | MTAC alternate |
| 16. | Margaret Middleton | City of Beaverton | TPAC member |
| 17. | Lainie Smith | ODOT | TPAC alternate and MTAC member |
| 18. | Dan Rutzick/ Peter Brandom | City of Hillsboro | Local government staff |
| 19. | Mara Gross | Coalition for a Livable Future | Community member |



Date: April 22, 2013
To: TPAC, MTAC and interested parties
From: Kim Ellis, Principal Transportation Planner
 Grace Cho, Assistant Transportation Planner
Re: Climate Smart Communities Scenarios Project: Comments on draft Phase 2 Scenario Assumptions and Evaluation Criteria

PURPOSE

This memorandum summarizes comments received on the draft Phase 2 scenario assumptions (dated February 27, 2013) and draft evaluation criteria (dated March 27, 2013). Comments were provided by members of the Metro Policy Advisory Committee (MPAC), the Metro Technical Advisory Committee (MTAC), the Joint Policy Advisory Committee on Transportation (JPACT), the Transportation Policy Alternatives Committee (TPAC) and the project technical work group.

Metro staff recommendations are reflected in the final draft scenario assumptions and evaluation criteria (dated April 22, 2013). More detailed documentation of the assumptions and analysis methodologies will be prepared during the evaluation process.

SUMMARY OF COMMENTS ON PHASE 2 SCENARIO ASSUMPTIONS

Comments on the draft Phase 2 scenario assumptions are organized by assumption category.

Fleet and Technology Assumptions

| Comment | Recommendation |
|--|---|
| The fleet and technology assumptions seem overly ambitious and unrealistic for the 2035 timeframe. | No change recommended. The fleet and technology assumptions were set by three state agencies (ODOT, ODEQ and ODOE) and were assumed when setting the region’s per capita greenhouse gas emissions reduction target in 2011. The assumptions were based on available information and current estimates about improvements in vehicle technologies and fuels. |

Land Use Assumptions

| Comment | Recommendation |
|---|--|
| More information is needed about the land use assumptions for Scenario A and Scenario C (beyond incorporating the Southwest Corridor work). | No change needed. The land use assumptions will be further developed and documented as part of the evaluation process. Scenario B will assume the 2035 growth distribution adopted by the Metro Council in November 2012. Staff will prepare alternative growth distributions, using MetroScope, that respond to the different levels of investment and transportation access assumed in Scenario A and Scenario C. Scenario C will also assume land use changes defined in the Southwest Corridor Land Use Vision consistent with the SW Corridor project. The Scenario A distribution will assume the same amount of urban growth boundary expansion as Scenario B. The Scenario C distribution will assume less urban |
| More information is needed about the amount of UGB expansion to be assumed in Scenario A and Scenario C. | |

| | |
|--|--|
| | growth boundary expansion than Scenario B – a total of approximately 7,700 acres – which reflects metering the use of the adopted urban reserves so they serve as a 50-year supply. This assumption was also used in Phase 1 as the Level 1 input. |
|--|--|

Streets and Highways Assumptions

| Comment | Recommendation |
|--|---|
| The I-84/I-5 interchange project should be listed in Scenario C. | Change as requested. Only preliminary engineering and right-of-way is included in the financially constrained RTP project list. Construction of the project is assumed in the State RTP project list. |

Transit Assumptions

| Comment | Recommendation |
|--|---|
| The Powell-Division BRT capital project should not be included in the Scenario A assumptions when Southwest Corridor is in Scenario C. | Change as requested. Both projects are included in the State RTP project list, but not the Financially Constrained RTP project list. As a result, both projects are recommended to be included in Scenario C to be consistent with investment choices framework and the State RTP project list. |
| The Division Powell BRT should remain in Scenario A. | |
| Add remaining Tier 2 HCT corridors to Scenario C. | Change as requested. HCT to Oregon City has been added, consistent with the High Capacity Transit Plan that was adopted as part of the Regional Transportation Plan in June 2010. |
| Add an extension of WES commuter rail to Salem to Scenario C. | Change as requested. |

Bike and Pedestrian Assumptions

| Comment | Recommendation |
|---|----------------------|
| Add reference to completing 100% of the regional bike and pedestrian networks as identified in the Regional Active Transportation Plan to Scenario C. | Change as requested. |

Education and Incentives Assumptions

| Comment | Recommendation |
|--|--|
| Increase the pay-as-you-drive insurance (PAYD) participation rate in Scenario C to reflect that it is a low-cost and effective strategy. | Change as requested. PAYD insurance is allowed in Oregon and other states today, although participation levels are currently low. The Statewide Transportation Strategy assumes 20% of drivers will participate in PAYD insurance by 2020 and 100% of drivers will participate in PAYD insurance by 2035. A graduated participation rate assumption is proposed for Scenarios A, B and C, with Scenario A having a 20% participation rate, Scenario B having a 40% participation rate and Scenario C having a 100% participation rate. |
| The eco-driving participation rate in | Change recommended. Scenarios A and B are recommended |

| | |
|---|--|
| Scenario C should be consistent with participation rates in the statewide transportation strategy as this will likely be the result of changes to vehicle technology and state education programs. | to assume 30% of drivers will participate and Scenario C is recommended to assume 60% of drivers will participate. The Statewide Transportation Strategy assumes 30% of drivers will participate in eco-driving by 2020 and 60% of drivers will participate in eco-driving by 2035, recognizing the combined impact of newer technology that provides real-time feedback to drivers and traditional public education and marketing programs that encourage drivers to conserve fuel as they drive by eliminating rapid stops/starts, reducing idling, properly servicing their vehicle and keeping tires inflated to proper to pressure. |
| Participation in carsharing programs is growing in the region and other metropolitan areas with targeted deployment of Car2Go and ZipCar in areas with significant mixed-use development; participation rates should be higher reflecting this trend. | Change recommended. All scenarios are recommended to assume 4% of households region-wide participate in carsharing by 2035, consistent with the Statewide Transportation Strategy assumptions for 2035. |

Pricing Assumptions

| Comment | Recommendation |
|---|--|
| Expand the parking fee assumptions in Scenario C to apply to frequent bus corridors. | Change as requested. Parking fees serve as a proxy for assessing the impact of both the cost of parking and the supply of parking in GreenSTEP. The Regional Transportation Functional Plan identifies reduced parking requirements for areas that are served with 20-minute or better transit service, which includes areas within .5-mile of High Capacity Transit stops and .25-mile of Frequent Bus stops. |
| Add Interstate 205 tolling to Scenario C | No change recommended due to model limitations. Upon further consultation with the Oregon Department of Transportation (ODOT), staff found that the GreenSTEP model does not meaningfully account for the impact of tolling on specific facilities. A tolling analysis would be more appropriately addressed using the regional travel model. Assessment of the revenue impact of the I-5 bridge toll will use the tolling financial analysis prepared for the project. The regional travel demand model will be used in the final analysis of the preferred scenario in Phase 3 in 2014; this could be included at that time. |
| Convert fuel use and emissions fees to cost/gallon equivalent or some other common measure. | Change as requested. This will be addressed during the evaluation when the assumptions and analysis methodologies are finalized. |

SUMMARY OF COMMENTS ON PHASE 2 EVALUATION CRITERIA

Comments on the draft Phase 2 evaluation criteria are organized by evaluation category.

Jobs and Housing Evaluation

| Comment | Recommendation |
|--|--|
| Measure the number of jobs by different job types. | Change as requested. The MetroScope output for distribution of jobs will be able to calculate the number of jobs by NAICS type. |
| Measure employment land proximity to key transportation corridors. | Change as requested. A detailed employment lands analysis is not possible due to time and resource constraints and limitations of the Phase 2 analysis tools. Staff will develop an assessment methodology as part of the job and housing distribution evaluation using ArcGIS and MetroScope outputs. |
| Measure access and proximity to labor markets. | |
| Growth captured in UGB should be included as evaluation measure; it is not an input. | Change as requested. Job and housing growth captured in the UGB compared to growth in nearby areas will be reported as part of the job and housing distribution evaluation, and has been added to the evaluation measures. |
| Add housing affordability as an evaluation measure. | Change recommended. A detailed housing affordability analysis is not possible due to time and resource constraints and limitations of the Phase 2 analysis tools. However, housing cost burden by income group has been added to the evaluation measures to address this comment. |

Cost and Economy Evaluation

| Comment | Recommendation |
|---|--|
| The evaluation should measure how much each scenario will cost. | Planning-level cost estimates will be developed for each scenario as part of the analysis. For reference, the transportation investments assumed in Scenario B reflects the adopted financially constrained Regional Transportation Plan (RTP), which includes approximately \$14 billion (2005 dollars) in multi-modal transportation investments and programs. The adopted State RTP projects assumed in Scenario C includes approximately \$20 billion in multi-modal transportation investments and programs. Scenario C assumes more bike, pedestrian and transit investments and programs than the State RTP to reflect the Regional Active Transportation Plan and transit service enhancements identified by TriMet and SMART. |
| Add a measure that reflects the share of household budget spent on housing and transportation combined. | Change as requested. |
| The evaluation should report who will be responsible for paying for different implementation costs. | A detailed analysis of “who pays” is not possible due to time and resource constraints, and limitations of the Phase 2 analysis tools. However, the evaluation will be able to report household housing and transportation costs by income group, and public and private sector costs at a regional level as called for in the evaluation criteria. In addition, the evaluation will also identify who is responsible for implementation at a broad |

| | |
|--|--|
| | level – e.g., local actions (individuals, local governments, businesses), regional actions (Metro, transit providers), state actions (Legislature, State Commissions and Agencies), and federal actions. |
|--|--|

Travel evaluation

| Comment | Recommendation |
|--|--|
| Add transit access to jobs as an evaluation measure. | Change as requested. |
| Define how the “change in metropolitan travel patterns,” will be evaluated as required in OAR 660-044-0040, which defines changes in metropolitan development and travel patterns as whether proposed policies will cause change in development or increased light vehicle travel between the metropolitan area and surrounding communities compared to reference case). | Change recommended. Average commute trip length has been added as an evaluation measure. The housing and job distribution evaluation will support an analysis of how development patterns might change in each scenario. A detailed analysis of changes in travel patterns is not possible due to time and resource constraints, and limitations of the Phase 2 analysis tools. The regional travel demand model will be used for the final analysis of the preferred scenario in Phase 3 in 2014 and will provide better information on potential changes in travel patterns. |
| Define what is included in travel costs. | No change needed. When possible, the GreenSTEP method of calculating outputs will be used. The Technical Appendix 2 to the Statewide Transportation Strategy describes the methods in more detail. Out-of-pocket household costs for vehicle ownership and use include vehicle cost, depreciation, energy costs (fuel and/or electricity), and taxes/fees. |
| Add mode share as an evaluation measure. | No change recommended due to model limitations. While GreenSTEP does not estimate mode share, it does provide amount of non-motorized travel as reflected in the physical activity evaluation measure (e.g., number of household walk trips and miles of bicycle travel per capita). Mode share will be an evaluation measure in the preferred scenario analysis. |
| Define what is included in the fuel consumption measure. | This measure includes petroleum-based, liquid and gaseous fuels consumed in light vehicle engines (e.g., gasoline, ultra low-sulfur diesel, ethanol, biodiesel, and compressed natural gas). |
| Explain how the public health model calculates change in fatalities and injuries. | The Oregon Health Authority model uses VMT data from GreenSTEP and ODOT safety data for the region as reported in the Metro State of Safety Report (April 2012). |
| Define what is included in the “access to destinations” measure, and include schools in the definition. | No change needed. Metro will use the same categories of destinations included in the Active Transportation Plan. These include: large employers, colleges and high schools, libraries, regional shopping centers, airports, hospitals and major medical centers, regional parks, and major social service sites. |
| Clarify what is included in the measure “access to transit,” e.g., stations or stops versus any part of a transit corridor. | Change as requested. Proximity to HCT stations/stops and Frequent Service bus stops will be used. |

Social Equity Evaluation

| Comment | Recommendation |
|--|--|
| <p>Define how the evaluation will measure potential impacts on disadvantaged communities.</p> | <p>Several evaluation measures have been identified to look at the impacts on vulnerable populations, including low-income households and to the extent possible, communities of color, children, older adults, people with disabilities and households with limited English proficiency. The analysis tools have limitations in that GreenSTEP and MetroScope do not forecast the future population by race or ethnicity, and the results cannot be reported at a community or neighborhood level. GreenSTEP and MetroScope account for household income, which will be a focus of the social equity evaluation. Staff will use a methodology developed for the Regional Flexible Funds process to support the analysis.</p> |
| <p>Clarify what is meant by neighborhood stability and how it will be addressed in the evaluation.</p> | <p>Neighborhood stability was identified in the Equity and Environmental justice Workshop as a priority outcome to measure, particularly as it relates to increased gentrification and displacement pressure on low-income households and communities of color. Gentrification and displacement pressure can occur as housing values increase in a neighborhood in response to public policies and investments.</p> <p>A detailed analysis of neighborhood stability is not possible due to time and resource constraints, and limitations of the Phase 2 analysis tools. However, the evaluation will include collaborating with community leaders working to advance social equity in the region. To the extent possible, this collaboration will help identify areas of potential risk for gentrification and displacement and best practices policies/tools that, if implemented, could limit gentrification and displacement pressure and help reduce existing community disparities.</p> |

NEXT STEPS

The Metro staff recommendations are reflected in the final draft scenario assumptions and evaluation criteria (dated April 22, 2013).

Metro staff will request the Metro Policy Advisory Committee (MPAC), Joint Policy Advisory Committee on Transportation (JPACT) to support moving forward with the evaluation on May 8 and 9, respectively. The Metro Council will provide direction to staff on moving forward with the evaluation on May 21.



DRAFT

April 22, 2013

Shaping our choices for the future

A scenario is an example of what the future might look like based on the choices we make today. The three scenarios presented will be tested in summer 2013. More detailed documentation of the assumptions and analysis methodologies will be prepared during the evaluation process.

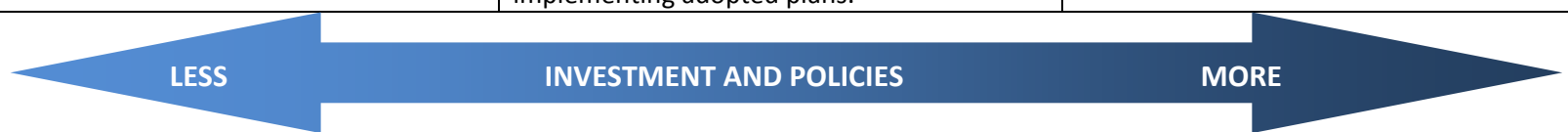
The results of the analysis will be used to stimulate a discussion about our choices for the future and the possible impacts they may have on how we live, travel, work and invest in our communities. Working together, cities, counties and regional partners will decide which elements from each of the three scenarios should go forward into one preferred scenario for the region to adopt in December 2014. Considerations for developing a preferred scenario will include: costs and benefits across public health, environmental, economic and social equity outcomes, financial implications, public support and political will.

NOTE: The scenarios are cumulative and for research purposes. The scenarios do not represent future Metro Council, Oregon Transportation Commission, TriMet or local government policy intentions.

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

WHAT THE FUTURE MIGHT LOOK LIKE IN 2035

| | Scenario A RECENT TRENDS | Scenario B ADOPTED PLANS | Scenario C NEW PLANS AND POLICIES |
|----------------|--|--|---|
| Purpose | This scenario follows recent funding trends and shows the results of implementing adopted plans to the extent possible with existing revenues. | This scenario counters recent funding trends and shows the results of raising additional revenues - as called for in the adopted Regional Transportation Plan – to allow the region to make more progress toward implementing adopted plans. | This scenario shows the results of pursuing new policies, more investment and new revenue sources to more fully achieve adopted and emerging plans. |



FLEET AND TECHNOLOGY ASSUMPTIONS

| | Scenario A RECENT TRENDS | Scenario B ADOPTED PLANS | Scenario C NEW PLANS AND POLICIES | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|-----------------------------|--------------------------------------|----------------------------------|------------------------------|--------------------------------------|----|---|----|--|----|---|----|---|----|--|----|---------------------------------------|----|---|-----|--|-----|---|------|--|---|
| Fleet and technology | Target rulemaking assumptions will be used for all three scenarios. <table border="1" style="margin: 10px auto; width: 80%;"> <thead> <tr> <th style="background-color: #d3d3d3;">Vehicle and Fuel Characteristics</th> <th style="background-color: #d3d3d3;">Target Rulemaking Assumption</th> </tr> </thead> <tbody> <tr><td>Auto fuel economy (miles per gallon)</td><td>68</td></tr> <tr><td>Light truck fuel economy (miles per gallon)</td><td>48</td></tr> <tr><td>Auto fuel economy—plug-in hybrids in charge sustaining mode (miles per gallon)</td><td>81</td></tr> <tr><td>Light truck fuel economy—plug-in hybrids in charge sustaining mode (miles per gallon)</td><td>56</td></tr> <tr><td>Proportion of autos that are plug-in hybrids or electric vehicles</td><td>8%</td></tr> <tr><td>Proportion of light trucks that are plug-in hybrids or electric vehicles</td><td>2%</td></tr> <tr><td>Plug-in hybrids battery range (miles)</td><td>35</td></tr> <tr><td>Electric vehicles battery range: auto and light truck (miles)</td><td>175</td></tr> <tr><td>% reduction in fuel carbon intensity from current levels</td><td>20%</td></tr> <tr><td>Electric power sources compared to current Renewable Portfolio Standard</td><td>Meet</td></tr> <tr><td>Average vehicle replacement rate (years)</td><td>8</td></tr> </tbody> </table> | | | Vehicle and Fuel Characteristics | Target Rulemaking Assumption | Auto fuel economy (miles per gallon) | 68 | Light truck fuel economy (miles per gallon) | 48 | Auto fuel economy—plug-in hybrids in charge sustaining mode (miles per gallon) | 81 | Light truck fuel economy—plug-in hybrids in charge sustaining mode (miles per gallon) | 56 | Proportion of autos that are plug-in hybrids or electric vehicles | 8% | Proportion of light trucks that are plug-in hybrids or electric vehicles | 2% | Plug-in hybrids battery range (miles) | 35 | Electric vehicles battery range: auto and light truck (miles) | 175 | % reduction in fuel carbon intensity from current levels | 20% | Electric power sources compared to current Renewable Portfolio Standard | Meet | Average vehicle replacement rate (years) | 8 |
| Vehicle and Fuel Characteristics | Target Rulemaking Assumption | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Auto fuel economy (miles per gallon) | 68 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Light truck fuel economy (miles per gallon) | 48 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Auto fuel economy—plug-in hybrids in charge sustaining mode (miles per gallon) | 81 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Light truck fuel economy—plug-in hybrids in charge sustaining mode (miles per gallon) | 56 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Proportion of autos that are plug-in hybrids or electric vehicles | 8% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Proportion of light trucks that are plug-in hybrids or electric vehicles | 2% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Plug-in hybrids battery range (miles) | 35 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Electric vehicles battery range: auto and light truck (miles) | 175 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| % reduction in fuel carbon intensity from current levels | 20% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Electric power sources compared to current Renewable Portfolio Standard | Meet | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Average vehicle replacement rate (years) | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | |

LAND USE ASSUMPTIONS

| | Scenario A RECENT TRENDS | Scenario B ADOPTED PLANS | Scenario C NEW PLANS AND POLICIES |
|----------------------------------|--|-----------------------------|--------------------------------------|
| Land use plans and zoning | Local land use plans and zoning as adopted by cities and counties for downtowns, main streets and employment areas will be the same for all three scenarios. The Southwest Corridor Plan land use vision will be incorporated into Scenario C. | | |

TRANSPORTATION ASSUMPTIONS

| | Scenario A RECENT TRENDS | Scenario B ADOPTED PLANS | Scenario C NEW PLANS AND POLICIES |
|-----------------------------|--|--|--|
| Streets and highways | Operations and maintenance <ul style="list-style-type: none"> Fall behind on fixing potholes and repairs Implement 50% of regional TSMO strategic plan to achieve 10% delay reduction Capital <ul style="list-style-type: none"> I-5 Bridge Replacement 2016-18 STIP and MTIP projects | Operations and maintenance <ul style="list-style-type: none"> Keep up with fixing potholes and repairs Implement full regional TSMO strategic plan to achieve 20% delay reduction Capital <ul style="list-style-type: none"> Adopted Financially Constrained RTP including: I-5 Bridge Replacement, Sunrise Project from I-205 to 172nd Avenue, US 26 widened to 6 through lanes to Cornelius Pass Road and interchange improvements at US 26, OR 217, I-205, and Troutdale/I-84 | Operations and maintenance <ul style="list-style-type: none"> Keep up with fixing potholes and repairs Expanded TSMO strategic plan achieves 35% delay reduction Capital <ul style="list-style-type: none"> State RTP project list, including interchange improvements at I-5/OR 217 interchange (Phase 2) and I-84/I-5 |



See reverse for more information




WHAT THE FUTURE MIGHT LOOK LIKE IN 2035

| | Scenario A RECENT TRENDS | Scenario B ADOPTED PLANS | Scenario C NEW PLANS AND POLICIES |
|----------------|--|--|---|
| Purpose | This scenario follows recent funding trends and shows the results of implementing adopted plans to the extent possible with existing revenues. | This scenario counters recent funding trends and shows the results of raising additional revenues - as called for in the adopted Regional Transportation Plan – to allow the region to make more progress toward implementing adopted plans. | This scenario shows the results of pursuing new policies, more investment and new revenue sources to more fully achieve adopted and emerging plans. |


TRANSPORTATION ASSUMPTIONS (CONTINUED)

| | Scenario A RECENT TRENDS | Scenario B ADOPTED PLANS | Scenario C NEW PLANS AND POLICIES |
|--|---|--|---|
| Transit  | <p>Operations and maintenance</p> <ul style="list-style-type: none"> Maintain existing TriMet service with small increases targeted to address overcrowding and delays due to congestion Implement SMART and C-TRAN plans <p>Capital</p> <ul style="list-style-type: none"> Extend MAX to Milwaukie Extend MAX to Vancouver, WA Complete Portland streetcar loop | <p>Operations and maintenance</p> <ul style="list-style-type: none"> Restore and expand frequent bus service in priority corridors, consistent with Service Enhancement Plans <p>Capital</p> <ul style="list-style-type: none"> Streetcar extension along priority corridors Additional transit priority and pedestrian/bike access to transit projects | <p>Operations and maintenance</p> <ul style="list-style-type: none"> Expand frequent bus service coverage to all major arterials with supporting land use connecting regional and town centers, consistent with TriMet Service Enhancement Plans Expand local bus service coverage and connections to frequent bus service and high capacity transit, consistent with TriMet Service Enhancement Plans <p>Capital</p> <ul style="list-style-type: none"> Cascadia rail connections to Eugene, Salem and Vancouver B.C. High capacity transit: Southwest Corridor, AmberGlen and Oregon City WES service frequency improvements and extension to Salem Bus rapid transit serving Powell/Division, I-205 and Tualatin-Valley Highway corridors Other Portland streetcar extensions Additional transit priority and pedestrian/bike access to transit projects |
| Bike and pedestrian  | <ul style="list-style-type: none"> Complete 2016-18 STIP and MTIP projects, as investments are limited to improving access to transit with no dedicated funding | <ul style="list-style-type: none"> Complete adopted RTP bike and pedestrian projects | <ul style="list-style-type: none"> Complete 100% of regional bike and pedestrian networks as identified in the Regional Active Transportation Plan, including regional trails, further targeting short trips and access to transit and centers |

EDUCATION AND INCENTIVES ASSUMPTIONS








| | Scenario A RECENT TRENDS | Scenario B ADOPTED PLANS | Scenario C NEW PLANS AND POLICIES |
|---|---|---|--|
| Education and incentives  | <ul style="list-style-type: none"> 30% of households practice ecodriving and participate in travel options programs 20% of employees participate in commute programs 4% of households participate in car-sharing 20% of vehicle owners use pay-as-you-drive insurance | <ul style="list-style-type: none"> 30% of households practice ecodriving and participate in travel options programs 20% of employees participate in commute programs 4% of households participate in car-sharing 40% of vehicle owners use pay-as-you-drive insurance | <ul style="list-style-type: none"> 60% of households practice ecodriving and participate in travel options programs 40% of employees participate in commute programs 4% of households participate in car-sharing 100% of vehicle owners use pay-as-you-drive insurance |

PRICING ASSUMPTIONS

| | Scenario A RECENT TRENDS | Scenario B ADOPTED PLANS | Scenario C NEW PLANS AND POLICIES |
|--|---|---|--|
| Pricing  | <p>Existing revenues at 2012 levels</p> <p>Fuel use and emissions fees</p> <ul style="list-style-type: none"> Federal gas tax = 18 cents/gallon State gas tax = 30 cents/gallon Local gas tax = 1-2 cents/gallon <p>Vehicle travel fees</p> <ul style="list-style-type: none"> I-5 Bridge toll <p>Other transportation fees</p> <ul style="list-style-type: none"> Payroll tax and farebox recovery Parking fees in downtown Portland, OHSU campus and the Lloyd district Other federal, state and local revenues at existing levels | <p>Revenues assumed to fund adopted RTP</p> <p>Fuel use and emissions fees</p> <ul style="list-style-type: none"> Federal gas tax = 18 cents/gallon State gas tax = 55 cents/gallon Local gas tax = 1-2 cents/gallon <p>Vehicle travel fees</p> <ul style="list-style-type: none"> I-5 Bridge toll <p>Other transportation fees</p> <ul style="list-style-type: none"> Payroll tax and farebox recovery Parking fees in more locations served by high capacity transit Other federal, state and local revenues at RTP levels | <p>New and expanded revenues at levels needed to fund investments</p> <p>Fuel use and emissions fees</p> <ul style="list-style-type: none"> Federal gas tax = 18 cents/gallon Carbon fee = \$20-50/ton Local gas tax = 1-2 cents/gallon <p>Vehicle travel fees</p> <ul style="list-style-type: none"> I-5 Bridge toll VMT fee = \$.03-.15/mile <p>Other transportation fees</p> <ul style="list-style-type: none"> Payroll tax and farebox recovery Parking fees in new locations served by high capacity transit and frequent bus service Other federal, state and local revenues at RTP levels |



Phase 2 Evaluation Framework and Criteria

| Evaluation criteria | Questions to answer | Evaluation measure | Estimation Method/Tool |
|---|--|--|---|
|  Jobs and housing | <i>How will our choices affect where we work and live?</i> | Number and distribution of housing (by type, cost and location) | MetroScope output |
| | | Number and distribution of jobs (by type and location) | MetroScope output |
| | | Housing and job growth captured inside urban growth boundary compared to growth captured in nearby areas | MetroScope output |
| | | Employment access and proximity to labor markets | MetroScope output and ArcGIS |
| | | Employment land in proximity to key transportation corridors (Land zoned for employment use in proximity to major transportation corridors) | MetroScope output and ArcGIS |
| | | Access to destinations (households within .5-mile distance of large employment centers, colleges and high schools, libraries, regional shopping centers, airports, hospitals, major medical centers, parks, and major social service sites by income group, race and ethnicity, and age) | MetroScope output and ArcGIS |
|  Cost and the Economy | <i>What will our choices cost and how will they affect public sector and household budgets, and the economic competitiveness of businesses and industry in the region?</i> | Transportation infrastructure costs (capital and operations) | GreenSTEP output |
| | | Other public/private infrastructure costs | GreenSTEP/MetroScope output |
| | | Social costs per capita and by income group (e.g., combined cost of travel delay, climate change damage and adaptation, energy security, air and noise pollution, crash costs to non-drivers and other environmental impacts) | GreenSTEP output |
| | | Household cost burden - Housing and transportation costs combined per household by income group (total and as a percent of income by income group) | MetroScope and GreenSTEP outputs |
| | | Freight truck travel delay costs | GreenSTEP output |
| | | Transportation revenues per capita and by income group | GreenSTEP output |
|  Travel | <i>How will our choices affect how we get around?</i> | Vehicle miles traveled per capita | GreenSTEP output |
| | | Vehicle delay per capita | GreenSTEP output |
| | | Transit service per capita (revenue miles) | GreenSTEP output |
| | | Access to transit (households and jobs within .5-mile distance of high capacity transit stations/stops and .25-mile distance of frequent bus stops by income group, race and ethnicity, and age) | MetroScope output and ArcGIS |
| | | Average commute trip length | MetroScope output |
|  Energy consumption and GHG emissions | <i>How will our choices affect climate change and energy security?</i> | GHG emissions per capita | GreenSTEP output |
| | | Fuel consumption (region-wide) (petroleum-based, liquid and gaseous fuels consumed in light vehicle engines) | GreenSTEP output |
|  Natural resources | <i>How will our choices affect air quality, water supplies and farms, forestland and natural areas?</i> | Criteria pollutant emissions | GreenSTEP output |
| | | Land consumed for development | MetroScope output |
| | | Residential water consumption | GreenSTEP output |
|  Public health | <i>How will our choices affect our health?</i> | Physical activity per capita (walk trips and bike miles) | GreenSTEP and public health model outputs |
| | | Chronic illness (obesity, diabetes, asthma) | Public health model output |
| | | Traffic safety (change in fatalities and injuries) | Public health model output |
|  Feasibility | <i>What choices can we afford, what choices are feasible and how do we implement our choices in an equitable and cost-effective manner?</i> | Financial, legal, legislative or regulatory barriers for implementation | Qualitative assessment |
| | | Political or public acceptability | Qualitative assessment |
| | | Institutional capacity for implementation and long-term "ownership" | Qualitative assessment |
| | | Policy tools to support neighborhood stability and reduce existing community disparities during implementation | Qualitative assessment and ArcGIS |

Highlighted evaluation measures can be measured across population groups (e.g., income, age and ethnicity) to identify whether disproportionate impacts may occur to vulnerable populations in the region. Vulnerable populations are defined to include: low-income households, communities of color, older adults, children, households with limited english proficiency and people with disabilities.

SPRING 2013

CLIMATE SMART COMMUNITIES SCENARIOS PROJECT



COMMUNITY CASE STUDY SERIES

This case study showcases actions that communities in the Portland metropolitan region are already taking to help reduce greenhouse gas emissions from cars and small trucks.

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.



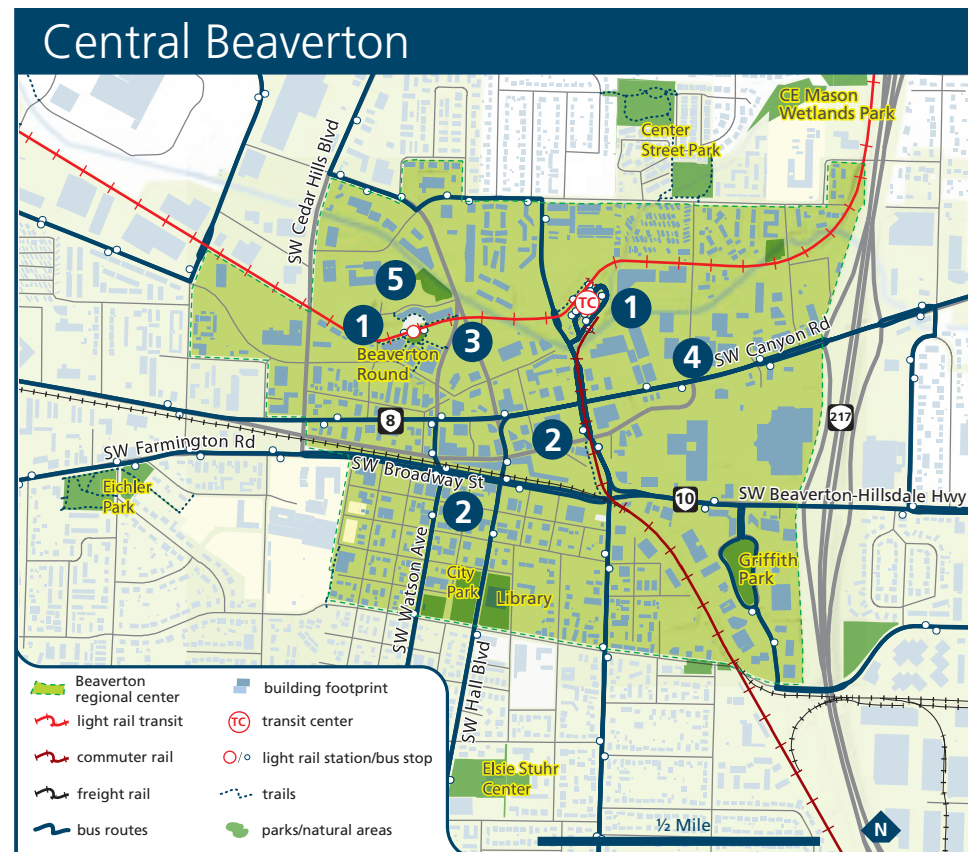
The Oregon Legislature has required the Portland metropolitan region to reduce per capita greenhouse gas emissions from cars and small trucks by 2035.



www.oregonmetro.gov/climatescenarios

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.



1 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

2 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 low-traffic 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.

3 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.

4 Transforming 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 pedestrian-friendly and more attractive for development. Key investments identified to transform the corridor include:

- safer pedestrian and bicycle crossings at key intersections
- sidewalk improvements, landscaping, transit stop improvements, pedestrian-scale lighting and stormwater treatment facilities
- an off-Canyon Road bicycle boulevard network, providing parallel routes for biking
- new street connections to provide multiple routes for travel.

5 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

| 2010 | 2011 | 2012 | 2015-2020 | 2020-2040 |
|---|---|--|---|--|
| Beaverton Community Vision calls for creating a vibrant downtown and improving mobility | Beaverton Civic Plan emphasizes greater connectivity, economic opportunity, and environmental sustainability Voters adopt \$150 million Beaverton Urban Renewal Plan | \$1 million HUD Sustainable Communities Challenge Grant awarded to help implement Beaverton Civic Plan | Improvements made to Canyon Road streetscape and downtown creek, park and plaza Off-Canyon Road bicycle boulevard network launched | Completion of the Beaverton Urban Renewal Plan projects attracts business and housing, improves traffic flow and public safety, and spurs private investment |



Regional partner

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



Climate benefits

| | |
|------------------------------|-----------|
| 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.

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

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.

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.

Stay in touch with news, stories and things to do.

www.oregonmetro.gov/connect

Metro Council President

Tom Hughes

Metro Councilors

Shirley Craddock, District 1
 Carlotta Collette, District 2
 Craig Dirksen, District 3
 Kathryn Harrington, District 4
 Sam Chase, District 5
 Bob Stacey, District 6

Auditor

Suzanne Flynn

SPRING 2013

CLIMATE SMART COMMUNITIES SCENARIOS PROJECT



COMMUNITY CASE STUDY SERIES

This case study showcases actions that communities in the Portland metropolitan region are already taking to help reduce greenhouse gas emissions from cars and small trucks.

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

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

Hillsboro

Community case study

Addressing greenhouse gas emissions with 21st century technology

Home 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.



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

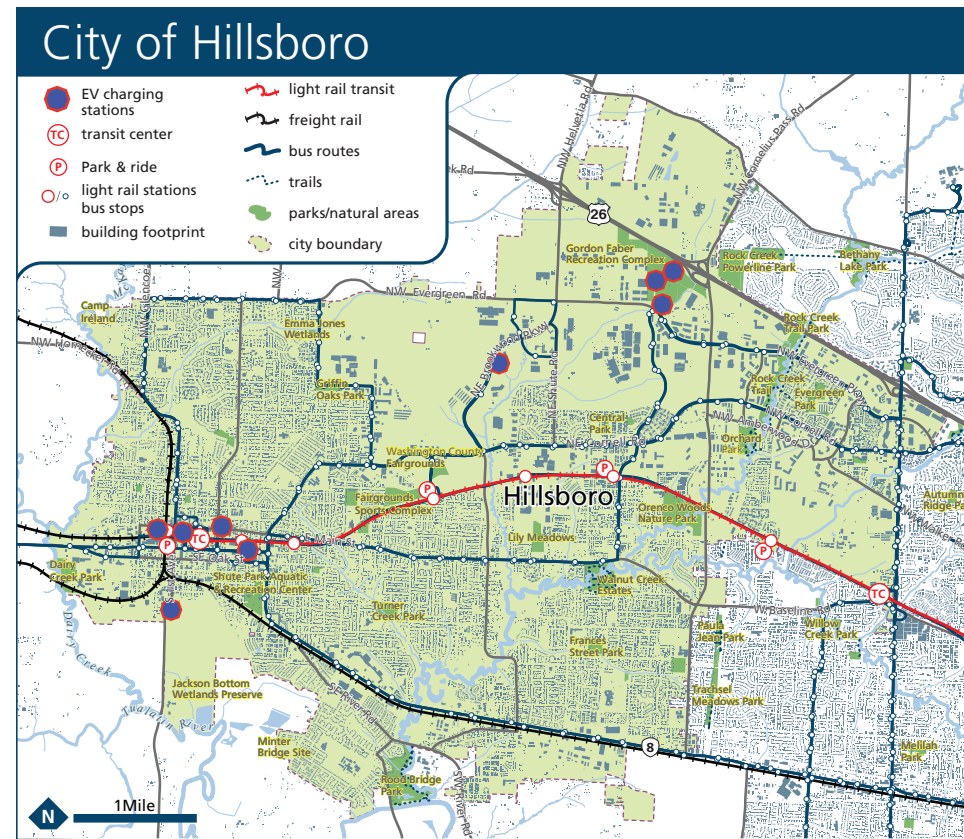


www.oregonmetro.gov/climatescenarios

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 five-year 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.



Timeline

| 2009 | 2010 | 2011 | 2012 | 2013 |
|--|---|--|--|--|
| Hillsboro installed the first of 35 electric vehicle charging stations in the downtown area next to the Civic Center | 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 Additional Level II electric vehicle chargers installed Hillsboro purchased its first electric vehicle complementing the city's existing fleet of alternative fuel vehicles | 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, Hillsboro proposed a GoPoint Mobility Hub concept at light rail stations which included installation of EV charging stations to better connect neighborhoods and employment centers with more travel choices |

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.

2 Diversifying fleet mix

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.

3 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.





Regional partner

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



Climate benefits

| | |
|---------------------------------------|-----------|
| Vehicle technologies and fuels | ★ ★ ★ ★ ★ |
| Fleet mix | ★ ★ ★ ☆ ☆ |
| Traffic management | ★ ★ ★ ☆ ☆ |

These greenhouse gas emissions reduction strategies are an important part of what the City of Hillsboro 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

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.

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.

Stay in touch with news, stories and things to do.

www.oregonmetro.gov/connect

Metro Council President

Tom Hughes

Metro Councilors

Shirley Craddick, District 1
 Carlotta Collette, District 2
 Craig Dirksen, District 3
 Kathryn Harrington, District 4
 Sam Chase, District 5
 Bob Stacey, District 6

Auditor

Suzanne Flynn

SPRING 2013

CLIMATE SMART COMMUNITIES SCENARIOS PROJECT



COMMUNITY CASE STUDY SERIES

This case study showcases actions that communities in the Portland metropolitan region are already taking to help reduce greenhouse gas emissions from cars and small trucks.

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

- 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.



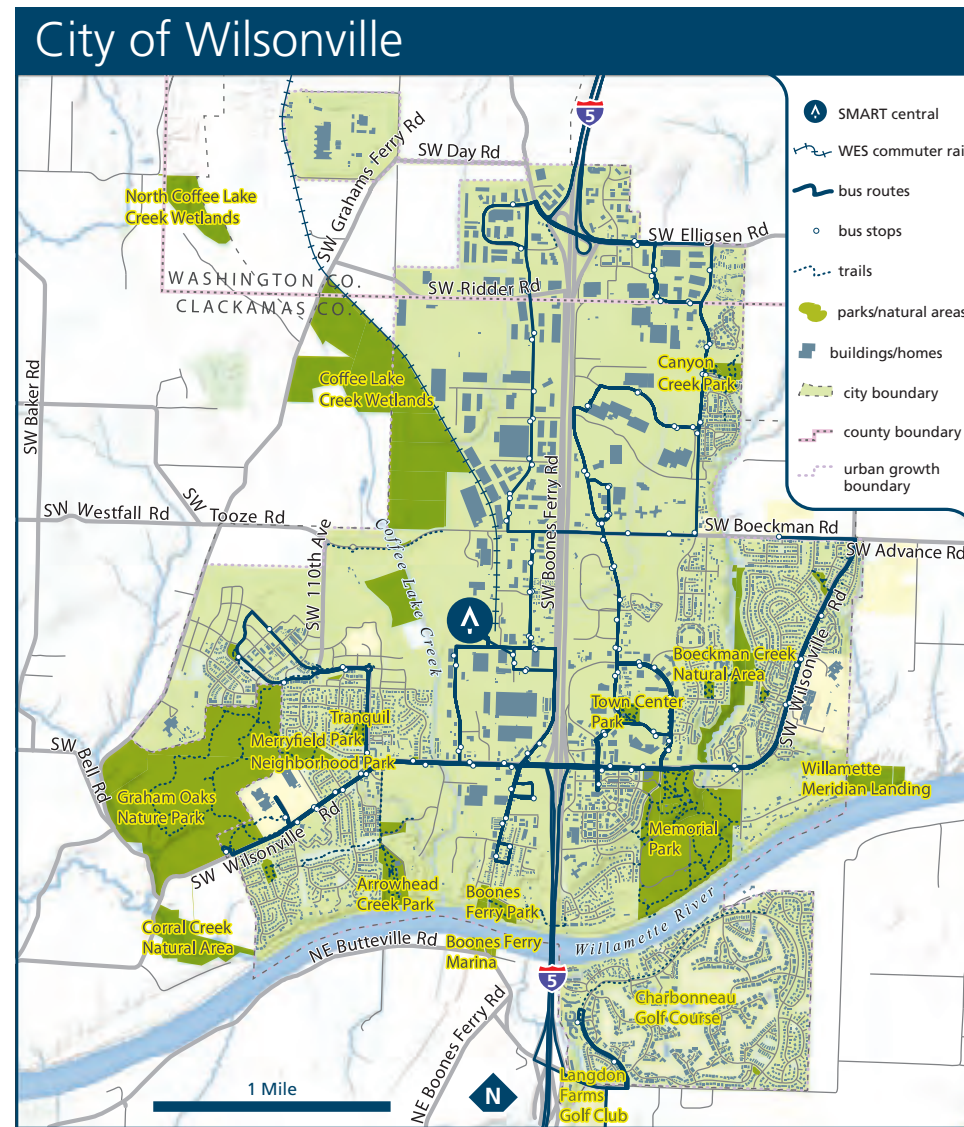
The Oregon Legislature has required the Portland metropolitan region to reduce per capita greenhouse gas emissions from cars and small trucks by 2035.



www.oregonmetro.gov/climatescenarios

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.



1 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 door-to-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 self-propelled 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.

2 Expanding commuter 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 city-sponsored events and pre-scheduled senior lunches, shopping, and other trips.

3 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.

4 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.

5 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

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.



Timeline

| 1988 | 1997 | 2002 | 2009 | 2013 |
|---|---|---|--|---|
| 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 | 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 | SMART moves into brand new operations and fleet facility located near SMART Central Station |



Regional partners

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



Climate benefits

| | |
|----------------------------------|-----------|
| 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.

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.

Stay in touch with news, stories and things to do.

www.oregonmetro.gov/connect

Metro Council President

Tom Hughes

Metro Councilors

Shirley Craddick, District 1
 Carlotta Collette, District 2
 Craig Dirksen, District 3
 Kathryn Harrington, District 4
 Sam Chase, District 5
 Bob Stacey, District 6

Auditor

Suzanne Flynn

Materials following this page were distributed at the meeting.

Phase 2 Investment Choices Evaluation

Metro Technical Advisory Committee

May 1, 2013

Kim Ellis, project manager



Climate Smart Communities Scenarios Project

- Working together with city, county, state, business and community leaders
- Researching how land use and transportation strategies can be leveraged to
 - meet state targets for reducing carbon emissions
 - create great communities
- Required by Oregon law



Community case studies

- First 3 of 8 in a series
- Showcase actions communities are already taking that reduce GHG emissions
- All to be completed in May

SPRING 2013

CLIMATE SMART COMMUNITIES SCENARIOS PROJECT

COMMUNITY CASE STUDY SERIES

This case study showcases actions that communities in the Portland metropolitan region are already taking to help reduce greenhouse gas emissions from cars and small trucks.

This case of eight is a series developed for the Climate Smart Communities Scenario Project.

- Beaverton
- Clatsop County
- Gateway (Portland)
- Hillsboro
- Multnomah (Hillsboro)
- Willamette
- Transport-based commuter programs
- Neighborhood-based travel options



Beaverton Community case study

Beaverton builds economic opportunity

Beaverton is revitalizing its downtown with targeted investments and partnerships to create jobs and economic development. Investments include:

- Major transportation corridors (downtown, 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 threaten the vibrancy of the area.

Old town, south of Farmington Road, offers a well-connected street grid and historic buildings with small business and pedestrian-oriented retail. The Beaverton Central Library, Beaverton City Park and the Beaverton Farmers Market are gathering places that serve nearby neighborhood 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 (downtown, 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 threaten the vibrancy of the area.

Strategies

- Mixed-use development
- Active transportation
- Traffic management

www.oregonmetro.gov/climatescenarios

SPRING 2013

CLIMATE SMART COMMUNITIES SCENARIOS PROJECT

COMMUNITY CASE STUDY SERIES

This case study showcases actions that communities in the Portland metropolitan region are already taking to help reduce greenhouse gas emissions from cars and small trucks.

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

- Beaverton
- Clatsop County
- Gateway (Portland)
- Hillsboro
- Multnomah (Hillsboro)
- Willamette
- Employer-based commuter programs
- Neighborhood-based travel options



Hillsboro Community case study

Addressing greenhouse gas emissions with 21st century technology

Home to more than 90,000 residents, host to thousands 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 (2050) 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).

The case study highlights accomplishments and challenges to address 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.

Strategies

- Vehicle technologies and fuels
- Fleet mix
- Traffic management

www.oregonmetro.gov/climatescenarios

SPRING 2013

CLIMATE SMART COMMUNITIES SCENARIOS PROJECT

COMMUNITY CASE STUDY SERIES

This case study showcases actions that communities in the Portland metropolitan region are already taking to help reduce greenhouse gas emissions from cars and small trucks.

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

- Beaverton
- Clatsop County
- Gateway (Portland)
- Hillsboro
- Multnomah (Hillsboro)
- Willamette
- Employer-based commuter programs
- Neighborhood-based travel options



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 WES (Westside Express 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 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 from 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.
- Many percent of the employees working in the city live in other communities.

Strategies

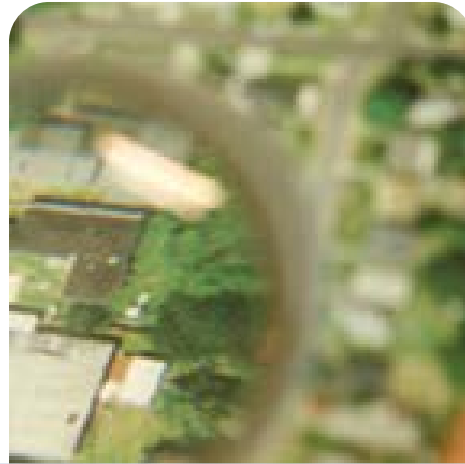
- Transit
- Active transportation
- Employer-based commuter programs
- Public education and marketing

www.oregonmetro.gov/climatescenarios

Opt In survey results

- **Climate efforts:** Most feel not enough is being done and that it is important to reduce GHG emissions.
- **Largest impact:** Faster and more frequent public transportation service would have the largest impact on reducing the amount participants drive.
- **Most valued:** **(1)** protection of farms, forests and natural areas, **(2)** reduction of air pollution, **(3)** more transportation choices and **(4)** long-term jobs created and retained closer to where people live.
- **Top spending priorities:** **(1)** increasing the coverage, frequency and reliability of public transportation, and **(2)** fixing potholes, repairing roads and improving traffic flow and **(3)** connecting more places with sidewalks and bikeways.

Phase 2 Evaluation Framework



SCENARIOS TO TEST

Recent trends
Adopted plans
New plans
and policies

QUESTIONS TO ANSWER

Cost? What can we afford? Most cost-effective? Impact on public health, economy, business, social equity and the environment? Public support? Feasibility?

OUTCOMES TO MEASURE

VMT, physical activity, delay, GHG emissions, air pollution, land consumption, housing and transportation costs by income, infrastructure costs, etc.

Phase 2 investment choices

A

RECENT TRENDS

This scenario follows recent funding trends and will show the results of implementing adopted plans to the extent possible with existing revenue.

B

ADOPTED PLANS

This scenario counters recent funding trends and will show the results of raising additional revenues – as called for in the RTP – to allow the region to make more progress toward implementing adopted plans.

C

NEW PLANS AND POLICIES

This scenario will show the results of pursuing new policies, more investment and new revenue sources to more fully achieve adopted and emerging plans.

Phase 2 evaluation criteria



Jobs and housing



Economy



Cost



Travel



Energy and GHG emissions



Natural resources



Public health

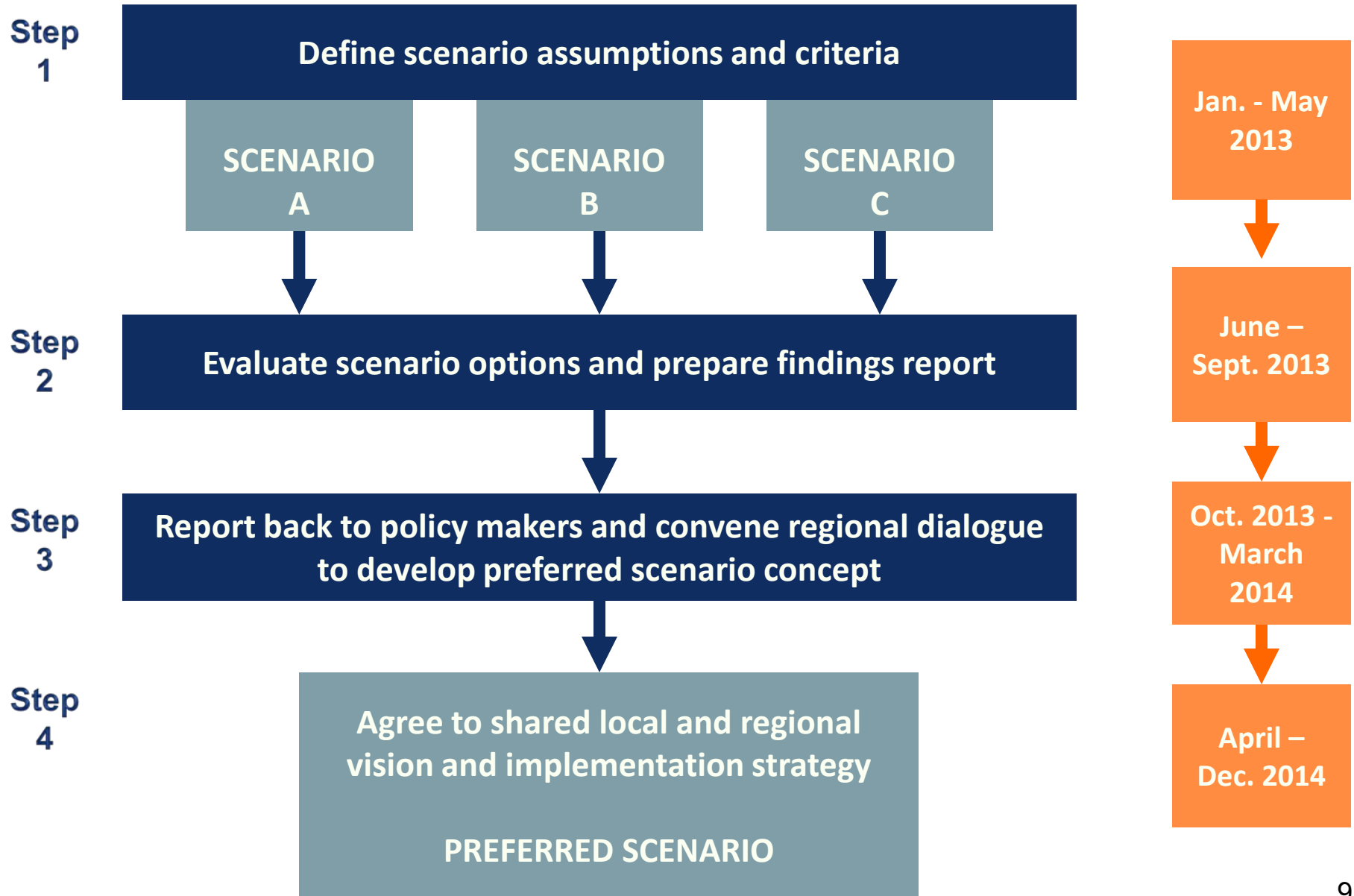


Feasibility

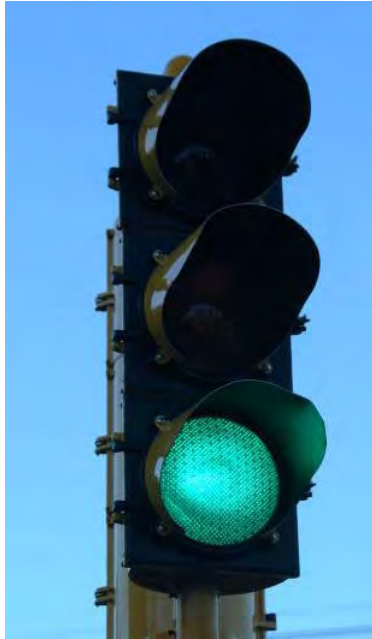


Social equity

Process moving forward



Action requested



Recommendation to MPAC to support moving forward with the Phase 2 evaluation and report back in October

Audience and Date

Community Investment Initiative: Development-Ready Communities Pilot Program

Challenge

- Inability to maximize the development potential of our urban land inventory
 - Developers perceive regulatory barriers, making existing land unattractive and/or financially unfeasible
 - Time uncertainty
 - Process/outcome uncertainty

Lack of "development ready land"

Cost of doing nothing

- Persistent uncertainty in the development process, real or perceived, results in
 - Inability to attract development and the associated benefits
 - Increased pressure to expand the urban growth boundary and associated costs

Failure to fully realize value of existing infrastructure investments

Development-Readiness Pilot Program

- Assess the potential for a program to assist communities in maximizing their economic development potential.
 - Aligning building codes, zoning capacity, permitting, public engagement processes, staff capacity, and financial tools to help jurisdictions achieve local development goals

Deliver more certainty at the local level

Why we are here

- Inform MTAC of the progress of the pilot program and preliminary findings
- Seek feedback on how to make the program more useful and attractive to its intended users: jurisdictions

Project Background

- The CII Development-Readiness Implementation group
 - Public and Private sector development professionals
- Created draft tool and process based on
 - Other models from around the country (Esp. MI)
 - Expertise of DRC members
 - Expertise of Metro planning and development staff
 - Engagement with MTAC, MPAC, Metro Council
- Worked with consulting team to develop pilot tool and process through engagement with
 - Partner Jurisdictions
 - Survey of development community
 - Interviews with non-profit development community

The Pilot Program Process

1. Select pilot jurisdiction from volunteer communities
2. Work with jurisdiction to ensure commitment from local leadership
3. Familiarize staff with the assessment tool
4. Meet with staff to complete assessment tool
5. Follow up with staff to ensure clear communication
6. Deliver results
 - Program recommendations
 - Opportunities for jurisdiction

The Diagnostic Tool

Focused on issues at the jurisdictional level

1. Land availability and site readiness
 - Ensure sufficient availability of land
 - Identification and marketing of opportunity sites
2. Development culture and customer service
 - Encouraging inter- and intra-departmental efficiency
 - Procedures for ensuring/increasing predictability and staff responsiveness during permitting
 - Regular/ongoing efforts to improve permitting process

The Diagnostic Tool

3. Regulatory environment
 - Development regulation reflects identified long term and short term development goals
 - Balance of predictability and flexibility

4. Development fees and incentives
 - Readily available and accurate information
 - Availability and marketing of incentives

The Diagnostic Tool

5. Outreach and Engagement
 - Actively informs public about development process and provides multiple avenues for feedback
 - Actively informs developers about community development vision, opportunity sites, incentives, and development process

6. Innovation/Other
 - Evidence of innovation or best practices employed but not addressed in other areas

The Diagnostic Tool

7. Development Statistics/Benchmarking
 - Approval times
 - Staff capacity: work load demand
 - Tracking permit/development activity

8. Goals
 - Setting goals based on diagnostic outcomes

Findings: Refining the Diagnostic Tool

Overall:

- Comprehensive and valuable
- Tool less useful than conversation
- Developer emphasis: Development culture and customer service

Easier to fix:

- Avoid ALL HR issues
- Put Outreach and Engagement somewhere besides last
- Development statistics not practical (though a good idea)

Harder to fix:

- Where is the practical midpoint between comprehensive and specific?

Findings: Oregon City Program

- Strength: Do a little with a lot
- Focus on:
 - Customer service training
 - Goals and policies to support efficiency and readiness
 - Vision

Findings: Program Development

- Incentives will help
- “Vision” is an important issue
- Context sensitive process
- Needs both public and ‘quiet’ components
- Include direct customer feedback component
- Additional refinement needed

Program administrator and tailored process will be critical to success

Preliminary Recommendations: Program Development

Possible program format:

1. Use diagnostic for goal setting
2. Develop work program
3. Provide support throughout implementation and track success

Questions:

- Incentives? Payment? Both?
- Graduation or certification?
- Self-evaluation or third party?

Discussion

- What would make this more appealing?
- What would stop you from participating?
- Facilitated self-eval or 3rd party review?
- Would you ever pay?
- To certify or not to certify?