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Metro | *Agenda*

Meeting: Transportation Policy Alternatives Committee (TPAC)
Date: Friday, March 22, 2013
Time: 9:30 a.m. to 12 p.m. (noon)
Place: Metro, Council Chamber

9:30 AM	**1.**		**Call to Order and Declaration of a Quorum**	**Elissa Gertler, Chair**
9:35 AM	**2.**		**Comments from the Chair and Committee Members**	
9:40 AM	**3.**		**Citizen Communications to TPAC Agenda Items**	
9: 45 AM	**4.**	#	**Consideration of the TPAC Minutes for March 1, 2013**	
9:55 AM	**5.**	*	2013-15 Unified Planning Work Program – INFORMATION/DISCUSSION • *Purpose*: Seek TPAC input on draft UPWP. • *Outcome*: Finalize draft UPWP for adoption at April 26 TPAC meeting.	**Josh Naramore, Metro**
10:05 AM	**6.**	*	Climate Smart Communities: Health Impact Assessment – INFORMATION/DISCUSSION • *Outcome*: TPAC members understand the public health impacts of strategies tested in Phase 1 and how the HIA implications and recommendations shape evaluation of scenarios moving forward.	**Andrea Hamburg, OHA** **Kim Ellis, Metro**
10:35 AM	**7.**	*	Climate Smart Communities Scenarios Project: Investment Choices Assumptions - DISCUSSION • *Purpose:* Continue discussion of draft assumptions to be tested. • *Outcome:* TPAC members provide input on the draft assumptions.	**Kim Ellis, Metro**
11:45 AM	**8.**		**ADJOURN**	**Elissa Gertler, Chair**

* Material available electronically.
** Material will be distributed in advance of the meeting.
# Material will be distributed at the meeting.

For agenda and schedule information, call Kelsey Newell at 503-797-1916, e-mail: kelsey.newell@oregonmetro.gov.
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2013 TPAC Work Program
3/22/13

March 1, 2013 – Regular Meeting • Household Travel Survey – Information • Climate Smart Communities Scenarios project – Discussion on Investment Choices • Presentation of Projects Requested by ODOT for Amendment into the Regional Transportation Plan – Information	**March 22, 2013 – Regular Meeting** • Climate Smart Communities – Health Impact Assessments • Climate Smart Communities Scenarios project: presentation on the scorecard workshops – Information/discussion
April 26, 2013 – Regular Meeting • Transportation Alternatives Program (TAP) funding administration • 2035 RTP Amendments – Recommendation to JPACT Requested • Transit funding and the MTIP Process – Discussion • 2013-15 UPWP and MPO self-certification – Adoption requested	**May 31, 2013 – Regular Meeting** • Regional Active Transportation Plan: final plan – Information • 2014 Regional Transportation Plan update – Information
June 28, 2013 – Regular Meeting • RFFA Step 1 Region-wide Programs - Information • STS vision findings and recommendationsInformation	**July 19, 2013 – Regular Meeting** • STIP Enhance Committee process
Aug. 30, 2013 – Regular Meeting • RFFA project narrowing process	**Sept. 27, 2013 – Regular Meeting**
Oct. 25, 2013 – Regular Meeting	**Nov. 22, 2013 – Regular Meeting**

Parking Lot:

- Metropolitan Planning Area boundary update
- Travel model update
- Streetcar Methods
- Portland Metropolitan Scenario Planning Rule update

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Metro | *Memo*

Date: March 14, 2013

To: TPAC members and interested parties

From: Josh Naramore, Senior Transportation Planner

Subject: FY 2013-15 Unified Planning Work Program (UPWP): Review and Comments

Background

The Unified Planning Work Program (UPWP) is developed annually by Metro as the Metropolitan Planning Organization for the Portland Metropolitan Area. It is a federally-required document that serves as a guide for transportation planning activities to be conducted over the course of each fiscal year, beginning on July 1st. Included in the UPWP are detailed descriptions of the transportation planning tasks, listings of various activities, and a summary of the amount and source of state and federal funds to be used for planning activities. The UPWP is developed by Metro with input from local governments, TriMet, ODOT, FHWA and FTA. Additionally, Metro must annually undergo a process known as self-certification to demonstrate that the Portland Metropolitan region's planning process is being conducted in accordance with all applicable federal transportation planning requirements. Self-certification is conducted in conjunction with annual adoption of the UPWP.

2013-15 UPWP

Metro has developed a two-year UPWP document for fiscal years (FY) 2013-14 and 2014-15. A new UPWP document will be developed every other year. In the interim years, Metro staff will take through a comprehensive list of updates and amendments through TPAC, JPACT and Metro Council. The interim updates and amendments will be packaged with annual MPO self-certification to ensure compliance with federal transportation planning requirements. At the March 22 TPAC meeting, Metro staff will be seeking comments on the document. Action on the 2013-15 UPWP is scheduled for the April 26 TPAC meeting.

Next Steps

Metro staff has received comments on the draft UPWP from FHWA and FTA. Comments from TPAC members are due **April 5**. Below is a timeline for the 2013-15 UPWP adoption and self-certification process:

February 6, 2013	FY 2013-15 UPWP draft submitted for federal, state and TPAC review.
February 20, 2013	Reviewed draft FY 2013-15 UPWP with federal and state partners at 9am at MRC.
March 22, 2013	TPAC review and comments on draft FY 2013-15 UPWP.
April 5, 2013	Deadline for comments from TPAC and interested parties on the draft FY 2013-15 UPWP.

April 26, 2012	TPAC final review and recommendation of FY 2013-15 UPWP and MPO self-certification to JPACT for adoption.
May 9, 2012	JPACT and Metro Council review and adoption of FY 2013-15 UPWP and MPO self-certification

To submit questions, comments, ore request and additional information, contact Josh Naramore at 503-797-1825 or joshua.naramore@oregonmetro.gov.

CLICK HERE FOR FULL FY 2013-15 UNIFIED PLANNING WORK PROGRAM

Exhibit A

FY 2013-15
Unified Planning Work Program

Transportation Planning in the Portland/Vancouver Metropolitan Area

Draft

March 14, 2013

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.

Oregon Health Authority

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.*"

Oregon Health Authority

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

Oregon Health Authority

600 NE Grand Ave.
Portland, OR 97232-2736
503-797-1700
503-797-1804 TDD
503-797-1797 fax

www.oregonmetro.gov

Metro | *Memo*

DATE: March 15, 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

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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 and technical work group and advisory committee discussions have informed development of this approach.

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

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

- Provide input on the draft assumptions suggested for each scenario.

Input provided by TPAC at the March 22 meeting will be brought to the technical work group for discussion on April 1. Input provided by MTAC on April 3 will further inform refinements to the draft assumptions.

TPAC will be requested to make a recommendation to JPACT on the scenario assumptions on April 26. MTAC will be requested to make a recommendation to MPAC on the scenario assumptions on May 1.

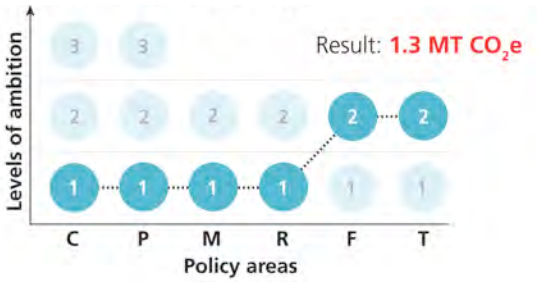
OVERVIEW OF PHASE 1 AND 2 – UNDERSTANDING AND SHAPING LAND USE AND TRANSPORTATION CHOICES

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.

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]



Current plans and policies together with advancements in fleet and technology get the region close to the state target of 1.2 MT CO_2e per capita.

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] 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)

[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).

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 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 summer 2013 evaluation.

PHASE 2: SHAPING OUR LAND USE AND TRANSPORTATION CHOICES

Phase 2 is 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 Environmental and Equity/Environmental Justice workshops can be downloaded from the project website – www.oregonmetro.gov/climatescenarios. The public health report will be made available in the next month.
- **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 and the Westside Economic Alliance and Wilsonville and Greater Hillsboro Chambers of Commerce. The two remaining focus groups will be held in the next month and include small business owners in partnership with the Portland Business Alliance, and developers. A summary report will be prepared upon completion of the focus groups in April.
- **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.
- **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 April 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 we test this summer.

Several of these activities have been extended into early 2013 given the time it has taken to effectively engage local communities in work sessions, business leaders in focus groups and complete other activities.

WORK AHEAD IN 2013

To stimulate thinking about our choices for the future and the possibilities they present, three scenarios will be tested in 2013. Findings from Phase 1, Phase 2 work and technical work group and advisory committee discussions have informed development of this approach.

The 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.

Staff will request a recommendation on the assumptions to test and the questions to be addressed in the evaluation in May 2013. With regional support, staff will move forward with the evaluation, using the agreed upon key outcomes to measure – e.g., economic, fiscal, equity, community and environmental outcomes.

OVERVIEW OF INVESTMENT CHOICES TO BE TESTED IN PHASE 2

Background

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 to be tested will 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 proposed approach 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, updated community visions identified through the Southwest Corridor Plan, East Metro Connections Plan and local planning and periodic review activities currently. 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. The CSCS investment scenarios analysis is intended to provide policy makers with better information about the implications and tradeoffs of different land use and transportation policy and investment choices, relative to the region's shared equity, economy, environmental and community goals.

Major objectives of the analysis are to:

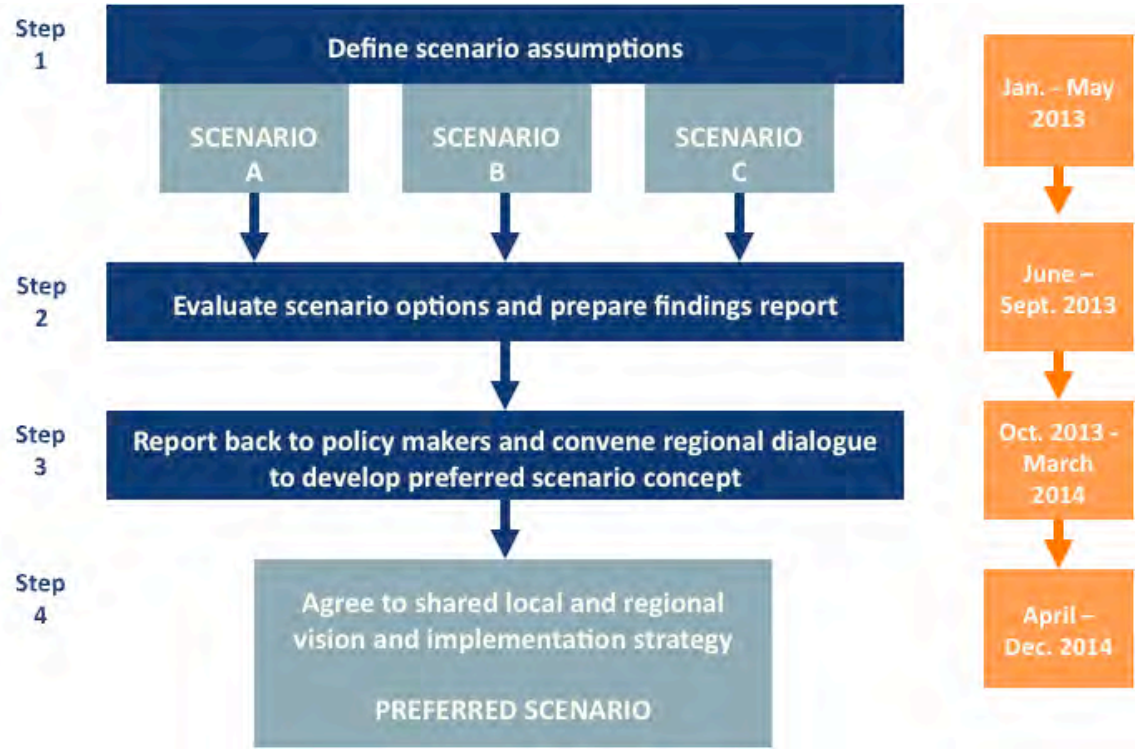
- Test distinct investment policy choices that frame the boundaries of the political landscape and public opinion to better understand the effect of different levels of investment on public health, travel behavior, development patterns, equity, the economy, the environment and greenhouse gas emissions.
- 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 of a preferred land use and transportation scenario.

General Construct and Scope

This analysis will examine three conceptual futures for their ability to serve forecast 2035 population and employment growth and meet state greenhouse gas emissions reduction targets. 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 with existing revenues?

  Purpose: This scenario follows the funding trends of the past decade and shows the results of limiting community investments to 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 people 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. *This scenario is not expected to meet the greenhouse gas emissions target.*

- **Scenario B (Adopted Plans)** - What if we implement adopted plans and raise additional revenues as called for in the adopted Regional Transportation Plan?

  Purpose: This scenario counters recent funding trends and shows the results of investing in a mix of transportation and land use strategies with revenues projected in the adopted RTP.

  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]

[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

- **Scenario C (New Plans and Policies)** - What if we more fully achieve adopted and emerging plans, and pursue new policies and revenues to meet greenhouse gas emissions reduction targets and achieve other goals?

  Purpose: This scenario shows the results of more investment aimed at fully achieving adopted and emerging plans and greenhouse gas emissions reduction targets.

  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, the Regional Active Transportation Plan, and updated community plans identified through local planning efforts. 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 the Cascadia high-speed rail and other service 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.

  This scenario 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 households of modest means and businesses. This scenario presents an opportunity to test new revenue mechanisms like a bike fee, mileage-based fee or a carbon fee to maintain and operate the transportation system and fund needed investments or market incentives that help reduce GHG emissions. This scenario could also be designed to explore using the mileage-based fee to test the effect of transitioning from the state gas tax to a mileage-based fee.

  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.

Methodology

The Investment Choices Scenarios Analysis is intended to be a starting point for developing a recommended land use and transportation scenario that meets the state greenhouse gas emissions reduction target. The understanding gained through this analysis will guide the design and analysis of a preferred scenario in Phase 3 of the project.

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.

MPAC, JPACT and the Metro Council will provide direction on the assumptions to be tested in each of the scenarios and the questions to be addressed through the evaluation. The three scenarios will be developed and evaluated in the summer of 2013 using the Metropolitan GreenSTEP model, GIS analysis and workshops aimed at identifying the action needed to implement each scenario.

Evaluation

While the technical evaluation of the investment scenarios will generate an array of data, the analysis will focus on reporting how each scenario responds to shared concerns about growth in the region as expressed in the Outcomes-Based Evaluation Framework endorsed by the MPAC and JPACT in June 2011. Performance of each scenario will be compared using a set of key indicators being developed based on input provided by business and community leaders in 2012 and early 2013, and the public through an Opt-In opinion survey. [5] The evaluation will consider public health, social equity, environmental, economic, financial, and political implications associated with each scenario.

Planning-level cost estimates for each scenario will be developed by Metro, in partnership with ODOT and TriMet. In addition, project staff will convene workshops as part of the evaluation to identify feasibility and actions needed to implement the scenarios being evaluated.

Questions to Answer with the Evaluation

The scenarios will help answer policy questions that forecasted growth and fiscal constraints in the region 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, including:

- What will our choices cost and what can we afford?
- Which strategies are most effective for supporting community visions and reducing greenhouse gas emissions?
- What are the risks, opportunities and tradeoffs of our choices – considering public health, social equity, environmental, economic, financial, and political implications?

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. The results of the analysis will be reported using an Outcomes-Based Evaluation Framework being refined by Metro staff based on input provided during a series of workshops and focus groups held with community leaders working to advance public health, equity and environmental justice, protection of the environment and economic prosperity in the region.

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

[5] A series of scorecard workshops and business focus groups and an Opt-In survey will inform refinements.

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.[6]

TIMELINE

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

February - April 2013	Metro Council, MPAC, JPACT review investment choices scenarios construct and outcomes-based evaluation framework.
	Newsfeeds on strategies under consideration are underway, and are available the project web site: www.oregonmetro.gov/climatescenarios.
	Complete business focus groups.
	Conduct Opt In on-line survey in April to gather input on investment priorities and priority outcomes to be evaluated, and build understanding of the project and strategies under consideration
May 2013	Metro Council, MPAC, JPACT confirm scenario assumptions to be tested and questions to be addressed in analysis.
June-August 2013	Project staff and technical work group analyze investment scenarios using Metropolitan GreenSTEP and GIS.
	Convene workshops to identify feasibility and actions likely to be necessary to implement scenarios.
August-September 2013	Project staff and technical work group report analysis results in CSCS Investment Choices Findings Report.
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.

[6] OAR 660-044-0040 and OAR 660-044-0045.

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

CLIMATE SMART COMMUNITIES SCENARIOS PROJECT

Technical Work Group Members

March 6, 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	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

Phase 1: 2010 base year and alternative scenario inputs

The input assumptions are for research purposes only and do not necessarily reflect current or future policy decisions of the Metro Council, MPAC or JPACT.

This table summarizes the inputs for the 2010 Base Year and 144 alternative scenarios that reflect different levels of implementation for each category of policies. The inputs were developed by Metro staff in consultation with a technical work group of MTAC and TPAC members. Documentation of the inputs and rationale behind each input can be found in the Phase 1 Metropolitan GreenSTEP Scenarios Technical Documentation report (January 2012). This information is for research purposes only and does not necessarily reflect current or future policy decisions of the Metro Council, MPAC or JPACT.

			Reference case		
		2010	2035		
	Strategy	**Base Year** Reflects existing conditions	**Level 1** Reflects current plans and policies	**Level 2** Reflects more ambitious policy changes	**Level 3** Reflects even more ambitious policy changes
Community design	Households living in mixed-use areas and complete neighborhoods (percent)	GreenSTEP calculates			
	Urban growth boundary expansion (acres)	2010 UGB	7,680 acres	7,680 acres	No expansion
	Bicycle mode share[1] (percent)	2%	2%	12.5%	30%
	Transit service level	2010 service level	2035 RTP service level	2.5 times RTP service level	4 times RTP service level
	Workers/non-work trips paying for parking (percent)	13% / 8%	13% / 8%	30% / 30%	30% / 30%
	Average daily parking fee ($2005)	$5.00	$5.00	$5.00	$7.25
Pricing	Pay-as-you-drive insurance (percent of households participating and cost)	0%	0%	100% at $0.06/mile	No change from Level 2
	Gas tax (cost per gallon $2005)	$0.42	$0.48	$0.18	
	Road use fee (cost per mile $2005)	$0	$0	$0.03	
	Carbon emissions fee (cost per ton)	$0	$0	$0	$50

[1] Percent of all tours less than 6 miles roundtrip.

	Strategy	2010	Reference case 2035		
		Base Year Reflects existing conditions	**Level 1** Reflects current plans and policies	**Level 2** Reflects more ambitious policy changes	**Level 3** Reflects even more ambitious policy changes
Marketing and incentives	Households participating in eco-driving	0%	0%	40%	No Level 3
	Households participating in individualized marketing programs (percent)	9%	9%	65%	
	Workers participating in employer-based commuter programs (percent)	20%	20%	40%	
	Car-sharing in high density areas (target participation rate)	Participation rate of 1 member/100 people	Participation rate of 1 member/100 people	Double participation to 2 members/100 people	
	Car-sharing in medium density areas (target participation rate)	Participation rate of 1 member/200 people	Participation rate of 1 member/200 people	Double participation to 2 members/200 people	
Roads	Freeway and arterial expansion	2010 system	2035 financially constrained system	No expansion	
	Delay reduced by traffic management strategies (percent)	10%	10%	35%	
Fleet	Fleet mix (proportion of autos to light trucks and SUVs)	auto: 57% light truck/SUV: 43%	auto: 56% light truck/SUV: 44%	auto: 71% light truck/SUV: 29%	
	Fleet turnover rate (age)	10 years	10 years	8 years	
Technology	Fuel economy (miles per gallon)	auto: 29.2 mpg light truck/SUV: 20.9 mpg	auto: 59.7 mpg light truck/SUV: 41 mpg	auto: 68.5 mpg light truck/SUV: 47.7 mpg	
	Carbon intensity of fuels	90 g CO_2e/megajoule	81 g CO_2e/megajoule	72 g CO_2e/megajoule	
	Light-duty vehicles that are electric or plug-in electric vehicles (percent)	auto: 0% light truck/SUV: 0%	auto: 4% light truck/SUV: 1%	auto: 8% light truck/SUV: 2%	

CLIMATE SMART COMMUNITIES SCENARIOS PROJECT

DRAFT

February 26, 2013

Shaping our choices for the future – a starting point for gathering input on what choices to test

A scenario is an example of what the future might look like based on the choices we make today. The three scenarios presented are intended to serve as a starting point for gathering input on what choices should be tested in summer 2013.

An analysis of the scenarios will 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.

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

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.

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 the funding trends of the past decade and shows the results of limiting community investments to existing revenues.	This scenario counters recent funding trends and shows the results of investing in a mix of transportation and land use strategies with revenues projected in the adopted Regional Transportation Plan.	This scenario shows the results of more investment aimed at fully achieving adopted and emerging plans and GHG emissions reduction targets.

LESS INVESTMENT AND POLICIES MORE

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.		

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.		
Growth captured in UGB	TBD	As reflected in 2035 Regional Growth Distribution adopted by the Metro Council in November 2012.	Southwest Corridor Plan land use vision and other city and county planning efforts underway (if available).
Public/private investment	TBD		TBD

See reverse for more information

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.

DRAFT

WHAT THE FUTURE MIGHT LOOK LIKE IN 2035

February 26, 2013

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TRANSPORTATION ASSUMPTIONS

	Scenario A RECENT TRENDS	Scenario B ADOPTED PLANS	Scenario C NEW PLANS AND POLICIES
Transit	**Operations and maintenance** ▪ Maintain existing TriMet service with small increases targeted to address overcrowding and delays due to congestion ▪ Implement SMART and C-TRAN plans **Capital** ▪ Extend MAX to Milwaukie ▪ Powell/Division BRT ▪ Extend MAX to Vancouver, WA ▪ Close Portland streetcar loop	**Operations and maintenance** ▪ Restore and expand frequent bus service in priority corridors, consistent with Service Enhancement Plans **Capital** ▪ Streetcar extension along priority corridors ▪ Additional transit priority and pedestrian/bike access to transit projects	**Operations and maintenance** ▪ 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 **Capital** ▪ Cascadia rail connections to Eugene, Salem and Vancouver B.C. ▪ High capacity transit: Southwest Corridor and AmberGlen ▪ WES service frequency improvements ▪ Bus rapid transit serving I-205 and Tualatin-Valley Highway corridors ▪ Other Portland streetcar extensions ▪ Additional transit priority and pedestrian/bike access to transit projects
Streets and highways	**Operations and maintenance** ▪ Fall behind on fixing potholes and repairs ▪ Implement 50% of regional TSMO strategic plan to achieve 10% delay reduction **Capital** ▪ I-5 Bridge Replacement ▪ 2016-18 STIP and MTIP projects	**Operations and maintenance** ▪ Keep up with fixing potholes and repairs ▪ Implement full regional TSMO strategic plan to achieve 20% delay reduction **Capital** ▪ Adopted 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, Troutdale/I-84 and I-84/I-5	**Operations and maintenance** ▪ Keep up with fixing potholes and repairs ▪ Expanded TSMO strategic plan achieves 35% delay reduction **Capital** ▪ I-5/OR 217 interchange (Phase 2) ▪ State RTP project list
Bike and pedestrian	▪ Investments are limited with no dedicated funding; X% of regional system completed ▪ Complete 2016-18 STIP and MTIP projects	▪ Complete adopted RTP bike and pedestrian projects; X% of regional system completed	▪ Complete 100% of regional bike and pedestrian networks, 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	▪ 10% of households practice ecodriving and participate in travel options programs ▪ 20% of employees participate in commute programs ▪ 1% of households participate in car-sharing ▪ 10% of vehicle owners use pay-as-you-drive insurance	▪ 20% of households practice ecodriving and participate in travel options programs ▪ 20% of employees participate in commute programs ▪ 2% of households participate in car-sharing ▪ 10% of vehicle owners use pay-as-you-drive insurance	▪ 40% of households practice ecodriving and participate in travel options programs ▪ 40% of employees participate in commute programs ▪ 4% of households participate in car-sharing ▪ 10% 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	**Existing revenues at 2012 levels** **Fuel use and emissions fees** ▪ Federal gas tax = 18 cents/gallon ▪ State gas tax = 30 cents/gallon ▪ Local gas tax = 1-2 cents/gallon Vehicle travel fees ▪ I-5 Bridge toll **Other transportation fees** ▪ 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	**Revenues assumed to fund adopted RTP** **Fuel use and emissions fees** ▪ Federal gas tax = 18 cents/gallon ▪ State gas tax = 55 cents/gallon ▪ Local gas tax = 1-2 cents/gallon Vehicle travel fees ▪ I-5 Bridge toll **Other transportation fees** ▪ Payroll tax and farebox recovery ▪ Parking fees in more locations served by high capacity transit ▪ Other federal, state and local revenues at RTP levels	**New and expanded revenues** **Fuel use and emissions fees** ▪ Federal gas tax = 18 cents/gallon ▪ Carbon fee = $20-50/ton ▪ Local gas tax = 1-2 cents/gallon **Vehicle travel fees** ▪ I-5 Bridge toll ▪ VMT fee = $.03-.15/mile **Other transportation fees** ▪ Payroll tax and farebox recovery ▪ Parking fees in new locations served by high capacity transit ▪ Bicycle fee

Metro

COMPARISON OF KEY DIFFERENCES BETWEEN PHASE 1 AND PHASE 2 ASSUMPTIONS

Policy input	Phase 1 Assumptions	Phase 2 Assumptions
Land use	**All scenarios** = Draft Gamma distribution (Oct. 2011)	**Scenario B =** Adopted Gamma distribution (Nov. 2012) **Scenario A and C =** New distribution to be developed to reflect effect of lower/higher levels of investment/policy tools
Transit	**Level 1 =** adopted RTP (financially constrained) **Level 2 =** 2.5 times RTP **Level 3 =** 4 times RTP	**Scenario A =** same as today with small operations enhancements **Scenario B =** adopted RTP (financially constrained) **Scenario C =** adopted RTP (full plan) + Westside enhancements (equivalent of between L1 and L2) and other items in draft assumptions table
Roads	**Level 1 =** adopted RTP (financially constrained) **Level 2 =** no new road projects	**Scenario A =** low build of RTP **Scenario B =** adopted RTP (financially constrained) **Scenario C =** adopted RTP (full plan)
I-5 Bridge toll	*Not considered in Phase 1*	**All scenarios**
State gas tax	**Level 1 =** $.30 gallon (same as today) **Level 2 =** transitioned $.55/gallon to VMT fee equivalent of $.03/mile **Level 3 =** same as level 2	**Scenario A =** $.30 gallon (same as today) **Scenario B =** $.55/gallon per adopted RTP (financially constrained) **Scenario C =** transitioned to VMT fee equivalent of $.03 - .15/mile to close funding gap
Carbon fee	**Level 1=** $0 **Level 2 =** $0 **Level 3 =** $50/ton	**Scenario A =** $0 **Scenario B =** $0 **Scenario C =** $20-50/ton to close funding gap
Pay-as-you drive insurance	**Level 1 =** 0% participation **Level 2 =** 100% participation	**Scenario A =** 10% participation **Scenario B =** 10% participation **Scenario C =** 10% participation
Parking	**Level 1=** same as today **Level 2 =** adopted RTP (financially constrained) **Level 3 =** adopted RTP + increased average cost	**Scenario A =** same as today **Scenario B =** adopted RTP (financially constrained) **Scenario C =** adopted RTP (full plan) + new HCT corridors
Bicycle fee	*Not considered in Phase 1*	*TBD*
Individual marketing	**Level 1 =** 9% participation (same as today) **Level 2 =** 65% participation (linked to transit access)	**Scenario A =** 10% participation **Scenario B =** 20% participation **Scenario C =** 40% participation
Commuter programs	**Level 1 =** 20% participation (same as today) **Level 2 =** 40% participation	**Scenario A =** 20% participation **Scenario B =** 20% participation **Scenario C =** 40% participation
Ecodriving	**Level 1 =** 0% participation **Level 2 =** 40% participation	**Scenario A =** 10% participation **Scenario B =** 20% participation **Scenario C =** 40% participation

Materials following this page were distributed at the meeting.

600 NE Grand Ave.
Portland, OR 97232-2736
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TRANSPORTATION POLICY ALTERNATIVES COMMITTEE
March 1, 2013
Metro Regional Center, Council Chamber

MEMBERS PRESENT	AFFILIATION
Karen Buehrig	Clackamas County
Steve Entenman	Community Representative
Adrian Esteban	Community Representative
Carol Gossett	Community Representative
Nancy Kraushaar	City of Wilsonville, representing Cities of Clackamas Co.
Katherine Kelly	City of Gresham, representing Cities of Multnomah Co.
Heather McCarey	Community Representative
Margaret Middleton	City of Beaverton, representing Cities of Washington Co.
Dave Nordberg	Oregon Department of Environmental Quality
Cora Potter	Community Representative
Satvinder Sandhu	Federal Highway Administration
Jeff Swanson	Community Representative
Chris Deffebach	Washington Co.
Mike Clark	Washington State Department of Transportation
Elissa Gertler, Chair	Metro
Scott King	Port of Portland
Alan Lehto	Trimet
Karen Schilling	Multnomah Co.
Paul Smith	City of Portland
Rian Windsheimer	Oregon Department of Transportation

MEMBERS EXCUSED	AFFILIATION
Dean Lookingbill	Southwest Washington Regional Transportation Council
ALTERNATES PRESENT	AFFILIATION
Lynda David	Southwest Washington Regional Transportation Council

STAFF: Andy Cotugno, Kim Ellis, Elissa Gertler, Mike Hoglund, Tom Kloster, Evan Landman, Ted Leybold, Robin McArthur ,Kelsey Newell, Ramona Perrault.

1. Call to Order and Declaration of a Quorum

Chair Elissa Gertler called the meeting to order and declared a quorum at 9:30 a.m.

2. Comments from the Chair and Committee Members

- Mr. Rian Windsheimer of ODOT let the group know that the STIP committee reached consensus on their 150% list at the last meeting. These projects will now be the subject of increased technical analysis, in advance of the narrowing to the 100% list by October 4th.
- Mr. Tom Kloster of Metro introduced Ms. Grace Cho, who is taking on the Air Quality Conformity program. Ms. Cho updated TPAC on the TCM substitution process. At the last meeting, TPAC gave its blessing to undergo a TCM substitution process. One of the proposals at that meeting was to find a way to incorporate into the measure the advancements in fuel efficiency and vehicle emissions technology in newer automobiles. Based on consultation with DEQ and EPA, it is recommended that the region not pursue that option due to limited data availability.
- Mr. Ted Leybold of Metro updated the group of the RTO grant program for the next two fiscal years. The deadline for applications was last Friday, February 22. 25 eligible applications were received, representing $3.7 million in requested funds. $2.1 million is available in this grant cycle. Of the applications received, 10 came from non-profits, 5 from TMAs, 3 from educational institutions, and 7 from governments. 11 of the applications were from first-time applications. The grant selection process begins this week. A five-person committee (including TPAC member Adrian Esteban) will make their final selections by April 5th, and the list will be released April 10th. After July 1st, successful projects will move into contracts.
- Mr. Rian Windsheimer of ODOT led a discussion of the recommended expressway classification modifications. ODOT Region 1 staff developed a list of segments for recommended expressway segments, which has been released to the public and will be presented to OTC at its public hearing March 20th, with final action on April 17. Members asked for clarification regarding expressway and other reclassification efforts. There is a comprehensive review every ten years following the census. This is particularly significant in the upcoming review because following MAP-21, every principal arterial has been incorporated into the National Highway System. Mr. Kloster mentioned that Metro staff had planned to address this as part of the RTP updated next year. A more detailed report will be delivered to TPAC in April or May.
- Mr. Kloster provided information on the RTP Update. This will go to JPACT in April and the Metro Council in May. MPAC has been added to this track as well, because the amendment relating to the East Metro Connections Plan falls into statewide requirements as an ordinance which requires MPAC and MTAC action.

3. Citizen Communications to TPAC Agenda Items

There were none.

4. Consideration of the TPAC Minutes for Jan. 25, 2013

Motion**:** Mr. Paul Smith moved and Mr. Alan Lehto seconded to approve the TPAC Minutes for Jan. 25 with no corrections.

Result: With all in favor, motion passed.

5. Climate Smart Communities Scenarios Project: Investment Choices – INFORMATION/DISCUSSION

Ms. Kim Ellis of Metro presented on the Climate Smart Communities (CSC) Scenarios Project. Adopted by the Oregon Legislature In 2009, HB 2001 directed the region to conduct scenario planning aimed at reducing greenhouse gas (GHG) emissions from small cars and trucks. This effort has been framed around that target as well as a broader set of regional outcomes (clean air and water, equity, etc). The work to date has focused on land use and transportation strategies that can help address this. The first phase of the project began in 2011 and resulted in an analysis of 144 different scenarios and the Phase 1 Findings Report that was submitted to the Oregon Legislature in January 2012. Throughout 2012, the CSC project shared the Phase 1 findings with local elected officials and conducted workshops with business, environmental, health, and equity leaders, looking at the strategies in each scenario from angles other than the GHG target mandated by the legislature. Two reports delivered in summer 2012 are available on the CSC website. Currently the CSC project team is seeking input on three scenarios to be tested this summer, included key assumptions and the research questions to answer to provide information for policy makers to discuss next fall. The result of the summer evaluation and subsequent fall discussion will shape what strategies should be included in the preferred scenario. Ms. Ellis explained that they hope to have general agreement on elements to include in the preferred scenario for evaluation using ODOT's Green Step model and the regional travel demand model by March 2014. This would allow further consultation with local governments between March and August 2012, with a final public comment period to be held in Fall 2014 before the Metro Council considers adoption in December, 2014.

The three scenarios being considered are:

- Scenario A: Recent Trends – What if the region implements adopted plans with existing revenues reflecting funding trends of the past decade?
- Scenario B: Adopted Plans – What if the region implement adopted plans and raise new revenues as called for in the RTP?
- Scenario C: New Plans and Policies – What if the region is able to more fully achieve adopted and emerging plans, and pursues new policies and revenues to meet GHG emissions reduction targets and achieve other goals?

These three scenarios were developed based on findings from the 144 scenarios tested in Phase 1 and subsequent stakeholder and technical work group discussions. More than 90 of the 144 scenarios met or exceeded the state's GHG reduction target. One of the key findings so far has been that if jurisdictions achieve their adopted plans, include the state's baseline assumptions about clean fuels and technological advances , the region would meet the target of 20% below 2005 levels per capita. However, the state's fleet and technology assumptions are very robust, and the fundamental problem remains that current revenues are not sufficient to achieve adopted plans.

TPAC member discussion included:

- Members discussed the funding outlook included in the scenarios. Mr. Paul Smith of the City of Portland mentioned that many jurisdictions are dealing with the prospect of less funding, not more. Scenario A presents a condition of flat funding and no transit growth, maintaining today's level. The project team felt that if something like the 70% cuts forecast by TriMet assuming no change to their union contract were to happen, something more dramatic would happen, and CSC staff did not want to be overly pessimistic.
- TPAC discussed how CSC has engaged the public. Public opinion research was conducted early in the process, and additional engagement has focused on local government staff, elected officials and community and business leaders. An online OptIn survey will be conducted this spring. Public engagement has been limited pending having more information about the tradeoffs and choices from an fiscal, equity, environmental and economic perspectives. CSC does not anticipate holding open houses, but there will be more opportunities for on-line engagement in the fall. There have not been community representatives recruited to participate in the CSC Technical Work Group, but former TPAC community representative Mara Gross is a member of the technical working group for the project. Ms. Ellis explained that the focus has been on the technical work of building the model, and not necessarily community engagement, because they have been focused on technical details and not shaping policy. In addition, all information developed by the technical work group has been brought forward to the technical and policy committees.
- TPAC members asked about how CSC scenarios relate to the Regional Active Transportation Plan (ATP). They propose that ATP recommendations be folded into Scenario C.
- The committee considered the CSC scenarios from an economic standpoint. Members suggested that whichever scenario the region's development most closely resembles, it will be important to avoid taking action that puts it at an economic disadvantage. Members asked Metro staff to consider how scenarios described in this research might affect the economy and communities around the region. Ms. Ellis explained that economic and other information beyond GHG emissions reduction will be considered as part of the evaluation of the three scenarios in the next phase of the project.

6. Household Travel Survey – INFORMATION

Mr. Bud Reiff of Metro presented on the new Household Travel Survey, using data from 2011 and 2009. The last survey of this kind was done in 1994. Mr. Reiff shared information on some of the key trends observed in the data collected in the survey.

Key trends described in the study include declining auto use, shorter travel distances, increased bike use in the Portland area, increased transit sue throughout the region, and increased walk trips in most of the region. The percentage of home-based work trips made by car has decreased since 1994, the average auto trip distance is down .5 miles, and average daily VMT has dropped more than 10%. Staff are also using this data in an effort to model travel choices based on urban form. Mr. Reiff cautioned that this survey is a snapshot of thousands of travel choices in the region circa 2011, but that the more time passes the less current and accurate it is.

TPAC member discussion included:

- Members considered the role of this study in how they share information on active transportation and transit use in the region, and noted that a way of making the connection with economic vitality would be very useful.
- The committee discussed the prospects for the future growth of interregional travel. Mr. Reiff explained that this study was done in cooperation with partner agencies throughout the state, yielding data on overlapping travelshed, interregional travel (for example, between Salem and Portland), and particularly in trips in ODOT Region 2 included McMinnville and Woodburn. Little analysis of this data has been conducted so far, but the data exists.
- Mr. Paul Smith thanked Mr. Reiff for the information, but expressed his hope that in 20 years regional trips would be decreasing in length, not increasing. He also noted that this would be very useful for the City of Portland to update the cycling data used in their modeling.

7. Presentation of Projects Requested by ODOT for Amendment into the Regional Transportation Plan – INFORMATION

Mr. Kloster introduced Mr. Windsheimer of ODOT to discuss a request for an amendment to the RTP. The proposed project would extend the auxiliary lane of I-5 southbound between the Lower Boones Ferry Road exit and entrance ramps in order to reduce congestion, improve lane balance and travel time reliability, and sustain stable traffic flow, providing a continuous lane from OR 217 to the Nyberg St. exit. Initially, staff were concerned about whether this project would be in conformity with air quality regulations, but analysis has revealed that it is in conformity. Metro staff brought this request to TPAC to ask the question whether or not this project in conjunction with future phases amounts to the creation of a through lane.

Mr. Windsheimer provided background on the project. This area was identified as a recurring bottleneck in the Corridor Bottleneck Operations Study (CBOS) mandated by FHWA. Travel demand model analysis was done to determine whether this improvement would induce demand; ODOT found that this project would facilitate the current trips, but not increase trips.

TPAC member discussion included:

- Mr. Dave Nordberg of DEQ noted that his agency was concerned about the impact of stringing together 2.5 miles of auxiliary lanes, but seeing that the model shows no increase in trips, DEQ has no objections about proceeding.
- Members discussed whether the recently completed Tualatin TSP would change any of the existing conditions addressed here. Mr. Windsheimer said that the new TSP is unlikely to make a major difference, and that this project is a shorter term fix rather than a longer-term fix.

Motion: Mr. Paul Smith Moved and Mr. Jeff Swanson seconded to add this project to the RTP amendment list.

Result: With all in favor, motion passed.

8. ADJOURN

Chair Elissa Gertler adjourned the meeting at 12:03 p.m.

Respectfully Submitted,

Evan Landman
Recording Secretary

ITEM	DOCUMENT TYPE	DOC DATE	DOCUMENT DESCRIPTION	DOCUMENT NO.
4.	Minutes	3/1/2013	January 25, 2013 TPAC Minutes	030113t-01
2.	Memo	3/1/2013	Air Quality Conformity/Transportation Control Measures Update	030113t-02
2.	Memo	3/1/2013	Pre-Conformity Plan and Draft 2035 Air Quality conformity Determination	030113t-03
5.	Memo	2/27/2013	Climate Smart Communities Scenarios Project- Phase 2 Investment Choices Scenarios Evaluation	030113t-04
5.	Handout	2/26/2013	Climate Smart Communities Scenarios Project	030113t--05
5.	Handout	Spring 2013	The Road to 2040: Choices for our future	030113t-06

Presentation to the Metro Transportation Policy Alternatives Committee

Climate Smart Communities Scenarios HIA

Andrea Hamberg, Eric Main
Oregon Health Authority, Public Health Division
HIA and EPHT Programs
March 22, 2013

What an HIA is…

A structured, but flexible, process that:

- Predicts anticipated health outcomes of a policy decision/project
- Translates that information into recommendations for balanced, well-informed policies
- Helps you weigh trade-offs and understand the direct and indirect health impacts of your work
- HIA's purpose is to improve health, track unintended consequences and mitigate risk

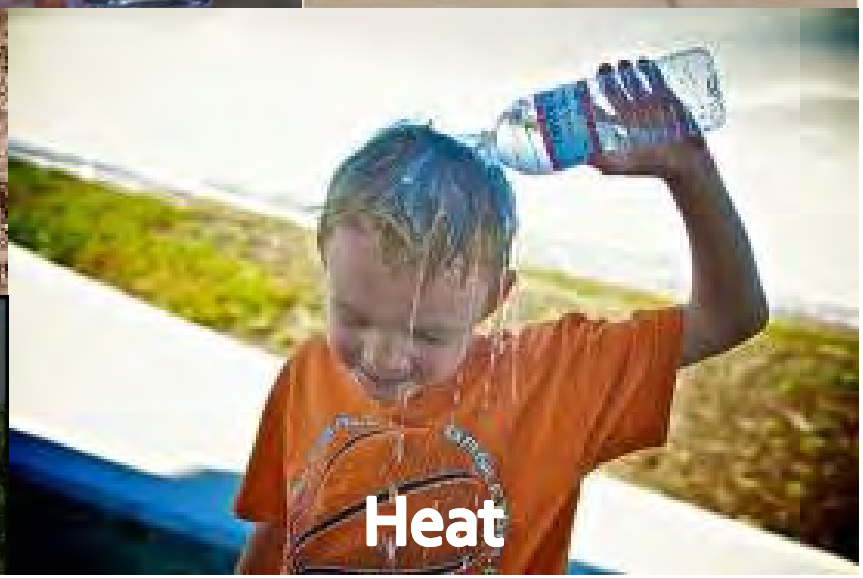
Health determinants

Social and Environmental Determinants of Health

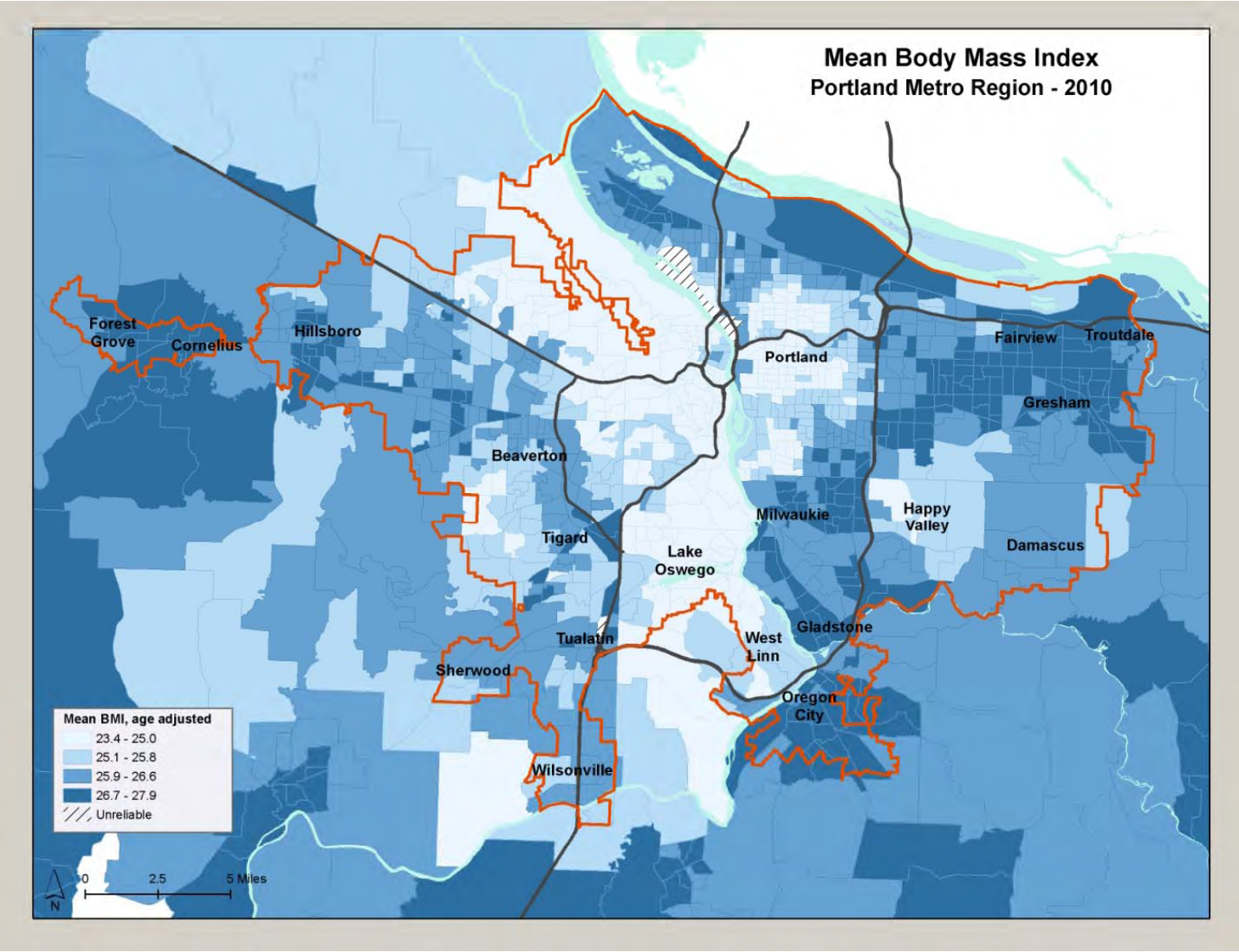
CSCS HIA Advisory Committee

1000 Friends of Oregon
DEQ
DLCD
City of Beaverton
City of Gresham, Urban Design and Planning Department
City of Forest Grove
City of Hillsboro
City of Milwaukee
City of Oregon City
City of Portland
City of Tualatin
Coalition for a Livable Future
Metro
Multnomah County Health Department
Multnomah County Planning
ODOT
OHSU
OPAL
Oregon Environmental Council
Oregon Health Authority
Oregon Public Health Institute
Oregon Transportation Research and Education Consortium
PSU
Regional Transportation Council
The Resource Innovation Group
TriMet
Upstream Public Health
Washington County

Health impacts of climate change



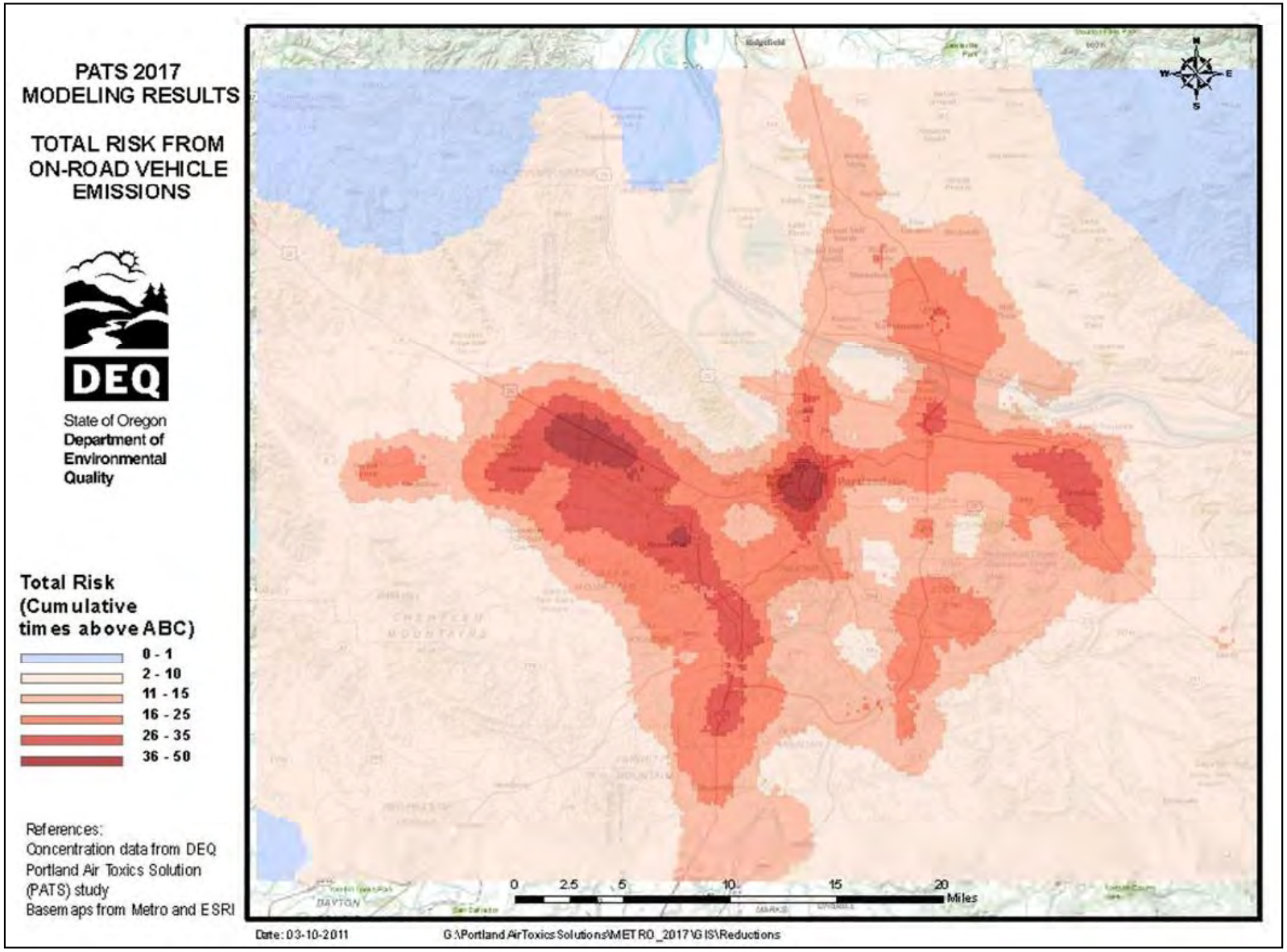
Physical activity



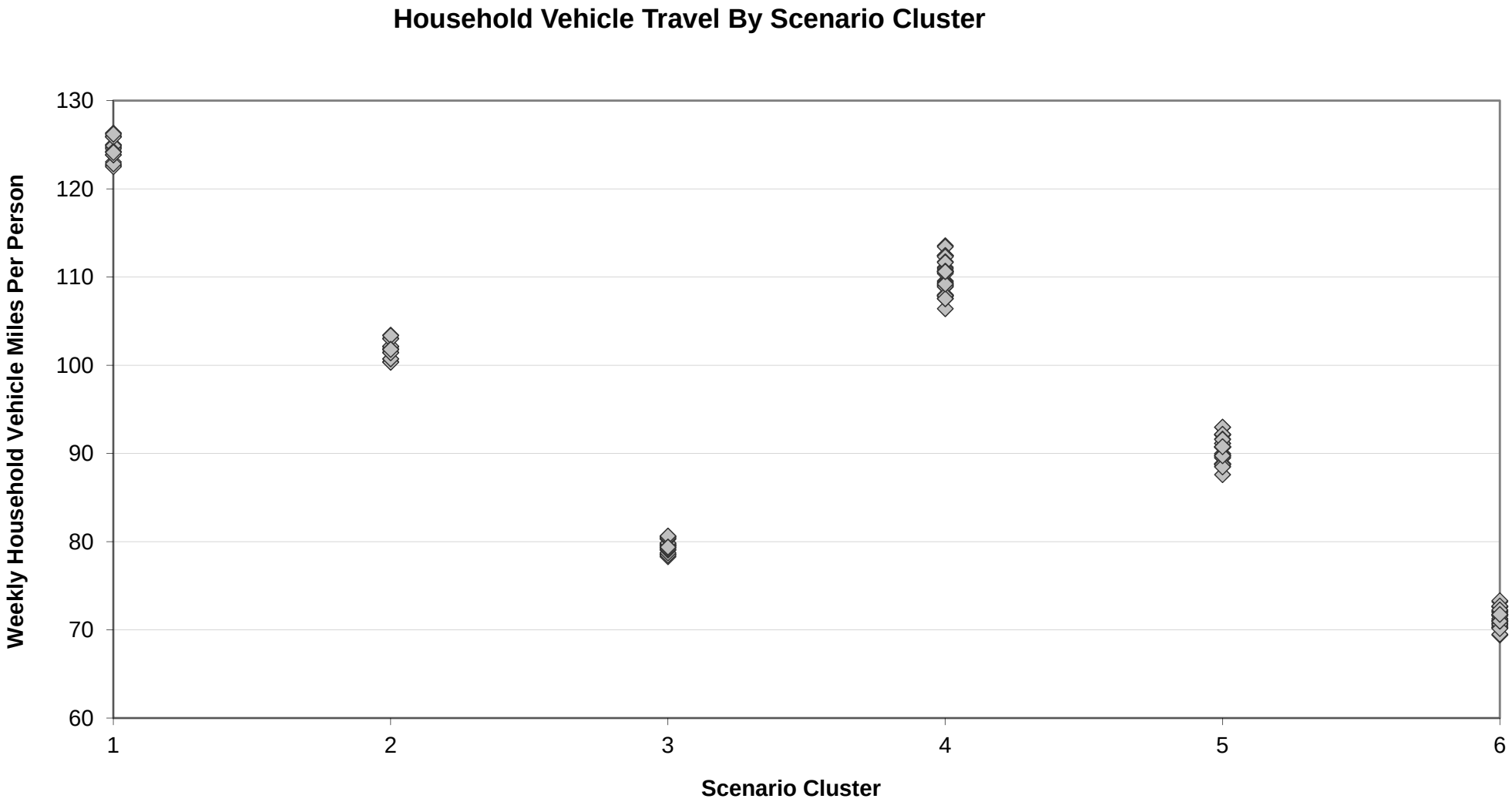
Source: Oregon Health Authority, Environmental Public Health Tracking report: DMV records are valuable for obesity surveillance in Oregon, September 2012

Collisions and fatalities

Air quality


PATS 2017
MODELING RESULTS
TOTAL RISK FROM
ON-ROAD VEHICLE
EMISSIONS
DEQ
State of Oregon
Department of
Environmental
Quality
Total Risk
(Cumulative
times above ABC)
0 - 1
2 - 10
11 - 15
16 - 25
26 - 35
36 - 50
References:
Concentration data from DEQ
Portland Air Toxics Solution
(PATS) study
Basemaps from Metro and ESRI
0 2.5 5 10 15 20
Miles
Date: 03-10-2011
G:\Portland AirToxics Solutions\METRO_2017\GIS\Reductions

Modeling the health outcomes of representative scenarios

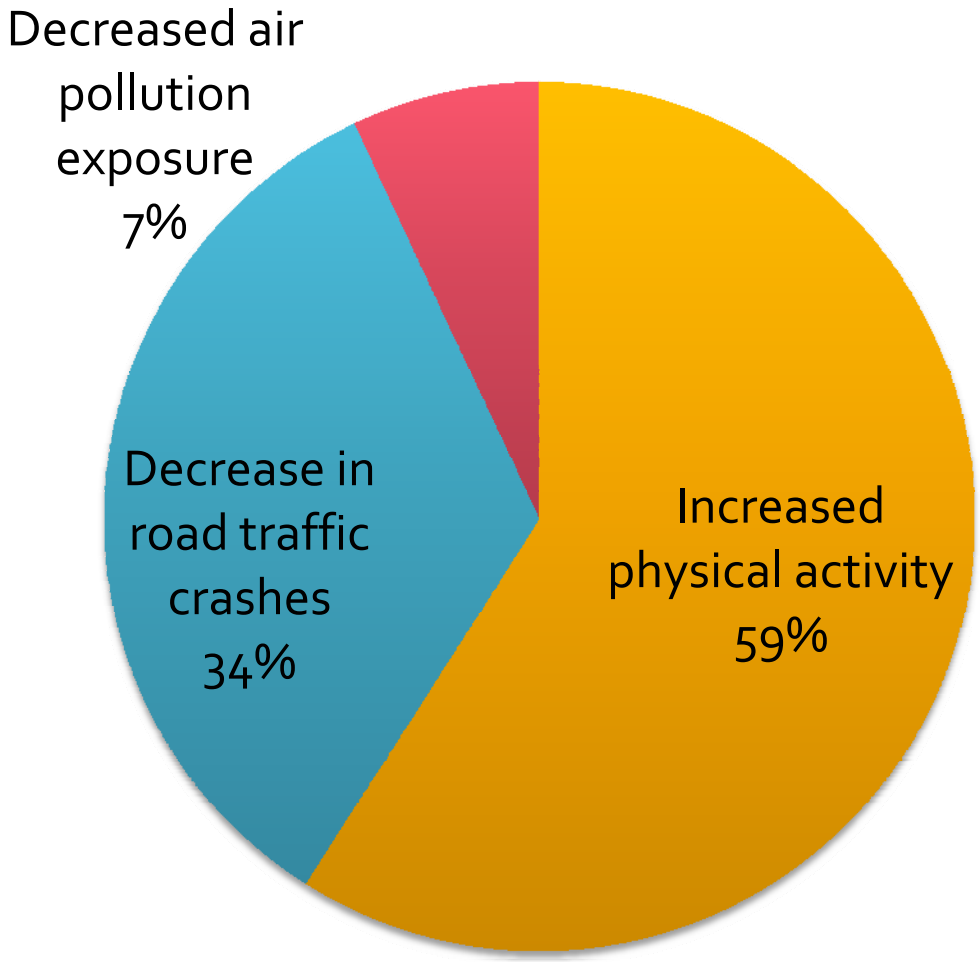


Scenario 6 health impacts by 2035

Overall the region would experience 208 fewer premature deaths and 3,240 years of life gained

- 5% fewer premature deaths
- 6% fewer years of life lost for cardiovascular disease, heart attack and stroke
- 4% reduction in years of life lost for diabetes
- Overall decrease in injuries and fatalities from traffic collisions
- increase injuries/fatalities in bike crashes, from 10 to 12

Health impacts



Key recommendations

- Develop and implement a preferred scenario that meets or surpasses the greenhouse gas emissions reduction target set for the region.
- Emphasize strategies that best increase active transportation and physical activity: community design, pricing and incentives – to maximize public health benefits and meet the state target.
- 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

Questions?

February | 2012

Climate Smart Communities Scenarios Project: Health Impact Assessment

A collaborative approach to building livable, prosperous, equitable and climate smart communities

Working toward healthier communities

Health impact assessment (HIA) provides decision-makers with information about how any policy, program, or project may affect the health of people. The Scenarios Project HIA (Scenarios HIA) will describe the health impacts of proposed land use and transportation strategies to decision-makers and ensure that the best health-promoting elements are included in the final outcome of this work.

Health Impact Assessment: Working toward healthier projects and policies

The Oregon Public Health Division's Health Impact Assessment initiative focuses on building Oregon's collective capacity to evaluate the health effects of proposed projects and policies and to provide the information to decision-makers and community members.

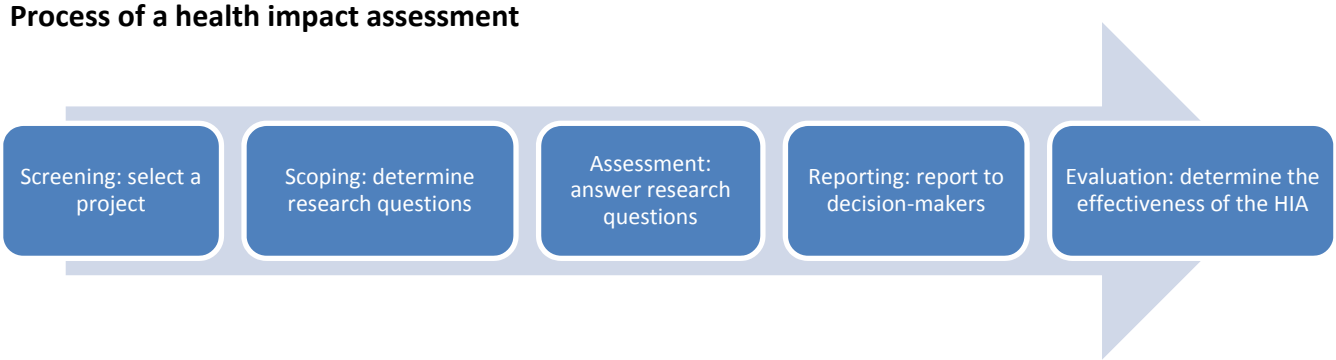
The key element that makes HIA different from traditional public health assessment is that its approach is prospective. Ideally, the health impacts of a proposal are assessed before a final decision is made, allowing the results of the HIA to be considered in the decision-making process. The ultimate goal of HIA is to utilize objective information to minimize negative health impacts and to maximize positive health impacts of a project or policy.

Equity is an integral component of all HIAs. HIA seeks to identify unequal impacts of a policy or project for people of color, people experiencing poverty, people with disabilities or chronic diseases, the young and the elderly.

Once impacts have been reviewed HIA seeks to improve health outcomes for everyone by recommending changes that improve the likelihood of positive impacts and lessen negative impacts.

HIA in Oregon has created new opportunities for collaboration between community members, local government, and the business community, and has been successfully used in Oregon to improve the health impacts of sidewalks and bike paths, parks, roads, zoning and the production of alternative energy.

Process of a health impact assessment



Climate Smart Communities Scenarios Project: Health Impact Assessment

A collaborative approach to building livable, prosperous, equitable and climate smart communities

Scenarios Project Health Impact Assessment

Transportation and health

Transportation produces 25 percent of the Portland metropolitan region's greenhouse gas emissions, contributing to a warming climate that could severely impact our health and quality of life. Policies and investments that reduce greenhouse gas emissions can also limit exposure to air and noise pollution, encourage physical activity, and reduce traffic-related injuries and deaths. By understanding benefits, impacts, and tradeoffs the Scenarios Project will identify how to reduce greenhouse gas emissions and improve the health of everyone in the region.

Assessing health impacts

To ensure that the health impacts of the strategies in the preferred scenario are carefully considered, Metro is partnering with Oregon Health Authority to conduct a health impact assessment (HIA). The CSC HIA will present the health benefits and impacts of different land use and transportation strategies, the building blocks for regional scenarios, to help inform the scenario development and selection process. The HIA will help to ensure that public health and equitable health outcomes are considered and included in transportation and land use decisions for decades to come.

Advisory work group

The Scenarios Project HIA will bring together public health experts, land use, planning and transportation experts, and community health, environmental and community-development advocates. This advisory work group will help OHA determine the scope of the HIA, ensure that health and equity issues are considered, and offer available resources and expertise.

Assessment

In the assessment, OHA will describe the direction and magnitude of health impacts for the Scenarios Project policy strategies that have been prioritized by the advisory work group. We may use the following analytic methods, depending on our scope and resources and what will best answer the research questions: literature review, meta-analysis, stakeholder interviews, risk analysis, and health effects modeling.

Climate Smart Communities Scenarios Project

Metro is leading the Climate Smart Communities Scenarios Project to determine how building healthy, livable, prosperous, and equitable communities supports state and regional goals for the reduction of greenhouse gas emissions from light vehicle travel. Metro is collaborating with local governments and other partners to develop, analyze, and select a preferred land use and transportation scenario that reduces emissions from cars, small trucks and SUVs as directed by the Oregon Legislature in 2009. The Scenarios Project will identify the best land use and transportation policies and investments that will keep communities vibrant and prosperous for everyone and reduce greenhouse gas emissions. The project continues to be about jobs, livable communities and public health as it is about a healthy environment.



Timeline

The Scenarios project is taking place in three phases from 2011 to 2014. The HIA method will be developed during Phase 2. During Phase 1, Metro developed scenarios to identify the mix of strategies that will help the region meet state greenhouse gas reduction goals. In Phase 2, the project team—in collaboration with local governments and other stakeholders—will explore how and where different strategies could be applied in the region. Throughout 2012, Oregon Health Authority (OHA) will engage partners, including decision-makers, to develop the HIA method and apply it to the Phase 1 scenarios. In 2013 and 2014 the project team will apply the HIA method to alternative scenarios and eventually to the preferred regional scenario. OHA and Metro will collaborate with partners to develop relevant communication materials for all decision-making bodies, with an eye to assisting decision-makers in understanding alternatives, tradeoffs and mitigation opportunities when deciding between scenarios.

The region's 6 desired outcomes—endorsed by city and county elected officials and adopted by the Metro Council in December 2010.

Implementation

The preferred scenario will be implemented through policies, investments and actions at the state, regional and local levels, including Metro's Regional Transportation Plan, the region's growth management strategy and local plans. Making this information clear to decision-makers will ensure that the best health-promoting elements are included throughout the scenario development and implementation process.

State-wide impact

The Oregon Sustainable Transportation Initiative (OSTI) is an integrated statewide effort to reduce greenhouse gas (GHG) emissions from transportation while creating healthier, more livable communities and greater economic opportunity. As part of this statewide strategy, ODOT has expressed interest in the Scenarios Project HIA methods and findings, further magnifying the impact of this work. Metro is the first Oregon MPO to address state mandates in partnership with the larger statewide effort. As part of this partnership, Metro is developing tools and methods that other MPOs could use in their own scenario planning efforts.

Building blocks for regional scenarios

- **Community design:** Complete neighborhoods and mixed-use areas, urban growth boundary, transit service, bike travel, parking
- **Pricing:** Pay-as-you-drive insurance, gas tax, road use fee, carbon fee
- **Marketing and incentives:** Eco-driving, individualized marketing programs, employer commute programs, car-sharing
- **Roads:** Freeway and arterial capacity, traffic management
- **Fleet:** Fleet mix and age
- **Technology:** Fuel economy, carbon intensity of fuels, electric and plug-in hybrid electric vehicle market share

The Oregon Public Health Division is the lead state agency for all public health matters including disease prevention, environmental health, maternal and child health, emergency preparedness, and community health systems planning and coordination.

The Office of Environmental Public Health, Research and Education Services section serves as Oregon Public Health Division's technical, scientific and educational public health resource. We identify, assess and report on threats to human health from exposure to environmental and occupational hazards. We advise the people and communities of Oregon to best understand potential risks where they live, work and play in order to remain healthy and safe.

www.healthoregon.org/hia

Clean air and clean water do not stop at city limits or county lines. Neither does the need for jobs, a thriving economy, and sustainable transportation and living choices for people and businesses in the region. Voters have asked Metro to help with the challenges and opportunities that affect the 25 cities and three counties in the Portland metropolitan area.

A regional approach simply makes sense when it comes to making decisions about how the region grows. Metro works with communities to support a resilient economy, keep nature close by and respond to a changing climate. Together we're making a great place, now and for generations to come.

www.oregonmetro.gov/climatescenarios.