

# Metro | Agenda

Meeting: Metro Policy Advisory Committee (MPAC)  
Date: Wednesday, Nov. 13, 2013  
Time: 5 to 7 p.m.  
Place: Metro, Council Chamber

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|---------|----|---|--|
| 5 PM    | 1. | <b><u>CALL TO ORDER</u></b>   | <b>Loretta Smith, Chair</b>                                    |
| 5:02 PM | 2. | <b><u>SELF INTRODUCTIONS &amp; COMMUNICATIONS</u></b>   | <b>Loretta Smith, Chair</b>                                    |
| 5:05 PM | 3. | <b><u>CITIZEN COMMUNICATIONS ON NON-AGENDA ITEMS</u></b>  |  |
| 5:08 PM | 4. | <b><u>COUNCIL UPDATE</u></b>  |  |
| 5:12 PM | 5. | * <b><u>CONSIDERATION OF THE OCT. 23, 2013 MINUTES</u></b>  |  |
| 5:15 PM |    | 2014 MPAC Officers – Select Nomination Committee – <u>DISCUSSION</u>  | <b>Loretta Smith, Chair</b>                                    |
|         |    | <ul style="list-style-type: none"><li>• <i>Outcome:</i> Select a representative from each of the three counties to serve on a nominating committee to select the 2014 MPAC chair and vice chairs. MPAC will consider and vote on the nominating committee’s recommendations at its Dec. 13 meeting.</li></ul> |  |
| 5:20 PM | 6. | * Climate Smart Communities Scenarios Project: First Look at Results – Review scenarios tested and report out on estimated greenhouse gas emissions reductions, and land use, employment, transportation and environmental outcomes – <u>INFORMATION / DISCUSSION</u>   | <b>Craig Dirksen, Metro Council</b><br><b>Kim Ellis, Metro</b> |
|         |    | <ul style="list-style-type: none"><li>• <i>Outcome:</i> Receive an informational presentation of the early results and understand next steps in the process for shaping a preferred approach in 2014.</li></ul>   |  |

- 6:10 PM** 7. \* City of Portland and Multnomah County Climate Adaptation Plan – INFORMATION / DISCUSSION
- *Outcome:* Strengthen the Advisory Committee’s understanding of the City and County climate preparation strategy and actions needed for building local resilience to climate change; discuss equity and health impacts and the role regional governments can play in climate preparation through their policies.

**Tim Lynch, Multnomah County  
Michele Crim, City of Portland  
Kari Lyons-Eubanks,  
Multnomah County**

**6:55 PM** 8. **MPAC MEMBER COMMUNICATION**

**7 PM** 9. **ADJOURN**

**Loretta Smith, Chair**

Upcoming MPAC Meetings:

- Wednesday, Dec. 11 from 5 to 7 p.m. at the Metro Regional Center, Council Chamber.
- Wednesday, Jan. 8 from 5 to 7 p.m. at the Metro Regional Center, Council Chamber.
- Wednesday, Jan. 22 from 5 to 7 p.m. at the Metro Regional Center, Council Chamber.

\* Material included in the packet.

\*\* Material will be distributed in advance of the meeting.

For agenda and schedule information, call Kelsey Newell at 503-797-1916, e-mail: [kelsey.newell@oregonmetro.gov](mailto:kelsey.newell@oregonmetro.gov).  
To check on closure or cancellations during inclement weather please call 503-797-1700.

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## 2013-14 MPAC Tentative Agendas

As of 11/6/13

*Items in italics are possible; **bold** denotes required items*

<p><b>MPAC Meeting</b> Wednesday, Nov. 13, 2013</p> <ul style="list-style-type: none"> <li>• 2014 MPAC Officers – Select Nomination Committee</li> <li>• Climate Smart Communities Scenarios Project: First Look at Results – Review scenarios tested and report out on estimated greenhouse gas emissions reductions, and land use, employment, transportation and environmental outcomes – Information/ discussion</li> <li>• Climate Adaptation Presentation (building community resilience to future climate impacts (Kent Snyder – ACSI; Tim Lynch – Multnomah County Office of Sustainability; Kari Lyons-Eubanks – Multnomah County Environmental Health; Vivek Shandas – <u>PSU</u>)</li> <li>• <i>Visits by Senator Merkley or Senator Wyden</i></li> </ul> <p><b>FYI: 2013 Association of Oregon Counties Annual Conference, Eugene, OR, November 18 - 21</b></p>	<p><b>MPAC Meeting</b> Wednesday, Dec. 11, 2013</p> <ul style="list-style-type: none"> <li>• 2014 MPAC Officers – MPAC is scheduled to consider and vote on the nominating committee’s recommendation</li> <li>• Climate Smart Communities Scenarios Project: First Look at Results – Report on scenarios’ cost analysis relative to fiscal, public health and social equity outcomes, and identify key policy areas to be the focus of discussion and input to shape draft preferred approach in 2014 – Information/ discussion</li> <li>• Solid Waste Community Enhancement Program Improvements – Information</li> </ul>
<p><b>MPAC Meeting</b> Wednesday, Jan. 8, 2014</p> <ul style="list-style-type: none"> <li>• <i>Regional Infrastructure Enterprise update – Information</i></li> <li>• <i>2014 Regional Transportation Plan process update and share demographic and economic trends – Information</i></li> <li>• <i>Comparison of past regional population and employment forecasts with actual growth – Information</i></li> <li>• <i>Streetcar Evaluation Methods Project: Discuss preliminary results of FTA funded research project focused on developing tools to better understand economic impacts of streetcar investments – Seek MPAC input on next steps in work program</i></li> </ul>	<p><b>MPAC Meeting</b> Wednesday, Jan. 22, 2014</p> <ul style="list-style-type: none"> <li>• <i>Metro Equity Strategy Program overview – Information/ discussion</i></li> <li>• <i>2014 Regional Transportation Plan process update / share draft project list – Information</i></li> </ul>

<p><b>MPAC Meeting</b> Wednesday, Feb. 12, 2014</p> <ul style="list-style-type: none"> <li>• <i>Current economic conditions and their possible implications for the 20-year regional population and employment growth forecast – Information/discussion</i></li> </ul>	<p><b>MPAC Meeting</b> Wednesday, Feb. 26, 2014</p>
<p><b>MPAC Meeting</b> Wednesday, March 12, 2014</p> <ul style="list-style-type: none"> <li>• <i>Preliminary 20-year range forecast for regional population and employment growth – Information/discussion</i></li> <li>• <i>Preview of public review draft plan and preliminary air quality results – Information</i></li> </ul>	<p><b>MPAC Meeting</b> Wednesday, March 26, 2014</p>

**Parking Lot:**

- Apartments without parking
- Oregon Energy Plan
- Statewide Transportation Strategy
- Presentation on health & land use featuring local projects from around the region
- Affordable Housing opportunities, tools and strategies
- Greater Portland, Inc. Presentation on the Metropolitan Export Initiative
- Update on regional economic trends
- MPAC composition
- Dept. of Land Conservation and Development work program



METRO POLICY ADVISORY COMMITTEE

October 23, 2013

Metro Regional Center, Council Chamber

MEMBERS PRESENT

Jody Carson, *1<sup>st</sup> Vice Chair*  
Sam Chase  
Tim Clark  
Craig Dirksen  
Denny Doyle  
Maxine Fitzpatrick  
Charlie Hales  
Marilyn McWilliams  
Wilda Parks  
Loretta Smith, *Chair*  
Bob Stacey  
William Wild

AFFILIATION

City of West Linn, Clackamas Co. Other Cities  
Metro Council  
City of Wood Village, Multnomah Co. Other Cities  
Metro Council  
City of Beaverton, Washington Co. 2<sup>nd</sup> Largest City  
Citizen, Multnomah Co. Citizen  
City of Portland  
Tualatin Valley Water District, Washington Co. Special Districts  
Citizen, Clackamas Co. Citizen  
Multnomah County  
Metro Council  
Oak Lodge Sanitary District, Clackamas Co. Special Districts

MEMBERS EXCUSED

Ruth Adkins  
Andy Duyck  
Amanda Fritz  
Josh Fuhrer  
Bob Grover  
Jeff Gudman  
Doug Neeley  
Tom Imeson  
Charlynn Newton  
Craig Prosser  
Jim Rue  
Martha Schrader  
Steve Stuart  
Peter Truax, *2<sup>nd</sup> Vice Chair*  
Bill Turlay  
Jerry Willey

AFFILIATION

PPS, Governing Body of School Districts  
Washington County  
City of Portland  
City of Gresham, Multnomah County, 2<sup>nd</sup> Largest City  
Citizen, Washington Co. Citizen  
City of Lake Oswego, Clackamas County, Largest City  
City of Oregon City, Clackamas Co. 2<sup>nd</sup> Largest City  
Port of Portland  
City of North Plains, City in Washington Co. Outside the UGB  
TriMet  
Oregon Dept. of Land Conservation & Development  
Clackamas County  
Clark County  
City of Forest Grove, Washington Co. Other Cities  
City of Vancouver  
City of Hillsboro, Washington Co. Largest City

ALTERNATES PRESENT

Gretchen Buehner  
Kris Howatt  
Carrie MacLaren  
Kathy Roth

AFFILIATION

City of Tigard, Washington Co. Other Cities  
Governing Body of School Districts  
Oregon Dept. of Land Conservation & Development  
City of Oregon City, Clackamas Co. 2<sup>nd</sup> Largest City

STAFF: Beth Cohen, Andy Cotugno, Kathryn Harrington, Mia Hart, Jim Middaugh, Kelsey Newell, Ted Reid, Nikolai Ursin, John Williams.

## **1. CALL TO ORDER AND DECLARATION OF A QUORUM**

MPAC Chair Loretta Smith called the meeting to order at 5:11 p.m.

## **2. SELF INTRODUCTIONS & COMMUNICATIONS**

All attendees introduced themselves.

## **3. CITIZEN COMMUNICATION ON NON-AGENDA ITEMS**

There were no citizen communications on non-agenda items.

## **4. COUNCIL UPDATE**

Councilor Sam Chase provided an update on the following items:

- Metro Council approved a 40-acre expansion of the Urban Growth Boundary on October 10<sup>th</sup>. The request was made by the West Linn-Wilsonville School District to accommodate an anticipated need for new elementary and middle schools.
- The public was invited to help name the three African lion cubs at the Oregon Zoo. More than 11,000 votes were received and the name will be released October 24.

## **5. APPROVAL OF OCT. 9, 2013 MPAC MINUTES**

**MOTION:** Mayor Denny Doyle moved, Ms. Maxine Fitzpatrick seconded, to approve the MPAC Minutes from October 9, 2013.

**ACTION:** With all in favor, the motion passed.

## **6. PUBLIC ENGAGEMENT GUIDE**

Ms. Patty Unfred of Metro introduced the Public Engagement Guide. Federal requirements under Title VI state the public involvement guide for transportation must be updated every four years. This year, the Public Engagement Guide update uses a broader approach applying to agency-wide programs. Staff worked with the Public Engagement Review Committee (PERC) to develop a draft Public Engagement Guide, which then underwent a 45-day public comment period. The guide is written for three audiences: Metro staff to use as a guide for best practices, local government staff to use as a resource, and the general public to break through mysticism surrounding planning processes.

Ms. Cassie Salinas of Metro stated the guide is divided in six sections: (1) introduction; (2) governing structure; (3) Metro services; (4) public meetings and events; (5) public engagement in regional land use and transportation planning, which addresses Metro's approach, the region's six desired outcomes, public engagement activities for key decisions, and procedures for local public engagement for project sponsors; (6) best practices for inclusive public engagement and outreach, including steps for developing an engagement plan, examples of engagement techniques to reach underrepresented populations, and methods used to consistently measure our effectiveness when engaging the community. Ms. Salinas summarized the local engagement and non-discrimination

check list and provided examples of tools and techniques to engage the public, such as interactive web pages, surveys, open houses, and social media.

The 45-day public comment began August 12<sup>th</sup> and closed September 30<sup>th</sup>. Over 1,400 comments were received. TPAC and MTAC member were generally in support of the guide and provided suggestions for improvement, such as additional detail surrounding coordination and outreach to local cities, counties, engagement committees, and broadened regional outreach. Key themes from public comments include building awareness about Metro in communities, building relationships with community-based organizations, and engaging the public through multiple channels.

A revised version of the Public Engagement Guide will be brought to TPAC for final review and recommendation to JPACT on November 1<sup>st</sup>, JPACT will be asked for approval November 14<sup>th</sup>, and Council will be asked to approve the guide November 21<sup>st</sup>. The final guide will be submitted by end of 2013.

Member comments included:

- Councilor Gretchen Buehner highlighted the importance of reaching out to all counties in the region and specifically expressed concern in regards to Washington County. Separately, Councilor Buehner recommended improvements to the website to increase usability. Ms. Unfred stated that although event outreach didn't occur in Washington County, events were one of many outreach tools to ensure expansive outreach. The Public Comment Report outlines the source of public comments, including a breakdown by county. Additionally, Ms. Unfred stated the website is currently undergoing improvements.
- Members stated the importance of including unincorporated areas in public outreach, namely utilizing web-based tools. Ms. Salinas stated staff has been examining a wider outreach base, such as outreach through blogs and newsletters, and acknowledged that Metro's outreach efforts can improve in these areas.

## **7. REGIONAL EQUITY ATLAS 2.0**

Councilor Chase introduced the Regional Equity Atlas 2.0 as an important tool for highlighting disparities in the Portland region. The mapping tool can be a valuable resource for Metro staff and MPAC members when considering recommendations to Council.

Mr. Ted Reid of Metro provided an overview of the Regional Equity Atlas 2.0. The Equity Atlas is a project of the Coalition for a Livable Future (CLF) in partnership with Metro and Portland State University (PSU). The Regional Equity Atlas Mapping Tool will enhance the ability of Metro staff to develop their equity strategy, among other

Ms. Mara Gross of CLF stated the Equity Atlas Mapping Tool provides a visual depiction of disparities across the region and enables a deeper understanding the resources and opportunities available for different neighborhoods and populations. CLF is introducing the tool to local jurisdictions as a resource to help inform policy, planning, and investments for regional decisions. The Regional Equity Atlas 2.0 project includes the web-based mapping tool, a website summarizing findings and gallery of key maps and analysis, and an outreach and education initiative to engage stakeholders to create concrete changes in regional policies and priorities.

The original Regional Equity Atlas, published in 2007, transformed local conversations around equity and the findings have catalyzed changes in regional planning and investment decisions through shaping jurisdictional understanding of the region's needs. For instance, the first Equity Atlas exposed many neighborhoods with minimal access to natural areas, which helped initiate Metro's Nature in Neighborhoods Capital Grant Program. The Regional Equity Atlas 2.0 is an update and expansion to the first Atlas, including extensive research on data sources and best practices as well as a stakeholder engagement process that gathered input from non-profits, government agencies, and community organizations. The mapping tool can organized data by city and county and includes a range of over 150 demographic and access indicators, such as race and ethnicity, income, education, health care and health outcomes, access to food, natural areas, and services and amenities. The online mapping tool can be accessed at [www.equityatlas.org](http://www.equityatlas.org).

The Atlas maps highlight significant regional disparities affecting people of color, low-income populations, and other key demographic groups, as well as display positive examples where opportunity is more equitably distributed. Ms. Gross provided examples of the capability of the mapping tool, such as overlapping maps to show the relationship between air quality and toxins with percent students eligible for free or reduced price lunches and proximity to publicly accessible park in relationship to areas with above regional average percent youth. One of the new findings include healthy eating and active living data and BMI distributions. Ms. Gross provided a live demonstration of the mapping tool and provided examples of how the Atlas can be used to inform policy and decision making related to Metro's programs, such as the Regional Transportation Plan and Climate Smart Communities. CLF is working with to set up technical trainings to help local jurisdictional staff use the tool and will be scheduling workshops in the coming months.

Member comments included:

- Members discussed how the Regional Equity Atlas Mapping Tool can be utilized by Metro and other local jurisdictions to inform regional decision making and analysis, for instance decisions surrounding the urban growth boundary and concerns surrounding water availability.
- Members stated their support of the Mapping Tool and encouraged additional presentations of the Equity Atlas at regional coordinating committees and counties. Mayor Doyle stated the City of Beaverton planners expressed their appreciation of the tool. Mayor Doyle stated the Equity Atlas is a valuable tool to save time and provide data support when applying for investments.
- Members asked if brownfields or industrial areas can be included as an indicator on the Mapping Tool. Ms. Gross stated this is a possibility, noting the tool can compile data from to overlap with the Equity Atlas, provided the data is complete throughout the region.
- Members discussed impacts and progress as a result of the Equity Atlas. Ms. Gross stated the tool helps shift the conversation to increase awareness surrounding equity and incorporating questions about race, ethnicity, income and people with disabilities. Additionally, the tool assisted in Metro's Nature in Neighborhoods capital grants, specifically location of investment. Councilor Chase highlighted how the tool can help drive change surrounding urban renewal reform and acknowledging how communities of color historically shift from specific areas.



## **8. PORTLAND BROWNFIELDS ASSESSMENT**

Commissioner Smith introduced Mr. Tom Armstrong and Mr. Tyler Bump of the City of Portland. The Portland Brownfield Assessment addresses the financial and economic development challenges of brownfield redevelopment.

Mr. Armstrong of the City of Portland provided an overview of the Portland Brownfield Redevelopment Assessment. Mr. Armstrong provided a definition of a brownfield and summarized the significance of removing toxins from the soil, namely as a source for economic development, environmental health impacts, public health, and industrial land supply. Barriers to redevelopment include financial barriers, uncertainty and risk, and regulatory process. Brownfields are a regional problem that exist throughout the region and can support regional economic development through utilizing existing regional land supply, for example generating new employment areas.

Mr. Bump of the City of Portland stated the total brownfield area in Portland amounts to 910 acres. The assessment examined the regional revenue potential of small commercial, industrial conversion, ongoing industrial, and rural industry sites through new jobs growth, property tax revenue, and net new personal income. Vacant and underutilized lands were identified, cross referenced with DEQ reported contaminated sites, and brownfield inventory was identified by typology. Typologies are consistent with Metro's work on the Regional Brownfield Scoping project and are driven by historic use and zoning. Buildable land inventory in Portland is 60% industrial and 40% non-industrial. The majority of parcels impacted by potential contamination are located in commercial typologies, while the majority total acreage is attributed to industrial typologies. 40% of sites in the brownfield inventory are also impacted by other constraints such as inadequate infrastructure or other physical site constraints.

Environmental cleanup costs generally have a stronger overall influence on feasibility than the costs associated with market variables. The total feasibility gap is estimated at \$214 million across all employment brownfield typologies or \$307 million when Superfund costs are included for affected properties. High value locations with high allowed density development are much more likely to be market feasible. Industrial brownfields are generally challenging to redevelopment because cleanup costs often exceed the redeveloped value, which is limited by the lower density of development and land prices. 100% redevelopment of the brownfield inventory would create an additional 335 acres of industrial land capacity, a potential for 31,000 jobs, \$240 million per year in potential state and local income, property and business tax revenues, and \$42million annual tax revenue for the City of Portland.

Policy tools include statewide tax incentives, the most efficient being the Remediation Cost Tax Credit, regional-local programs, the most effective being Public Land Bank, and superfund. Key findings of the assessment were that brownfields exist throughout the region; 60% of the Portland brownfield inventory is industrial land and 75% of the financial feasibility gap is on industrial lands. Portland is exploring a City Incentive Program to address the feasibility gap; SB 246 rulemaking may provide this vehicle. The city is coordinating with the DEQ, Port of Portland and Metro to receive tax credits and working to establish a Public Land Bank.

Member comments included:

- Members asked clarifying questions surrounding the feasibility gap, particularly as it relates to the urban renewal area. Mr. Armstrong stated a significant portion of the challenge of

brownfield redevelopment is the upfront capital to perform the cleanup and discussed legislative mechanisms surrounding urban renewal areas.

- Members asked clarifying questions related to the timeline and four-year payback assumption.
- Councilor Stacey asked clarifying questions about the feasibility gap in industrial areas compared to mixed use areas, for example mixed use development on SE Division Street. Mr. Bump stated \$32 million of the total feasibility gap is attributed to mixed use development and noted there are variations depending on the area, for instance potential contamination as a development cost.
- Councilor Buehner asked if there are any available tools for analysis to work with adjacent cities on brownfields next to Barbur Boulevard. Mr. Armstrong stated the available data is often not specific and there is little incentive to pursue research related to the scale of the issue until a phase one and phase two analysis is initiated.
- Members asked clarifying questions related to the financial feasibility gap in the City of Portland, specifically how the feasibility gap is larger than an uncertainty gap. Mr. Armstrong stated the perspective purchasing agreement and limiting risks are inexpensive solutions, but the brownfield clean up is a large cost. A polluter pays system is often utilized, but the City of Portland has to consider providing funds to begin the cleanup and initiate payback. Mr. Bump noted that uncertainty is a financial risk.


#### **9. MPAC MEMBER COMMUNICATION**

Commissioner Smith reminded members to sign up for the MPAC tour of the Oregon Zoo.

#### **10. ADJOURN**

Chair Loretta Smith adjourned the meeting at 6:56 p.m.

Respectfully Submitted,



Mia Hart

Recording Secretary

**ATTACHMENTS TO THE PUBLIC RECORD FOR OCTOBER 23, 2013**

<b>ITEM</b>	<b>DOCUMENT TYPE</b>	<b>DOC DATE</b>	<b>DOCUMENT DESCRIPTION</b>	<b>DOCUMENT No.</b>
5	Handout	10/9/2013	100913 MPAC Minutes	102313m-01
6	PPT	N/A	Public Engagement Guide	102313m-02
7	Handout	N/A	Regional Equity Atlas 2.0 Indicators	102313m-03
7	PPT	N/A	Regional Equity Atlas	102313m-04
8	Handout	11/12/2012	Regional Brownfield Scoping Project Final Report Excerpt	102313m-05
8	PPT	10/23/2013	Portland Brownfield Redevelopment Assessment	102313m-06

# MPAC Worksheet

**Agenda Item Title:** Climate Smart Communities Scenarios Project – First Look At Results

**Presenter(s):** Metro Councilor Dirksen and Kim Ellis

**Contact for this worksheet/presentation:** Kim Ellis

**Date of MPAC Meeting:** November 13, 2013

## **Purpose/Objective**

Staff will present early results from the Phase 2 scenario analysis and next steps for reporting back to regional advisory committees, and local and state officials, and the process for shaping a preferred approach in 2014.

## **Action Requested/Outcome**

MPAC members receive an informational presentation of the early results and begin to identify potential policy areas for the project to focus on in 2014 when seeking input from community and business leaders, local governments, state agencies and the public about which investments and actions should be included in a preferred approach.

## **How does this issue affect local governments or citizens in the region?**

The 2009 Oregon Legislature required the Portland metropolitan region to develop an approach to reduce per capita greenhouse gas emissions from cars and small trucks by 20 percent below 2005 levels by 2035. Oregon Administrative Rule 660-044 directs the Metro Council to select a preferred approach by the end of 2014 after public review and consultation with local governments and state and regional partners.

The goal of the Climate Smart Communities Scenarios Project is to adopt a preferred approach that supports community visions for downtowns, main streets and employment areas, protects farms, forestland, and natural areas, creates healthy, livable neighborhoods, increases travel options and grows the regional economy while meeting the state mandate. The project is now entering its third and final phase, and is currently on track to meet the legislative and administrative mandates the project is aimed at addressing.

## **What has changed since MPAC last considered this issue/item?**

- Staff completed modeling of the three alternatives and began to review the early results with the technical work group, TPAC and MTAC.
- Other activities are described in the packet.

## **What packet material do you plan to include?**

- Memo to MPAC, JPACT and interested parties on Climate Smart Communities: First Look at Results and Next Steps (November 6, 2013).
  - Attachment 1. Phase 3 Communications and Engagement Strategy
  - Attachment 2. First Look at Results Project briefings and engagement (*November 6, 2013*)
  - Attachment 3. Technical Work Group Roster (*October 18, 2013*)
  - Attachment 4. Overview of scenarios assumptions (*October 29, 2013*)
  - Attachment 5. Investing in Great Communities brochure with early results (*October 18, 2013*)

 Metro | Memo

DATE: November 6, 2013  
TO: MPAC, JPACT and Interested Parties  
FROM: Kim Ellis, Principal Transportation Planner  
SUBJECT: Climate Smart Communities Scenarios Project – First Look At Results and Next Steps

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This memorandum outlines the history of the Climate Smart Communities Scenarios Project and next steps for moving forward to develop a preferred approach in 2014.

The 2009 Oregon Legislature required the Portland metropolitan region to develop an approach to reduce per capita greenhouse gas emissions from cars and small trucks by 20 percent below 2005 levels by 2035. Oregon Administrative Rule 660-044 directs the Metro Council to select a preferred approach by the end of 2014 after public review and consultation with local governments and state and regional partners.

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

The goal of the Climate Smart Communities Scenarios Project is to adopt a preferred approach that supports community visions for downtowns, main streets and employment areas, protects farms, forestland, and natural areas, creates healthy, livable neighborhoods, increases travel options and grows the regional economy while meeting the state mandate.

The project is now entering its third and final phase, and is currently on track to meet the legislative and administrative mandates the project is aimed at addressing. Metro staff will present the results of the evaluation completed in September - launching the third, and final, phase of the project. Phase 3 will use the analysis results to begin a regional discussion aimed at identifying which investments and actions from each of the three scenarios to include in the region's preferred approach.

In December, the Metro Council, Metro Policy Advisory Committee (MPAC), Joint Policy Advisory Committee on Transportation (JPACT) will be asked to identify policy areas for the project to focus on in 2014 when seeking input from community and business leaders, local governments, state agencies and the public about which investments and actions should be included in a preferred approach for the Metro Council to consider for adoption in December 2014.

**ACTION REQUESTED**

- Receive early results and begin to identify potential policy areas for the project to focus on in 2014.

## PROJECT BACKGROUND

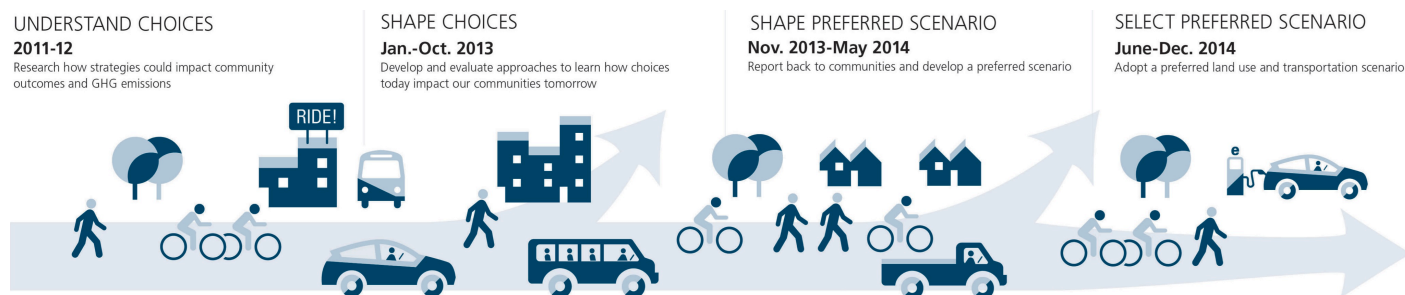
The 2009 Oregon Legislature required the Portland metropolitan region to develop an approach to reduce per capita greenhouse gas emissions from cars and small trucks by 20 percent below 2005 levels by 2035. Oregon Administrative Rule 660-044 directs the Metro Council to select a preferred approach by the end of 2014 after public review and consultation with local governments and state and regional partners.

The Metro Council has adopted policies to make decisions that advance the six desired outcomes found in the Regional Framework Plan. One of those desired outcomes pertains to leadership on climate change.

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 reduce greenhouse gas emissions as required by the state. All six desired outcomes are being used to guide the evaluation of scenarios and development of a preferred approach. The land use visions of cities and counties across the region are the foundation for this work.

Figure 2 illustrates an overview of the project timeline.

### FIGURE 2. CLIMATE SMART COMMUNITIES SCENARIOS PROJECT TIMELINE

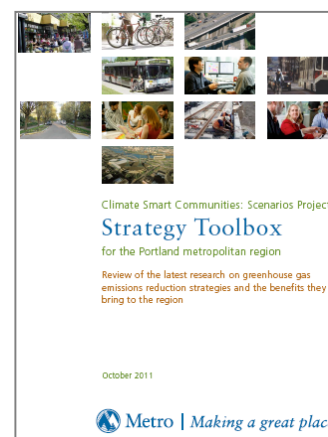


Phase 1 was completed in early 2012 and focused on understanding the region's choices. A key product of Phase 1 was the *Strategy Toolbox*, which reviewed the latest research on greenhouse gas (GHG) reduction strategies and their potential effectiveness and benefits. Staff also strategically engaged public officials, community and business leaders, community groups and government staff through two regional summits, 31 stakeholder interviews, and public opinion research.

Metro then evaluated a wide range of options for reducing GHG emissions by testing 144 different combinations of land use and transportation strategies (called "scenarios") to learn what it would take to meet the

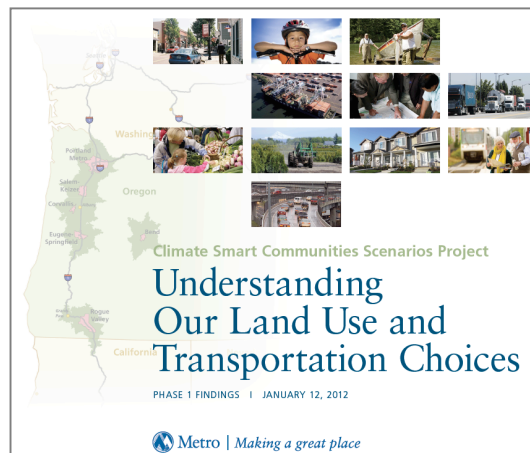


Figure 1. Metro's scenario evaluation criteria are based on the six desired regional outcomes adopted by the Metro Council in 2010.



region's reduction target.

Phase 1 found that current plans and policies – if realized – along with advancements in fleet and technology provide a strong foundation for meeting the state target. Although current plans move the region in the right direction, current funding is not sufficient to implement adopted local and regional plans. Metro concluded that a key to meeting the target would be the various governmental agencies working together to develop partnerships and make community investments to encourage development that both supports adopted local and regional plans and reduces greenhouse gas emissions.



Phase 2 began in January 2012 and concluded in October 2013. This phase focused on shaping and evaluating future choices for supporting community visions and meeting the state emissions reduction target. Staff conducted sensitivity analysis of the Phase 1 scenarios to better understand the GHG emissions reduction potential of individual strategies.<sup>1</sup> The strategies tested included pay-as-you-drive insurance, traffic operations, expanded transit service, pricing, transportation demand management programs, increased bicycle travel 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 road use fee, and carbon fee)

The information derived from the sensitivity analysis was used to develop a five-star rating system for communicating the relative climate benefits of different strategies in the region. Adopted local land use plans and zoning were unchanged in the Phase 1 analysis, and, therefore, no modeled climate benefit was derived from the sensitivity analysis for this strategy.

The climate benefits are shown in **Table 1** using a scale of 1 to 5 stars, with 5 stars representing the most effective greenhouse gas emissions reduction strategies.

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

**TABLE 1. RELATIVE CLIMATE BENEFITS FOR THE PORTLAND METROPOLITAN REGION \***

Investments and actions that reduce greenhouse gas emissions	Estimated climate benefit
Shift to low emissions vehicles and low carbon fuels	*****
Maintain and make transit more convenient, frequent accessible and affordable	*****
Increase the cost of fuel (e.g., gas tax or other fees)	*****
Increase participation in private pay-as-you-drive insurance programs	*****
Implement a mileage-based road use fee	*****
Use a market-based approach to manage parking	*****
Implement a carbon fee	*****
Adopt Federal fuel economy standards	*****
Use technology and “smarter roads to manage traffic flow and boost efficiency	*****
Provide information to expand use of low carbon travel options and fuel-efficient driving techniques <sup>2</sup> through public education and marketing	*****
Make walking and biking more safe and convenient with complete streets	*****
Provide information and incentives to expand use of low carbon travel options through employer-based commuter programs	*****
Limit urban growth boundary expansion	*****
Expand access to car-sharing	*****
Expand access to and market share of electric vehicle/plug-in electric vehicles	*****
Maintain and make streets and highways more safe, reliable and connected	*****

\* Note: The estimated climate benefit reflects the relative climate benefit of individual strategies as they were tested in Phase 1. The climate benefit shown represents the relative effectiveness of each strategy in isolation and does not capture any variations that may occur from synergies between multiple strategies.

Metro also undertook an extensive consultation process by sharing the Phase 1 findings with the cities, counties, county-level coordinating committees, regional advisory committees and state commissions. In addition, Metro convened workshops with community leaders working to advance public health, social equity, environmental justice and environmental protection in the region. A series of discussion groups were held in partnership with developers and business associations across the region. More than 100 community and business leaders



<sup>2</sup> ODOT initiated a statewide EcoDrive campaign in 2013. More information can be found at <http://www.oregon.gov/ODOT/TD/TP/pages/ecodrive.aspx>



participated in the workshops and discussion groups.

Eight case studies were produced to spotlight local government success stories related to strategies implemented to achieve their local visions that also help to reduce GHG emissions. A video of local elected officials and other community and business leaders was also produced as another tool for sharing information about the project and the range of strategies being considered.

Through these efforts, Metro concluded that the region's 2040 Growth Concept and the locally adopted land use and transportations plans that implement it provide the foundation for further scenario development and analysis. **Figure 3** summarizes the three approaches evaluated.

**FIGURE 3. THREE APPROACHES THAT WERE EVALUATED IN 2013**

<b>Scenario</b> <b>A</b>	<b>RECENT TRENDS</b> This scenario shows the results of implementing adopted plans to the extent possible with existing revenue.
<b>Scenario</b> <b>B</b>	<b>ADOPTED PLANS</b> This scenario shows the results of raising additional revenues – as called for in the RTP – to allow the region to make more progress toward implementing adopted plans.
<b>Scenario</b> <b>C</b>	<b>NEW PLANS AND POLICIES</b> This scenario shows the results of pursuing new policies, more investment and new revenue sources to more fully achieve adopted and emerging plans.

A set of criteria were developed through the Phase 2 consultation process to evaluate and compare the scenarios considering costs and benefits across public health, environmental, economic and social equity outcomes. As unanimously recommended by the Metro Policy Advisory Committee (MPAC) and the Joint Policy Advisory Committee on Transportation (JPACT), Council approved a resolution on June 6 directing staff to move forward into the analysis and report back with the results in Fall 2013. The Phase 2 evaluation was conducted during the summer and fall of 2013.

In addition to conducting the analysis this summer, staff prepared a communication and engagement strategy to guide the project to successful completion by the end of 2014. The strategy is summarized in **Attachment 1**.

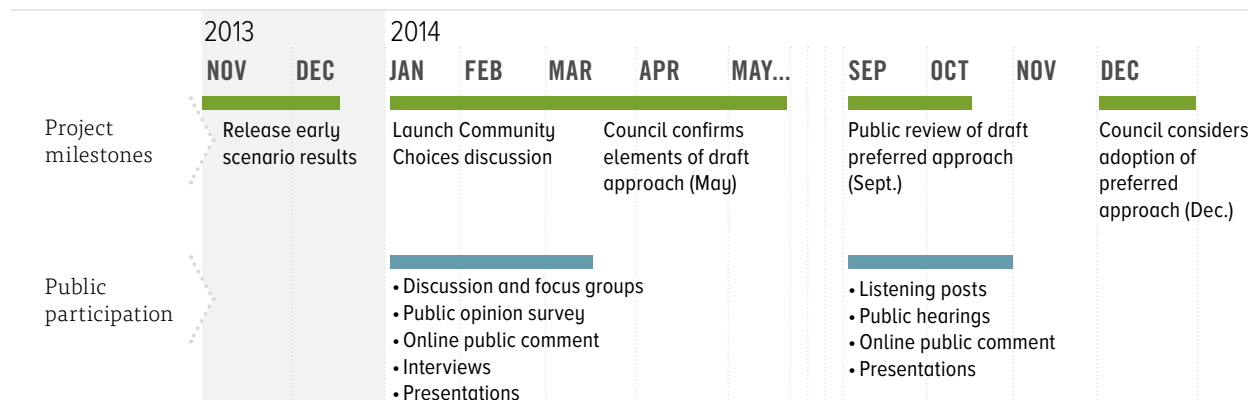
### **PHASE 3 - WHERE WE ARE NOW AND WHERE WE ARE HEADED**

As directed by MPAC, JPACT and the Metro Council, the project schedule calls for reporting back to Council and regional advisory committees starting in Fall 2013, launching the third, and final, phase of the project. More information is provided below.

Phase 3 from November 2013 to December 2014 is focused on reporting the results of the evaluation and seeking input from community and business leaders, local governments, state agencies and the public about which investments and actions should be included in a preferred approach for the Metro Council to consider for adoption in December 2014.

Figure 4 summarizes Phase 3 activities and milestones.

**FIGURE 4. PHASE 3 PROJECT MILESTONES AND PUBLIC PARTICIPATION OPPORTUNITIES**



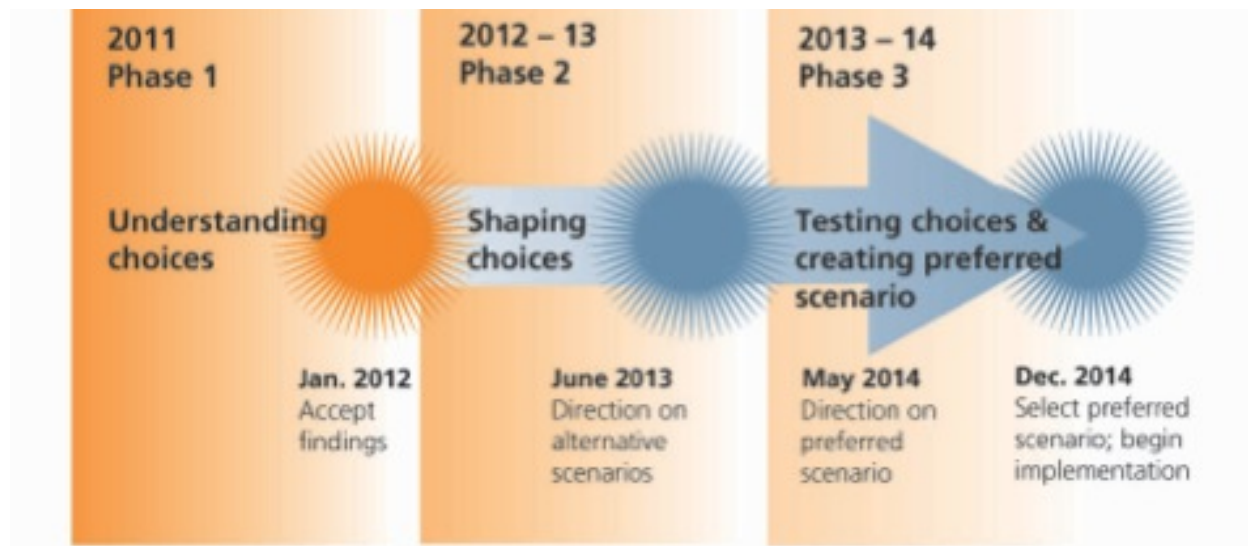
- **FIRST LOOK AT RESULTS: In November and December 2013**, the analysis results will be reported back to the Metro Council, regional advisory committees and local government county-level coordinating committees, prior to engaging other community and business leaders and the public. The November briefings will focus on review of what was tested and reporting the estimated greenhouse gas emissions reductions and land use, employment, transportation and environmental outcomes. The December briefings will focus on reporting the scenarios' cost analysis relative to fiscal, public health and social equity outcomes. A goal of these early briefings is to identify key remaining policy issues to seek input on through the "Community Choices" discussions in 2014.
- **COMMUNITY CHOICES DISCUSSION: From January to April 2014**, Metro will facilitate a Community Choices discussion to explore policy choices and trade-offs. Community and business leaders, local governments and the public will be asked to weigh in on which investments and actions should be included in the region's preferred approach. On-line comment opportunities, stakeholder interviews, discussion groups, public opinion research and focus groups will be used to gather input. 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.

Local government staff are requested to coordinate and host presentations with their local elected officials and senior leadership as interest and time allow. Community and business leaders are also encouraged to coordinate sharing information with their networks during this period. Metro staff and Metro Councilors will participate in as many of these presentations as time allows. A Community Choices discussion guide, Data Book of results, presentation tool kit and other communication materials will also be available to support partner outreach throughout this period. A public engagement summary report and recommendations for the draft preferred scenario will be provided to Metro's technical and policy advisory committees in April.

- **DIRECTION TO STAFF: In May 2014**, the Metro Council will be asked to provide direction to staff on the draft preferred approach. It is expected that the preferred approach will be a hybrid of investments and actions from the three tested scenarios of Phase 2 while relying on adopted local land use plans and visions as its foundation. The draft approach will be evaluated in Summer 2014 and then released for final public review in September 2014. Outreach to local government officials will occur in the summer in advance of the final adoption process to be held in the fall.
- **ADOPTION PROCESS: From September to December 2014**, the project will move into the final adoption stage. OAR 660-044 directs the Metro Council to select a preferred approach by the end of 2014 after public review and consultation with local governments and state and regional partners. On-line comment opportunities and public hearings are planned during this period. Refinements may be identified through the adoption process. The final action to select a preferred scenario will be in the form of an amendment to the Regional Framework Plan. The preferred approach is expected to support implementation of existing local plans and include regional and state investments and actions. The action is also expected to include recommendations to state agencies and commissions, the 2015 Legislature, and the Regional Transportation Plan (RTP). The Metro Council will consider adoption of a preferred approach in December of 2014.

Figure 5 shows the project timeline and decision milestones.

FIGURE 5. PROJECT TIMELINE AND DECISION MILESTONES

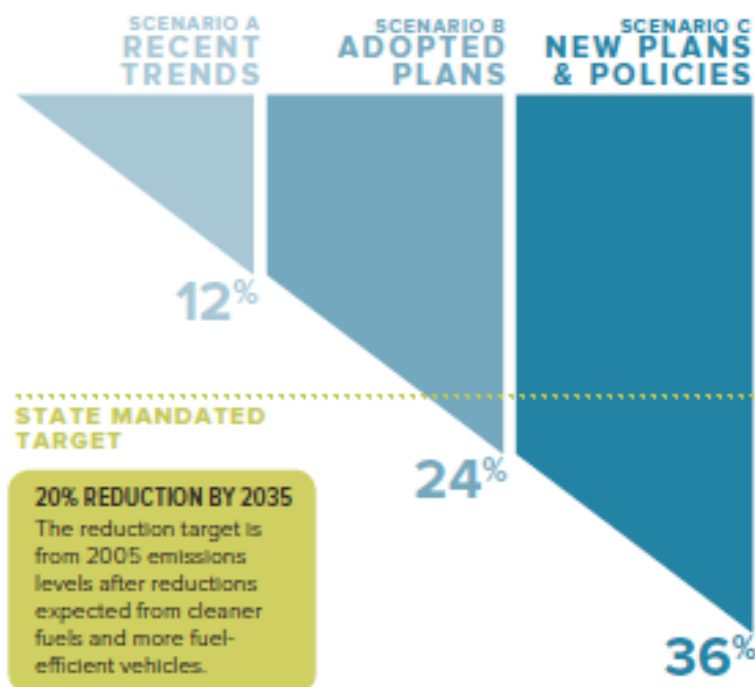


In early 2015, Metro will submit the preferred approach to the Land Conservation and Development Commission in the manner of periodic review. According to OAR 660-044, following Metro's plan amendment and LCDC review and order, Metro is required to adopt functional plan amendments, if necessary, to require cities and counties to implement the preferred scenario.

## CHANGES SINCE TPAC AND MTAC LAST CONSIDERED THIS ITEM

- **Staff completed modeling of the three alternatives and began to review the results with the technical work group.** The target for the region is to achieve a 20 percent reduction in greenhouse gas emissions on a per capita basis by 2035. **Figure 6 shows that Scenario A achieves a 12 percent reduction, while Scenario B and Scenario C achieve 24 percent and 36 percent reductions, respectively.** Additional results will be presented at the upcoming meetings.

FIGURE 6. ESTIMATED PER CAPITA GREENHOUSE GAS EMISSIONS REDUCTION BY 2035



- Staff **refined the Scenario A assumptions** to remove the I-5/Columbia River Bridge Replacement, reflecting the Washington State Legislature’s funding decision and lack of certainty around what could be assumed as an “Oregon-funded” project. The project remained in Scenario B and Scenario C as reflected in the adopted 2035 Regional Transportation Plan.
- Staff **convened the project technical work group** in August to provide a project update and review the Phase 3 engagement strategy, and in September and October to review early results and request help in briefing local officials.
- The **Oregon Health Authority began preparing a health impact assessment** of the three alternatives. This work is expected to be completed in November and will be shared with policymakers in December.
- Staff **finalized the project’s communications and engagement plan** and released a Request for Proposals (RFP 14-2499) to implement portions of the plan. Proposals were submitted on October 3. The selection process will be completed in October; and the firm selected will begin work as soon as possible in November. The RFP calls for communications support to gather

input from identified audiences through interviews, facilitated topic-specific discussion groups, and an online comment tool that effectively engages interested members of the public. The input will be summarized and then provided to Council, MPAC and JPACT to inform development of a draft preferred approach by May 2014. The Contractor will also help develop a mix of presentation tools and materials to support partner presentations and outreach this fall and in 2014.

- Staff shared the **community case studies** with Community Newspapers to elicit interest in a series of articles to help readers understand what greenhouse gas reduction strategies might look like in their communities. Staff from Gresham, Beaverton, and Hillsboro have been approached about running short articles in the city-produced newsletters featuring their respective case studies to increase awareness among residents. Wilsonville published a feature story in the city's Boones Ferry Messenger in July about their case study and the scenarios project. Hillsboro will run an article in their city newsletter, *City Views*, in October on the Climate Smart Communities Scenarios Project and how Hillsboro is addressing greenhouse gas emissions with 21st century technologies. The Portland Tribune reported on the project and a recently released progress report from the Oregon Global Warming Commission at <http://portlandtribune.com/pt/9-news/198023-metro-takes-steps-to-fight-climate-change>.
- Staff continued **coordination with Oregon Department of Transportation (ODOT), the Department of Land Conservation and Development and the Oregon Metropolitan Planning Organizations Consortium (OMPOC)** on CSC-related work. Staff provided information to be included in a progress report from LCDC and ODOT to the 2014 House and Senate Transportation Subcommittees by February 1, 2014. Staff provided information to ODOT to inform development of a draft implementation work plan for the Oregon Statewide Transportation Strategy (STS). The STS was accepted in March by the Oregon Transportation Commission, and the commission is expected to consider a draft work plan early next year.

Since the Portland region is the first area required by the state to do this work, it required a new set of modeling tools that ODOT and DLCD wanted us to use. This included adapting the state GreenSTEP model to run at a regional scale, learning to use it at Metro and sharing our experiences with other MPOs. In addition, staff provided technical and communication materials to the Central Lane metropolitan planning organization (MPO) to support the scenario planning effort underway in the Eugene-Springfield area. They anticipate completing an initial assessment of the greenhouse gas emissions reductions that could be achieved through their adopted plans by the end of the year. The Bend, Rogue Valley and Corvallis area MPOs are exploring how they might move forward to conduct a similar assessment of their adopted plans, and have reviewed the STS and CSC work completed to date to inform their approach and the analytic tools needed to support their efforts. CSC project-related discussions, tool development and information sharing will continue into 2014.

Finally, in May the LCDC designated Commissioner Lidz to be the CSC project liaison to the Commission. Commissioner Lidz will begin attending Council work sessions and MPAC and JPACT discussions as his schedule permits throughout the remainder of the project. Commissioner Lidz attended the November 5 Council work session and anticipates attending the December MPAC and JPACT discussions. This represents an important opportunity for the

region to build understanding of and support for the region's preferred approach with a member of the Commission. The Commission will review the region's adopted approach in the manner of periodic review in 2015.

- Staff continued **coordination** with the Urban Growth Report, Regional Transportation Plan (RTP), Metropolitan Transportation Improvement Program and Equity Strategy Program staff to identify potential opportunities for collaboration around engagement, evaluation methods and data. The Oregon Department of Transportation, TriMet, SMART district, and cities and counties in the region are currently developing lists of investment priorities as part of the 2014 RTP update. The project lists are due in December 2013, and are anticipated to include investment priorities from the Southwest Corridor Plan and East Metro Connection Plan in addition to other locally identified priorities from more recent updates to local visions and transportation system plans (TSPs). This presents an early opportunity for public agencies to identify investment priorities to be included in the preferred approach that is developed in 2014.

#### **PROPOSED NEXT STEPS**

##### **Nov. – Dec. 2013**

First Look at Results - Report back to regional advisory committees and County Coordinating Committees, and identify key policy issues for further discussion and input in 2014.

*November will focus on review of what was tested and reporting the estimated greenhouse gas emissions reductions and land use, employment, transportation and environmental outcomes.*

*December will focus on reporting the scenarios' cost analysis relative to fiscal, public health and social equity outcomes.*

The Oregon Health Authority is anticipated to complete health impact assessment of the three scenarios and make recommendations.

Prepare a presentation toolkit, a Data Book summarizing the results, and a discussion guide and other communication materials to seek input on which strategies should be included in the region's preferred approach from Jan. to April 2014.

##### **Nov. 18, 2013**

Project status update to the Local Officials Advisory Committee (LOAC) to LCDC.

##### **Dec. 10, 2013**

Council work session to discuss the scenarios' cost analysis relative to fiscal, public health and social equity outcomes and identify key policy issues for further discussion and input in 2014.

##### **January 2014**

Project status update provided to the Oregon Transportation Commission (OTC); an opportunity for the commission to provide comments and suggestions for Metro to consider as it moves forward.

##### **January 23 or 24, 2014**

Project status update provided to the Land Conservation and Development Commission (LCDC); an opportunity for the

commission to provide comments and suggestions for Metro to consider as it moves forward.

**Jan. – March 2014**

Engage local and state officials, community and business leaders and groups, and the public to share the results and seek input on the investments and actions to include in a draft preferred approach.

**April-May 2014**

MPAC, JPACT and Metro Council provide direction on draft preferred approach - directing staff to analyze the draft preferred approach and prepare adoption package and public review materials.

**Summer 2014**

Analyze draft preferred scenario using the regional travel demand model and Metropolitan GreenSTEP.

Project staff prepare adoption package for public comment period and provide updates to local governments.

**September 2014**

45-day public comment period on adoption package.

Consult with local governments, state and regional partners and the public on the “public review draft” preferred approach and implementation recommendations.

**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 approach.

**January 2015**

DLCD and LCDC consider the adopted Climate Smart Communities preferred approach in the manner of periodic review.

/Attachments

Attachment 1. Phase 3 Communications and Engagement Strategy

Attachment 2. First Look at Results Project briefings and engagement (*November 6, 2013*)

Attachment 3. Technical Work Group Roster (*October 18, 2013*)

Attachment 4. Overview of scenarios assumptions (*October 29, 2013*)

Attachment 5. Investing in Great Communities brochure with early results (*October 18, 2013*)

## ATTACHMENT 1.

### Phase 3 Communication and Engagement Strategy

Stage	First Look at Scenario Results	Community Choices Discussion	Building Understanding of Preferred Scenario	Final Adoption and Building Momentum for the Future
<b>Time frame</b>	Oct. – Dec. 2013	Jan. – May 2014	June – Aug. 2014	Sept. – Dec. 2014
<b>Milestone</b>	Release results (Oct.)	Council/JPACT/MPAC direction on preferred scenario (April-May)	Public review draft scenario summarized (June)	Public comment period begins (Sept.) Council/JPACT/MPAC Adoption (Dec.)
<b>Goal</b>	Decision-makers review results and begin to identify/discuss tradeoffs and policy issues through process of shared discovery	Decision-makers, public officials, business and community leaders, community groups and engaged public shape public review draft preferred scenario	Decision-makers, public officials, and business and community leaders understand basic elements of draft preferred scenario and importance of participating in final adoption process	Decision-makers, public officials, and business and community leaders embrace and take ownership of preferred scenario, commit to implement next steps/action plan



## ATTACHMENT 2.



NOVEMBER 6, 2013

### FIRST LOOK AT RESULTS

### Project Briefings and Engagement

#### October 2013 | Complete preliminary analysis and compile early results

- Oct. 14 – Work group meeting (share early results)
- Oct. 25 – Oregon MPO Consortium (share early results)
- Oct. 28 – Work group meeting (share early results)

#### November 2013 | Launch Phase 3 and First Look at Results

- Nov. 1 – TPAC (share early results; prep for JPACT)
- **Nov. 5 – Council work session** (share early results)
- Nov. 6 – MTAC (discuss early results; prep for MPAC)
- Nov. 13 – MPAC (share early results; identify key policy issues for further discussion)
- Nov. 14 – JPACT (share early results; identify key policy issues for further discussion)
- Nov. 18 - Local Officials Advisory Committee to LCDC (share early results)
- Nov. 20 - CTAC (share early results)
- Nov. 20 - EMCTC TAC (share early results)
- Nov. 21 - WCCC TAC (share early results)
- Nov. 22 - TPAC (discuss key policy issues)

#### December 2013 | First Look at Results continues

- Dec. 2 - WCCC Policy (share early results; discuss key policy issues)
- Dec. 4 - MTAC (discuss key policy issues)
- Dec. 5 - Wash. Co. Planning Directors (share early results; discuss key policy issues)
- Dec. 5 - C-4 Metro Subcommittee (share early results; discuss key policy issues)
- Dec. 9 - EMCTC Policy (share early results; discuss key policy issues)
- **Dec. 10 – Council work session** (share early results and identify key policy issues to be focus of 2014 engagement)
- Dec. 11 - MPAC (direction on key policy issues to be focus of 2014 engagement)
- Dec. 12 – JPACT (direction on key policy issues to be focus of 2014 engagement)

#### January 2014 | Launch Community Choices Discussion

- January - Oregon Transportation Commission (share results and policy issues)
- Jan. 23/24 - Land Conservation and Development Commission (share results and policy issues)
- January – May 2014 schedule under development

## ATTACHMENT 3.



## TECHNICAL WORK GROUP MEMBERS ROSTER

October 18, 2013

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



**INTRODUCTION**

The Portland metropolitan region is an extraordinary place to live. Our region has vibrant communities with inviting neighborhoods. We have a diverse economy and a world-class transit system. The region features beautiful scenery, parks, trails and wild places close to home.

Over the years, the communities of the Portland metropolitan area have taken a collaborative approach to planning that has helped make our region one of the most livable in the country. Because of our dedication to planning and working together to make those plans a reality, we have set our region on a wise course for managing growth – but times are changing. An increasingly diverse and growing population, a changing climate, rising energy costs, aging infrastructure, and other social and economic challenges demand new kinds of leadership and thoughtful deliberation and action.

**PROJECT BACKGROUND**

The 2009 Oregon Legislature required the Portland metropolitan region to develop an approach to reduce per capita greenhouse gas emissions from cars and small trucks by 2035 while at the same time the region expects to welcome 625,000 new residents within the region’s urban growth boundary.

The Climate Smart Communities Scenarios Project will illustrate how different investments and policies can protect farms, forestland and natural areas, create healthy, livable neighborhoods, and grow the regional economy while reducing greenhouse gas emissions from cars and small trucks. Building toward a future that reflects what is important to us means making priority investments that drive a strong economy, support the unique character of our communities and ensure everyone has access to

the opportunities that create the quality of life for which our region is known.

We know that investing in quality infrastructure is essential to a functioning, vibrant economy and healthy, livable communities. Past experience and analysis indicate that investments in centers, corridors and employment areas are an effective means of attracting growth to these areas in support of community visions and values. Investments can take the form of urban renewal, expanding transit service, building new sidewalks, bikeways or street connections, managing parking, travel option programs, and other tools. Removing barriers to more efficient use of land and existing infrastructure can also help local governments achieve their desired community visions.

Yet the Portland metropolitan region is not making the investments necessary to support our growing population or achieve community visions. The existing transportation system is overburdened, underfunded and cannot not meet current or future needs of the region. The cost of building the needed public and private facilities is estimated to be \$27 to \$41 billion. Traditional funding sources are expected to cover only half that amount.

As the region’s economy, labor and housing markets begin to recover in the aftermath of the Great Recession, lack of investment over the last 20 years in the systems that support our communities is undermining our region’s ability to prosper. We’re investing less in infrastructure today than at any time in our history. Infrastructure – such as roads, highways, sewer and stormwater networks, school facilities– is not being maintained or replaced as it ages. We also need to complete gaps in our region’s transit, walking and biking networks. At a time when state and federal resources needed to address our aging infrastructure are scarce, we have a unique opportunity to find a better way to support our communities, attract new business, and grow the economy.

To better understand the possibilities and challenges facing the region, the Climate Smart

Communities Scenarios Project evaluated three scenarios in Summer, 2013. Each scenario reflects choices about how and where the region invests to implement locally adopted plans and visions. They illustrate how different levels of leadership and investment could impact how the region grows over the next 25 years and how those investments might affect different aspects of livability for the region – creation of living-wage jobs, access to transit and jobs, housing, air quality, public health and greenhouse gas emissions.

The results of the analysis will be used to frame a regional discussion about which investments and actions should be included in a preferred approach. Working together, cities, counties and regional partners will decide which elements from each of the three scenarios evaluated should go forward into a preferred approach for the region to adopt in December 2014. Through this collaborative effort, we can identify how the region should work together to implement the approach that is adopted and develop new kinds of leadership and the local, regional, state and federal partnerships needed to invest in communities to make local and regional plans a reality.

## WHAT WE TESTED

While most assumptions are tailored to each scenario, several assumptions were the same for all three scenarios:

- Comprehensive plans and zoning as adopted by cities and counties across the region.
- Vehicle and fuel assumptions that were developed by three state agencies (ODOT, ODEQ and ODOE), and assumed by the Land Conservation and Development Commission when setting the region’s per capita GHG emissions reduction target in 2011. The assumptions were developed based on the best available information and current estimates about improvements in technologies and fuels.
- Federal gas tax at 18 cents per gallon (2012 level).

## THREE APPROACHES THAT WE EVALUATED IN 2013

<b>Scenario</b> <b>A</b>	<b>RECENT TRENDS</b> This scenario shows the results of implementing adopted plans to the extent possible with existing revenue.
<b>Scenario</b> <b>B</b>	<b>ADOPTED PLANS</b> This scenario shows the results of raising additional revenues – as called for in the RTP – to allow the region to make more progress toward implementing adopted plans.
<b>Scenario</b> <b>C</b>	<b>NEW PLANS AND POLICIES</b> This scenario shows the results of pursuing new policies, more investment and new revenue sources to more fully achieve adopted and emerging plans.

## Scenario

# A

## RECENT TRENDS

### Reference case

Given the uncertainties facing our region today, it is difficult to predict future trends and conditions. With that limitation in mind, the starting point for the scenarios analysis is the reference scenario. This scenario is a projection of how the region would grow if current local government transportation and land-use plans are followed through to 2035 with existing revenues and policies.

#### Land use and urban form

- Current zoning is maintained.
- Future Metro urban growth boundary expansions through the year 2035 add about 28,000 acres, in keeping with falling behind on the investments needed to attract growth in the region's centers, corridors and employment areas. This represents an accelerated schedule for making the region's adopted 50-year land supply available for development.
- Neighboring cities grow at rates that are similar to historic rates.

#### Public and private development incentives and fees

- Public incentives for housing decline from today limiting the ability of public agencies to partner with the private sector to build investments.
- Significant urban growth boundary expansion is coupled with higher developers fees in these areas to help urban reserves to be ready for development, recognizing limited public funding is available to fund needed infrastructure in these areas.
- Areas with paid parking in place today remain the same. This includes portions of the Portland Central City – Downtown Central Business District, Lloyd District, and

the River District/Northwest. No other parking strategies are implemented throughout the region.

#### Transportation system

Limited investment is made in the region's transportation system as funding levels stay the same as they are today for the period 2010 to 2035. Only projects with committed funding were included in the analysis.

#### Key road and highway investments

- The Sellwood Bridge replacement is completed.
- Interchanges in the I-84, OR 217 and US 26 corridors and at the junction of I-205/I-84 are improved.
- Auxiliary lanes are added on I-5 and I-205 at the junctions of I-5/I-205 and I-205/Powell/Washington and I-205/I-84, respectively.
- US 26 West is widened to six through lanes.
- Shute Road and 185<sup>th</sup> Avenue are widened to seven lanes to improve access from the Intel campus to US 26.
- The Sunrise project connection from I-205 to Southeast 122nd Avenue is built.
- Existing programs aimed at improving traffic operations and reducing delay continue at existing programmatic levels. Investments include timing traffic signals to be coordinated and implementing programs to clear breakdowns and accidents quickly on the region's highways.

#### Regional transit investments

- Portland-to-Milwaukie light-rail transit is constructed and Milwaukie light rail feeder bus service is provided.
- The Portland streetcar CL line loop is completed.
- 2010 levels of TriMet and South Metro Area Rapid Transit (SMART) service is maintained with small increases in TriMet service targeted to address overcrowding and delays due to congestion. This reflects that 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 multi-modal investments**

- New street connections and widening of existing major streets are limited.
- Limited bicycle and pedestrian investments reflecting that existing revenues are largely dedicated to transit, road and highway investments.

**Key education and incentive programs**

- Employer Outreach programs are funded at existing levels and focused on encouraging large employers (100 or more employees) to promote transit use, flexible work hours, carpooling, walking and bicycling in their workforce.
- Metro's Regional Travel Options (RTO) program continues to support operation of the Drive Less Connect program and provides technical assistance to Transportation Management Associations (TMAs) in the region, including the Lloyd District TMA, Westside Transportation Alliance and Swan Island TMA at existing program levels.
- Participation in carsharing programs grows.

# Scenario **B** **ADOPTED PLANS**

This scenario is a projection of how the region would grow if current local transportation and land-use plans are followed through to 2035 with the revenues anticipated in the 2035 Regional Transportation Plan.

### Land use and urban form

- Current local zoning is maintained.
- Future Metro UGB expansions through the year 2035 add nearly 12,000 acres, in keeping with the regional growth distribution adopted by the Metro Council in November 2012.
- Assumptions for neighboring cities are the same as Scenario A.

### Public and private development incentives and fees

- Public incentives for housing grow and are available in more areas than today.
- Developers pay similar fees as exist today, but less than Scenario A.
- Funding for public infrastructure (capital costs as well as costs of maintenance and upgrade) is available in all areas to accommodate new jobs and housing.
- A market-based approach to parking management is implemented in all regional centers, station communities and town centers served by high capacity transit.

### Transportation system

Significant investments are made to the transportation system reflecting the \$14 billion (2014\$) in funding assumed in the 2035 RTP financially constrained system for the period 2010 to 2035. Funding sources include:

- an increase of one cent per gallon per year in the statewide gas tax for system operations and maintenance.

- a \$15 increase of the state vehicle registration fee every eight years to pay for system expansion.
- continuation of past local and federal funding levels to pay for system expansion
- tolling on the I-5/Columbia River Bridge crossing to help pay for the I-5 Bridge Replacement project.
- An increase in the payroll tax to pay for reinvestment and expansion of transit service.

### Key road and highway investments

- The I-5/Columbia River Bridge Replacement is constructed, and I-5 North is widened to six through lanes.
- Additional interchange investments are made in the I-5, I-205, I-84, OR 217 and US 26 corridors.
- Programs and investments aimed at improving traffic operations and reducing delay are also expanded, including the expansion of real-time traveler information on-line and through the growing Smartphone app industry.

### Regional transit investments

- Columbia River Crossing light rail from Milwaukie to Clark College via downtown Vancouver is constructed.
- Portland to Lake Oswego streetcar, Burnside/Couch streetcar to Hollywood Transit Center and the Eastside streetcar loop (using the Milwaukie LRT bridge) are completed.
- Bus service routes and operations are adjusted to serve all new capital projects.

### **Other multi-modal investments**

- New street connections that further build out the regional street grid and arterial street expansion are constructed throughout system.
- Major streets are widened or retrofitted with wider sidewalks, safer street crossings, improved bus stops, bikeways, transit signal priority at intersections and other multi-modal designs.
- On-street bicycle and pedestrian projects, such as bicycle lanes, cycle tracks, bicycle boulevards, sidewalks and crossing improvements are constructed.
- Off-street regional trail projects are constructed, such as the Lake Oswego to Portland trail, South waterfront Willamette Greenway trail, Fanno Creek (Red Electric) trail, Beaverton Creek Trail, Westside trail, Bronson Creek trail, Council Creek trail, Tonquin trail, Columbia Slough trail, Scouter's Mountain trail, the Sunrise Project trail and Springwater trail, Oregon City Loop trail, a segment of the E. Buttes Loop trail, and the Gresham-Fairview trail.
- Freight rail and street extensions and expansions focused on serving industrial areas are constructed.

### **Key education and incentive programs**

- Car-sharing and Metro's Regional Travel Options (RTO) program is expanded throughout the region, particularly in areas served by high capacity transit.
- ODOT successfully launches a statewide EcoDrive Campaign, focusing on giving commercial drivers training in fuel-efficient driving practices. The campaign targets public agencies and private, commercial companies who maintain a fleet of cars and/or trucks, providing them with materials to teach their employees on ways to improve fuel efficiency through vehicle maintenance and driving techniques.



## Scenario

# C

## NEW PLANS & POLICIES

### Land use and urban form

- Current local zoning is maintained, but additional zoned capacity is assumed in keeping with the Southwest Corridor land use vision adopted by the Southwest Corridor Steering Committee in 2013. The vision identified additional residential and employment capacity to be added to areas of southwest Portland, Tigard, Tualatin and Sherwood.
- Future Metro UGB expansions through the year 2035 add nearly 12,000 acres, in keeping with the regional growth distribution adopted by the Metro Council in November 2012.
- Assumptions for neighboring cities are the same as Scenario A.

### Public and private development incentives and fees

- Public incentives for housing grow and are available in more areas than Scenario B. New locations served by high capacity transit are assumed to provide incentives to attract more housing and jobs in these areas.
- Developers pay similar fees as exist today, the same as Scenario B.
- Funding for public infrastructure (capital costs as well as costs of maintenance and upgrade) is available in all areas to accommodate new jobs and housing.
- In addition to the parking assumptions in Scenario B, a market-based approach to parking is also implemented in locations within .25-mile of where one or more frequent bus service routes intersect. Frequent bus lines have 15-minute or better service all day everyday.

### Transportation investments

Significant investments are made to the transportation system reflecting the \$20.8 billion (2014\$) in funding assumed in the 2035 RTP State System for the period 2010 to 2035.

In addition to the financially constrained system funding sources, this includes:

- The equivalent of a \$2 per year increase in the state vehicle registration fee through 2035 to pay for system expansion.
- Creation of a local/regional vehicle registration fee equivalent to \$1 per year to pay for system expansion.
- Creation of local street utility fees where they do not currently exist to pay for system maintenance and operations.
- a \$.03 per mile road use fee in lieu of at statewide gas tax beginning in 2015 to pay for system maintenance and expansion.
- a \$50 per ton carbon fee beginning in 2015 to pay for system expansion.
- the equivalent of a .02 increase in the TriMet payroll tax to pay for additional expansion of transit service.

### Key road and highway investments

- Investments assumed in Scenario B.
- The Sunrise project extension from Southeast 122nd to Southeast 172nd Avenue is built.
- Operational improvements are made in the I-5 South and I-205 corridors.
- Programs and investments aimed at improving traffic operations and reducing delay are also expanded to clear breakdowns and accidents quickly on the region's arterials.
- Additional interchange investments are made at the junctions of I-5/OR 217, I-5/72<sup>nd</sup> and US 26/185<sup>th</sup> Avenue.

### Regional transit investments

- Investments assumed in Scenario B.
- An extension of light rail transit from Portland to Tigard via Barbur Boulevard is constructed.
- Bus rapid transit serving AmberGlen in Hillsboro and the Powell/Division, I-205,

McLoughlin Boulevard and Tualatin-Valley Highway corridors is provided.

- Other Portland Streetcar extensions are completed, including: Broadway/Weidler Streetcar, Northeast MLK Streetcar, linking Portland State University to the Oregon Museum of Science and Industry (OMSI) to Northeast Killingsworth, and Northwest 19th/20th Streetcar.
- Bus service routes and operations are adjusted to serve all new capital projects. In addition, all headways are 30-minute or better, either through overlapping service or straight frequency on a single line. Frequent service lines have a minimum of 10-minute headway or better.
- A locally-developed transit system expansion plan for each part of the region is fully implemented building on the plan developed for the westside in 2012.
- Westside commuter rail operations are expanded to all-day service with 15-minute peak and 15 off-peak headways.

#### **Other multi-modal investments**

- Additional new street connections that build out the regional street grid and arterial street expansion are constructed throughout system.
- Major streets are widened or retrofitted with wider sidewalks, safer street crossings, improved bus stops, bikeways, transit signal priority at intersections and other multi-modal designs.
- On-street bicycle and pedestrian projects, such as bicycle lanes, cycle tracks, bicycle boulevards, sidewalks and crossing improvements are constructed.
- The draft regional Active Transportation Plan (August 2013) recommended pedestrian and bicycle networks are completed, including the spiderweb bicycle network. The spiderweb network encompasses diagonal bicycle parkways radiating from the Portland central city that are connected by circular bicycle parkways that connect nearly all town centers.
- Off-street regional trails in Scenario B are constructed in addition to other trails, such

as the Turf to Surf Rail with Trail, the Willamette River shared-use path in Oregon City, the Trolley Trail Bridge, completion of the St. John's segment of the Willamette Greenway, the northern railroad crossing segment of the Gresham-Fairview trail, and the East Buttes Loop Trail.

#### **Education and incentive programs**

- Car-sharing, employer outreach programs and Metro's Regional Travel Options (RTO) program are expanded throughout the region, particularly in new areas served by high capacity transit and frequent bus service.
- Real-time traveler information is provided on-line and through the growing Smartphone app industry.
- ODOT successfully expands its statewide EcoDrive Campaign to individual drivers, as evidenced by growth in participation in the region.

## Phase 2: 2010 base year and alternative scenario inputs

The inputs are for research purposes only and do not represent current or future policy decisions of the Metro Council.

		2010	2035		
		Base Year Reflects existing conditions	Scenario A Recent trends	Scenario B Adopted plans and policies	Scenario C New plans and policies
Strategy					
Community design	Households in mixed use areas (percent)	26%	36%	37%	37%
	Urban growth boundary expansion (acres)	2010 UGB	28,000 acres	12,000 acres	12,000 acres
	SOV trips under 10 miles that shift to bike (percent)	9%	10%	15%	20%
	Transit service (daily revenue miles)	73,000 miles	80,000 miles (keeps pace with job growth)	91,000 miles (RTP Financially Constrained)	159,000 miles (RTP State + more transit)
	Work/non-work trips in areas with parking management (percent)	13% / 8%	13% / 8%	30% / 30%	50% / 50%
Pricing	Pay-as-you-drive insurance (percent of households participating)	0%	20%	40%	100%
	Gas tax (cost per gallon \$2005)	\$0.42	\$0.48	\$0.73	\$0.18
	Road use fee (cost per mile \$2005)	\$0	\$0	\$0	\$0.03
	Carbon emissions fee (cost per ton)	\$0	\$0	\$0	\$50.00

The inputs are for research purposes only and do not represent current or future policy decisions of the Metro Council.

Strategy		2010	2035		
		Base Year Reflects existing conditions	Scenario A Recent trends	Scenario B Adopted plans and policies	Scenario C New plans and policies
Marketing and incentives	Households participating in eco-driving (percent)	0%	0%	30%	60%
	Households participating in individualized marketing programs (percent)	9%	30%	30%	60%
	Workers participating in employer-based commuter programs (percent)	20%	20%	20%	40%
	Car-sharing in high density areas (target participation rate)	One car share per 5000 vehicles	Twice the number of car share vehicles available	Same as Scenario A	Four times the number of car share vehicles available
	Car-sharing in medium density areas (target participation rate)	One car share per 5000 vehicles	One car share per 5000 vehicles	Twice the number of car share vehicles available	Same as Scenario B
Roads	Freeway and arterial expansion (lane miles added)	N/A	9 miles	81 miles (RTP Financially Constrained)	105 miles (RTP State)
	Delay reduced by traffic management strategies (percent)	10%	10%	20%	35%
Fleet	Fleet mix (proportion of autos to light trucks and SUVs)	auto: 57% light truck/SUV: 43%	auto: 71% light truck/SUV: 29%		
	Fleet turnover rate (age)	10 years	8 years		
Technology	Fuel economy (miles per gallon)	auto: 29.2 mpg light truck/SUV: 20.9 mpg	auto: 68.5 mpg light truck/SUV: 47.7 mpg		
	Carbon intensity of fuels	90 g CO <sub>2</sub> e/megajoule	72 g CO <sub>2</sub> e/megajoule		
	Light-duty vehicles: electric or plug-in electric vehicles (percent)	auto: 0% light truck/SUV: 0%	auto: 8% light truck/SUV: 2%		



# CLIMATE SMART COMMUNITIES SCENARIOS PROJECT



## INVESTING IN GREAT COMMUNITIES

**The Climate Smart Communities Scenarios Project was initiated in response to a mandate from the 2009 Oregon Legislature to reduce greenhouse gas emissions from cars and small trucks by 2035.**

There are many ways to reduce emissions while creating healthy, more equitable communities and a vibrant regional economy. Providing services and shopping near where people live, expanding transit service, encouraging electric cars and providing safer routes for walking and biking all can help.

The goal of the project is to adopt a preferred approach that meets the state mandate and supports community visions for downtowns, main streets and employment areas.

To better understand how best to support community visions and reduce greenhouse gas emissions, Metro evaluated three approaches – or scenarios – over the summer of 2013. The results will be used to frame a regional discussion about which investments and actions should be included in a preferred approach for the Metro Council to consider for adoption in December 2014.

[www.oregonmetro.gov/climatescenarios](http://www.oregonmetro.gov/climatescenarios)

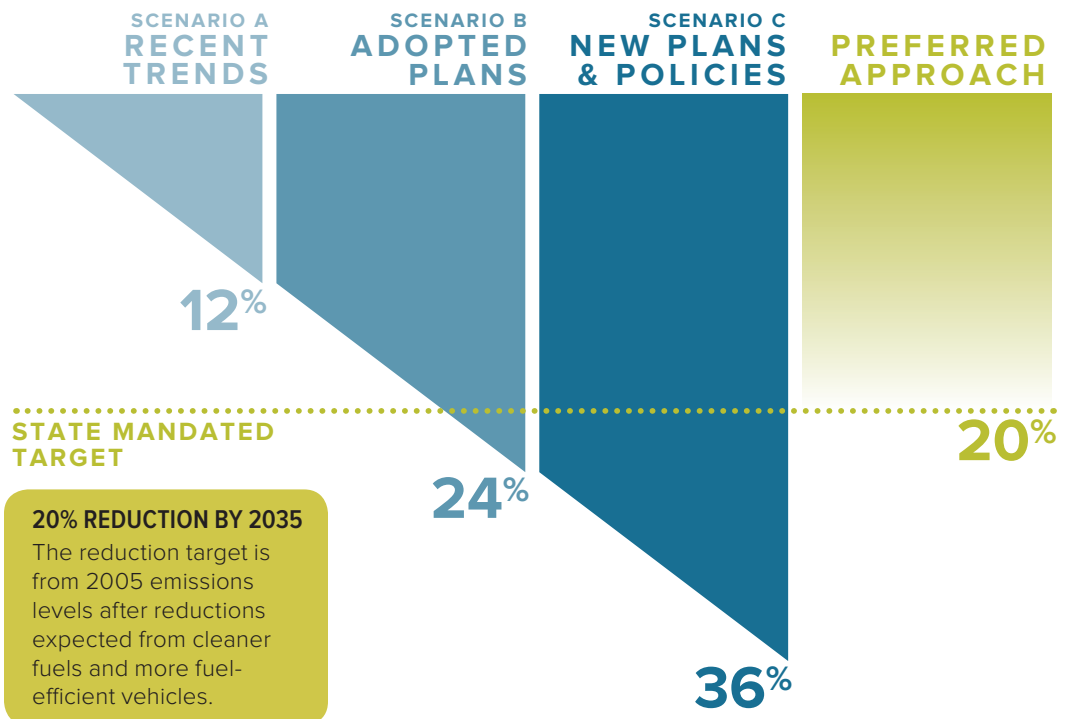
## WHAT HAVE WE LEARNED SO FAR?

### Adopted plans can meet the target

Our early analysis indicates that adopted local and regional plans can meet our target for reducing greenhouse gas emissions – if we make the investments and take the actions needed to implement those plans.

**This is good news, but there is more work to be done.**

### REDUCED GREENHOUSE GAS EMISSIONS PERCENT BELOW 2005 LEVELS



## WHAT CHALLENGES DO YOU FACE IN YOUR COMMUNITY?

At both the local and regional levels, we face many challenges in carrying out our adopted plans. The Climate Smart Communities Scenarios Project provides an opportunity to build on existing efforts and address these challenges. Working together, we can develop the local, regional, state and federal partnerships needed to make the investments and take the actions that will reduce greenhouse gas emissions while creating great communities.



### Challenges to realizing community visions

#### Financial

- Funding
- Market demand and lending practices
- Costs and affordability

#### Civic

- Public acceptance
- Political will
- Governance structures

#### Regulatory

- Existing codes and regulations
- Alignment of federal, state and local policies

Sources: Regional policy and technical advisory committees, community and business leaders. Scenarios Project Strategy Toolbox (October 2011). Phase 1 Findings (January 2012) and Community Case Studies (Spring 2013)

## WHAT INVESTMENTS AND ACTIONS BEST SUPPORT YOUR COMMUNITY VISION?

Most of the investments and actions under consideration are already being implemented to varying degrees across the region to realize community visions and other important economic, social and environmental goals. The scenarios project will build on and support those efforts to reduce greenhouse gas emissions.

A one-size-fits-all preferred approach won't meet the needs of our diverse communities. A combination of investments and other actions will help us realize our shared vision for making this region a great place for generations to come.



INVESTMENTS AND ACTIONS THAT REDUCE EMISSIONS		WHO HAS A ROLE?			
		FEDERAL	STATE	REGIONAL	LOCAL
✓ completed ● in progress					
<b>SUPPORTING LAND USE VISIONS</b>					
✓	Adopt 2040 Growth Concept			○	
✓	Adopt local zoning and comp plans				○
✓	Manage urban growth boundary			○	
●	Update community visions if desired				○
<b>MAXIMIZING ENERGY EFFICIENCY</b>					
✓	Adopt Federal fuel economy standards	○	○		
●	Shift to lower carbon fuels	○	○		
●	Shift to low emissions vehicles	○	○	○	○
●	Expand access to electric vehicle technology	○	○	○	○
●	Expand access to car-sharing				○
●	Manage parking				○
●	Use technology and “smarter” roads to manage traffic flow and boost efficiency		○	○	○
●	Provide information and incentives to expand use of low carbon travel options		○	○	○
<b>INVESTING IN COMMUNITIES</b>					
●	Maintain streets, highways, bridges and transit		○	○	○
●	Make streets and highways more safe, reliable and connected		○	○	○
●	Make transit more convenient, frequent, accessible and affordable		○	○	○
●	Make walking and biking more safe and convenient		○	○	○
●	Provide schools, services and shopping close to neighborhoods				○

## About Metro

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 providing services, operating venues and 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.

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

[www.oregonmetro.gov/connect](http://www.oregonmetro.gov/connect)

### Metro Council President

Tom Hughes

### Metro Council

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

# MAKING A GREAT PLACE



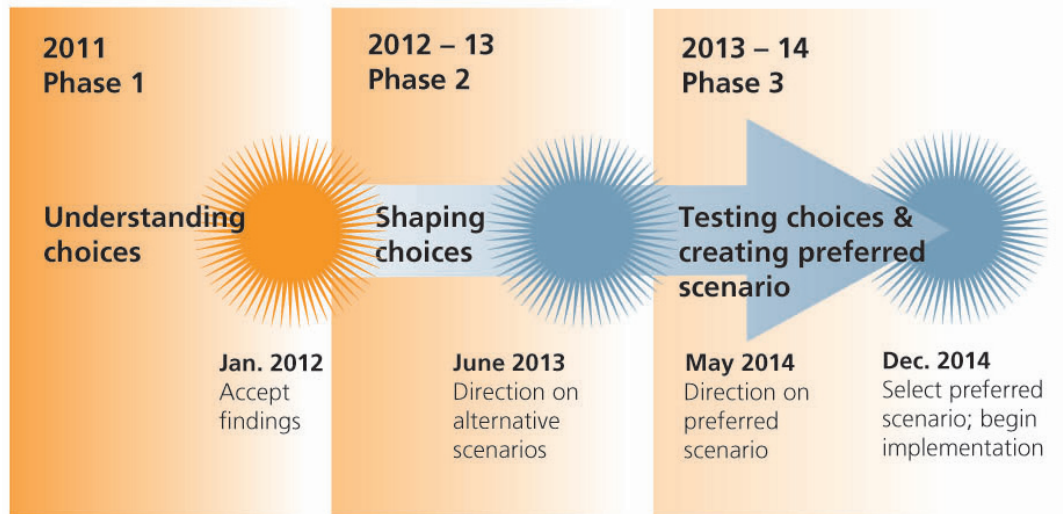
## WHAT'S NEXT?

In November and December 2013, the analysis results will be reported back to the Metro Council, regional advisory committees and county-level coordinating committees.

From January to April 2014, community and business leaders, local governments and the public will be asked to weigh in on which investments and actions should be included in the region's preferred approach.

In May 2014, the Metro Council will be asked to provide direction to staff on the draft preferred approach that will be evaluated in Summer 2014 and released for final public review in September 2014. The Metro Council will consider adoption of a preferred approach in December 2014.

## Climate smart communities scenarios project timeline



## WHERE CAN I FIND MORE INFORMATION?

The Climate Smart Communities Scenarios Project developed eight case studies showcasing actions that communities in the Portland metropolitan region are already taking to implement their community visions. These same investments and actions can also help reduce greenhouse gas emissions. Case studies were created in collaboration with city and county partners.

- Beaverton
- 82nd Avenue corridor (Clackamas County)
- Gateway (Portland)
- Hillsboro
- Rockwood (Gresham)
- Wilsonville
- Employer-based commuter programs
- Neighborhood-based travel options

Visit the project website to learn more about these community efforts and their challenges, and to download other publications and reports.

For email updates, send a message to [climatescenarios@oregonmetro.gov](mailto:climatescenarios@oregonmetro.gov)

OCTOBER 18, 2013



# MPAC Worksheet

**Agenda Item Title:** City of Portland and Multnomah County Climate Adaptation Plan

**Presenter:** Tim Lynch, Multnomah County; Kari Lyons-Eubanks, Multnomah County; Kaitlin Michele Crim, City of Portland

**Contact for this worksheet/presentation:** Tim Lynch (503-988-4094 or tim.j.lynch@multco.us)

## **Purpose/Objective**

Strengthen the Advisory Committee's understanding of the City and County climate preparation strategy and actions needed for building local resilience to climate change; discuss equity and health impacts and the role regional governments can play in climate preparation through their policies.

## **Action Requested/Outcome**

No action required; however, the questions we are posing and hoping to stimulate conversation around are:

- What are the likely impacts of climate change that policymakers need to be taking into consideration?
- How do we assure that our policy and investment decisions do not have unintended consequences on health outcomes and vulnerable populations?

## **What has changed since MPAC last considered this issue/item?**

New issue; no past events/actions to consider.

## **What packet material do you plan to include?**

No materials to be distributed.

Materials following this page were distributed at the meeting.



# Metro | *Making a great place*

## Regional Active Transportation Plan (ATP) | Review & Refinement Timeline

### WorkGroup Review and Refinements

- Oct 10 ATP/RTP WorkGroup** -first meeting/identify process & focus areas
- Oct-Nov ATP topical focus groups** - focus on specific topics identified at first WorkGroup meeting
- Nov 1 TPAC** – Comments from Chair on WorkGroup process
- Nov 5 Metro Council work session** - ATP Council liaison ATP project update
- Nov 6 MTAC** - Comments from Chair on WorkGroup process
- Nov 17 Metro Council work session** - Update on ATP refinement progress included in RTP update
- Nov 13 MPAC** - Comments from Council liaison on WorkGroup process
- Nov 14 JPACT** - Comments from Chair on WorkGroup process
- Dec 6** – First deadline for ATP map network changes & refinement comments to ATP (same as RTP)
- End of Dec** – Workgroup proposed ATP refinements and edits to RTP available for review

### TPAC and MTAC review and feedback on WorkGroup Refinements

- Jan 3 TPAC** – Comments from the chair ATP refinement update
- Jan 7 Metro Council work session** – ATP Council liaison ATP refinement update
- Jan 8 MPAC** – Comments from Council liaison ATP refinement update
- Jan 9 JPACT** – Comments from Chair ATP refinement update
- Jan 15 MTAC**– Comments from the chair, ATP refinement process update
- Jan 16 ATP/RTP WorkGroup** - Second meeting, recommend WorkGroup ATP refinements/RTP edits
- Jan 31 TPAC** –Review of ATP WorkGroup refinements/RTP edits; feedback from TPAC
- Feb 5 MTAC**- Review of ATP WorkGroup refinements/RTP edits; feedback from MTAC

### Preview and overview of public comment draft ATP

- Feb 28 TPAC**- Preview of public review of draft ATP/RTP edits
- March 5 MTAC** - Preview of public review of draft ATP/RTP edits
- March 11 Metro Council work session** - Preview of the public review draft ATP/RTP edits
- March 13 JPACT** Preview of the public review draft ATP/RTP edits
- March 21 – May 5** - *Release of draft ATP for public comments, along with RTP*
- March 26 MPAC** - Overview of the public review draft ATP/RTP edits

### Recommendation on potential refinements to draft ATP & request for preliminary approval

- April 25 TPAC**- Recommendation on potential refinements to ATP from public comments
- May 6 Metro Council work session**- Review of draft ATP per public comments received
- May 7 MTAC**- Recommendation on potential refinements of ATP from public comments
- May 8 JPACT** -Preliminary approval of the draft ATP per public comments received
- May 14 MPAC** - Preliminary approval of the draft ATP per public comments received
- May 21 MTAC** – Comments from the Chair – Process update
- May 30 TPAC** - Comments from the Chair – Process update

### ATP proposed for adoption

- June 18 MTAC** – Recommendation to MPAC on ATP resolution
- June 25 MPAC** - Recommendation to Metro Council on ATP resolution
- June 27 TPAC** – Recommendation to JPACT on ATP resolution
- July 10 JPACT** - Approval of ATP resolution/RTP ordinance
- July 10 Metro Council** – First reading of 2014 RTP ordinance
- July 17 Metro Council** –Action on ATP resolution, final action on RTP ordinance

**CLIMATE  
SMART  
COMMUNITIES  
SCENARIOS PROJECT**

[www.oregonmetro.gov/climatescenarios](http://www.oregonmetro.gov/climatescenarios)

**Climate Smart Communities Scenarios Project**

# **First Look at Results**



**Kim Ellis, project manager**

**November 13, 2013**



**Metro** | *Making a great place*

# First Look at Results

## TODAY

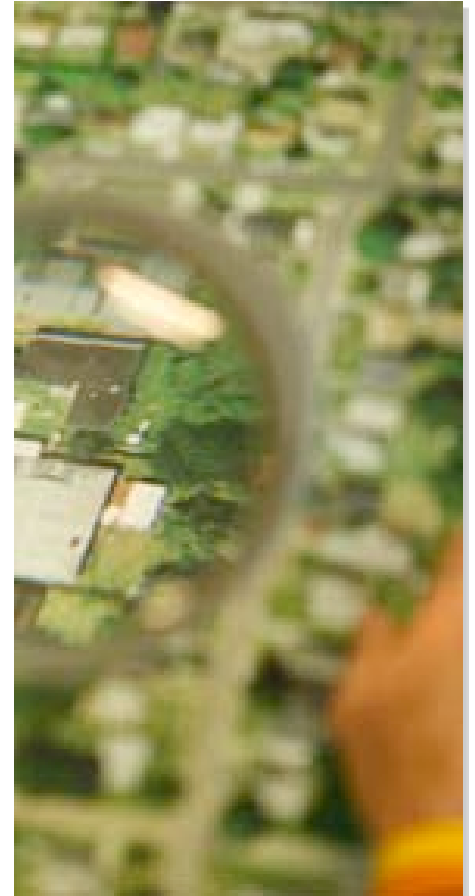
- Launch Phase 3
- Report emissions, travel, air quality, housing and job outcomes

## DECEMBER

- Review costs relative to health, social equity and fiscal outcomes
- Identify policy areas for further discussion and input in 2014

## JANUARY

- Recommend policy areas for further discussion and input in 2014



# What the future might look like in 2035

Scenario

**A**

## RECENT TRENDS

This scenario shows the results of implementing adopted plans to the extent possible with existing revenue.

Scenario

**B**

## ADOPTED PLANS

This scenario shows the results of successfully implementing adopted land use and transportation plans and achieving the current RTP, which relies on increased revenue.

Scenario

**C**

## NEW PLANS & POLICIES

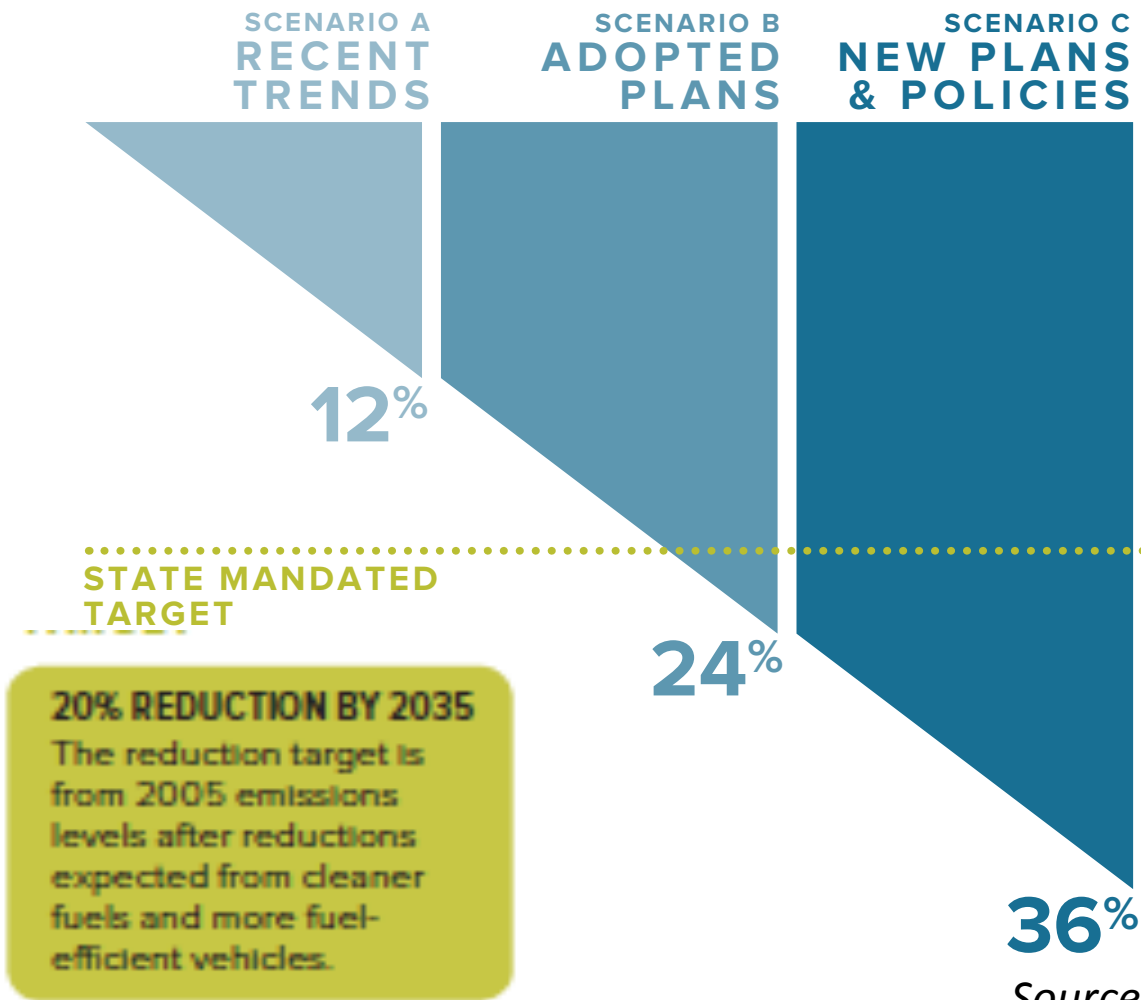
This scenario shows the results of pursuing new policies, more investment and new revenue sources to more fully achieve adopted and emerging plans.

*Scenarios approved for testing by Metro advisory committees and the Metro Council in May and June 2013*

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# WHAT WE LEARNED

# Adopted plans can meet the target

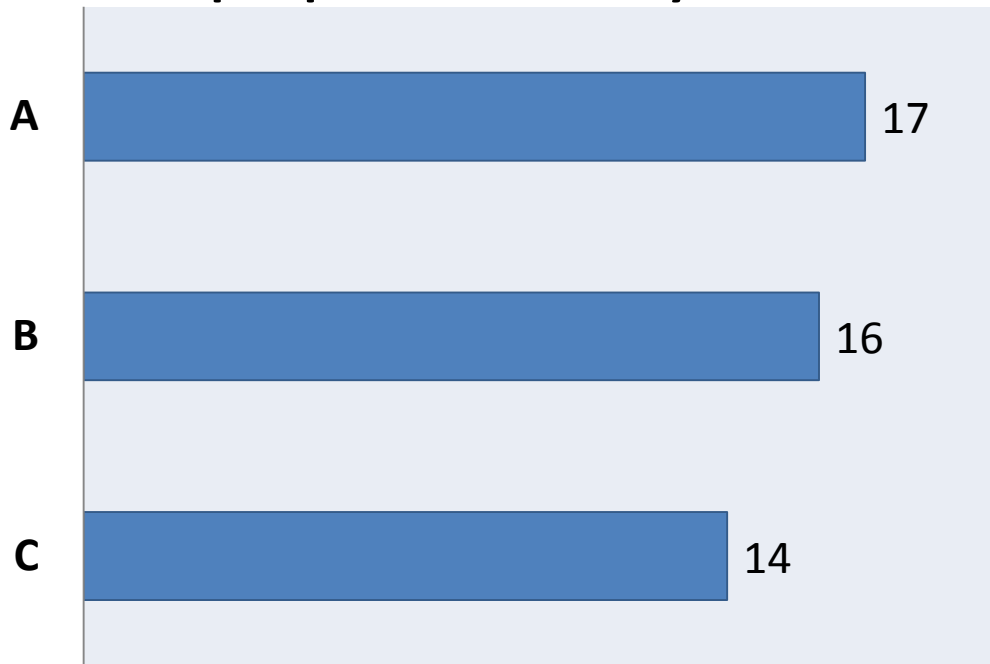


Source: GreenSTEP



# Individuals continue to drive less

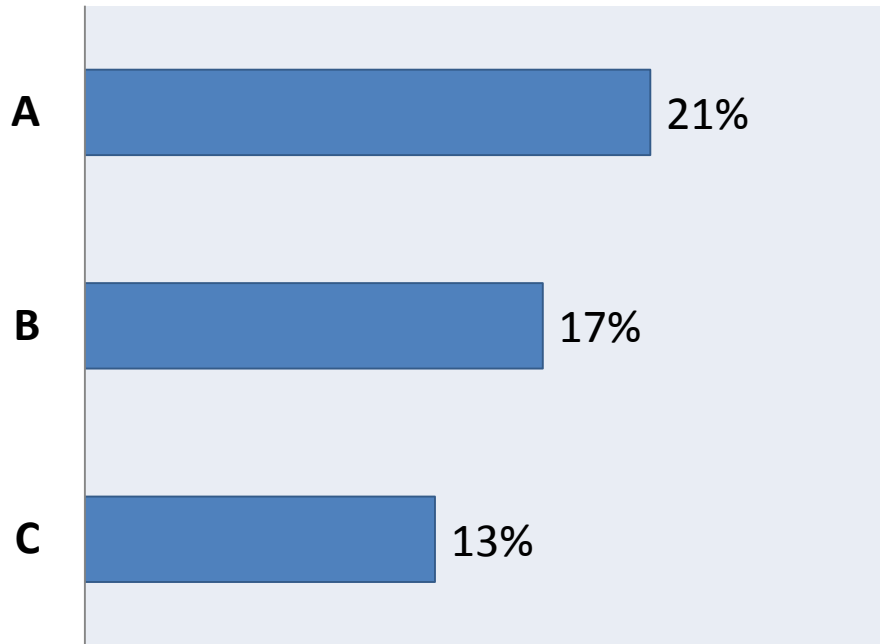
Vehicle miles traveled  
per person each day



Source: GreenSTEP

# Investment helps address congestion

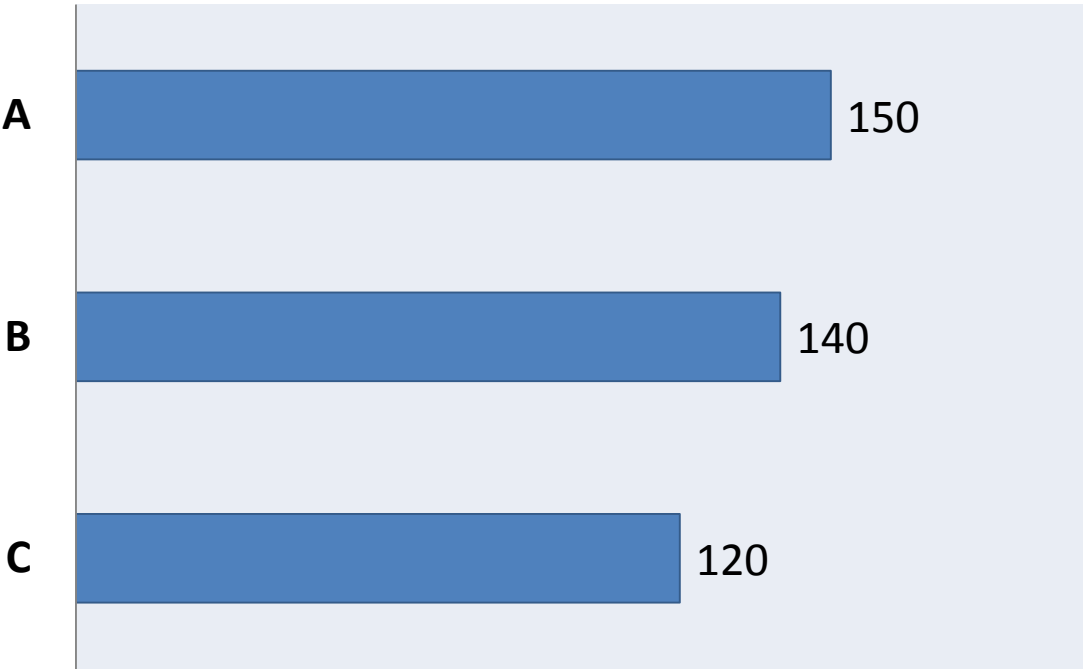
Share of light vehicle travel time spent in traffic



Source: GreenSTEP

# Investment helps maintain air quality

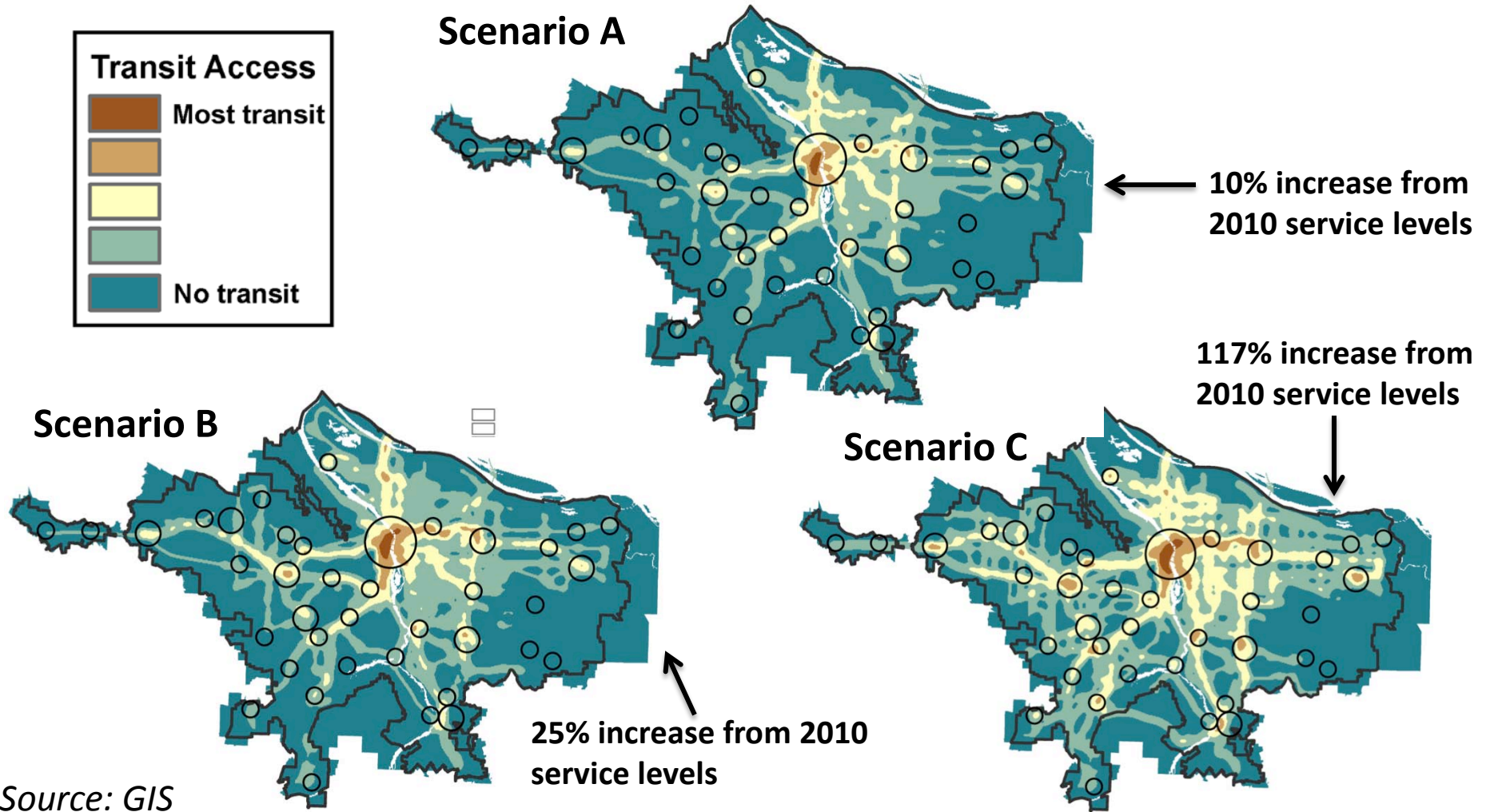
Criteria air pollutants  
*(metric tons per day)*



*Analysis includes PM<sub>2.5</sub>, hydrocarbons and nitrous oxides.*

*Source: GreenSTEP*

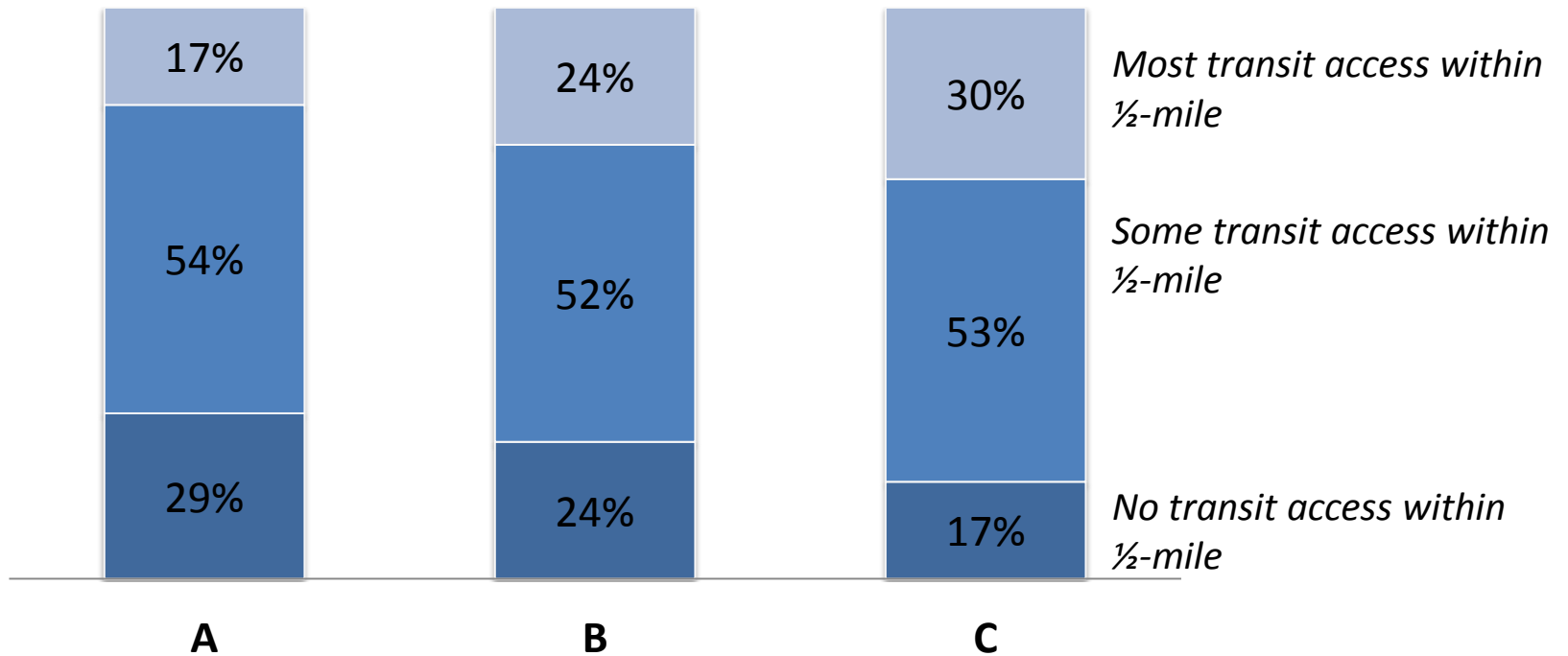
# Investment improves transit access



Peak service (fixed-route)

# Most new housing locates near transit...

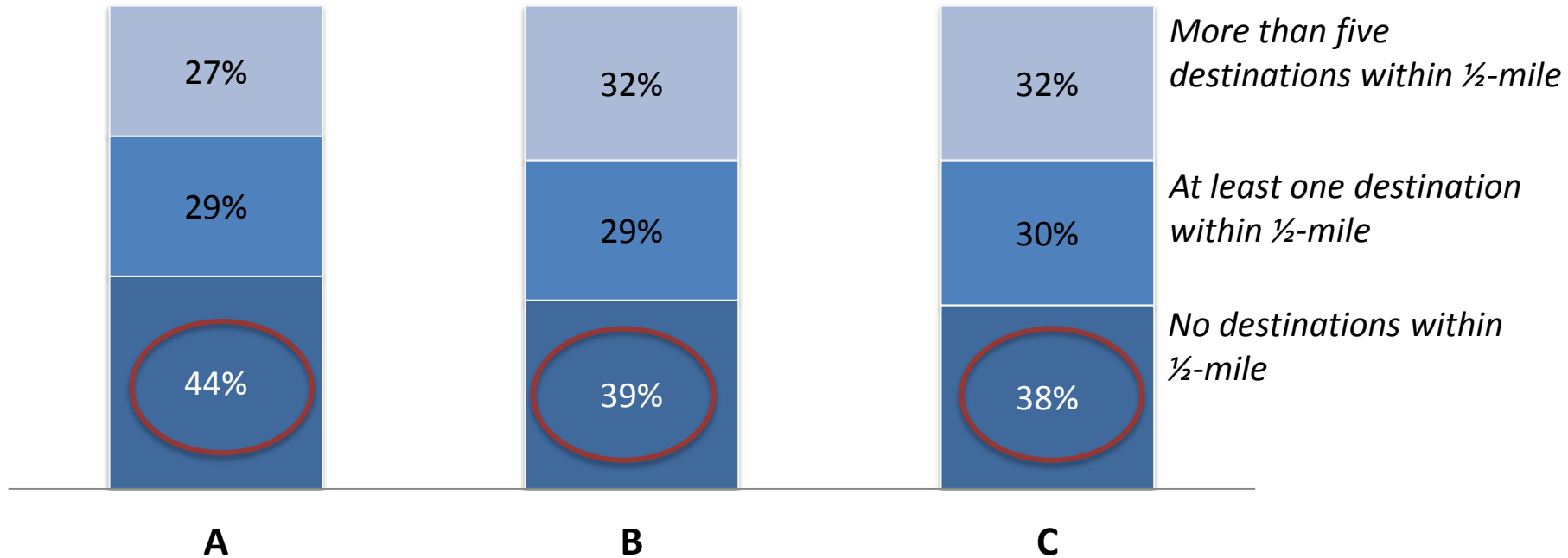
Share of new households near transit service in 2035



Source: MetroScope and GIS

# ...and schools, services and shopping

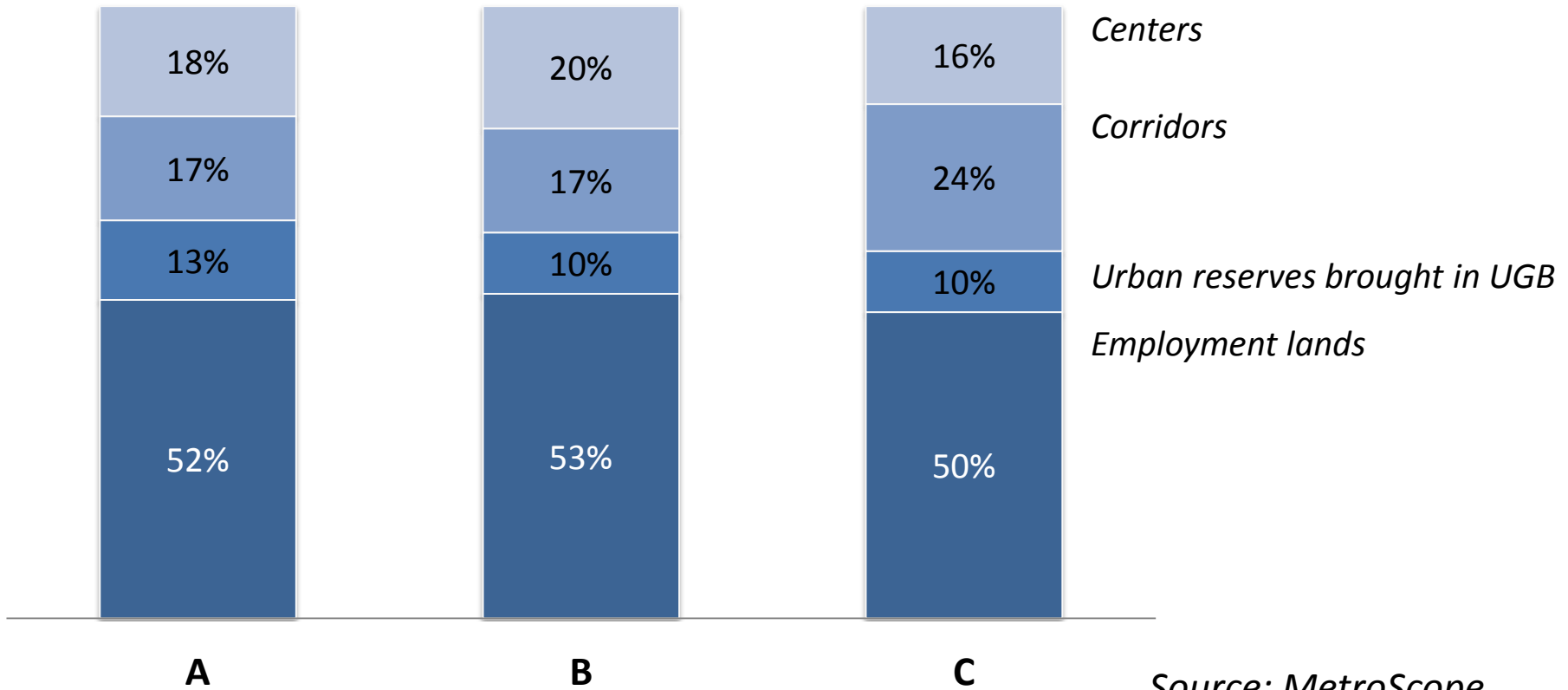
Share of new households near schools, services and shopping in 2035



Source: MetroScope and GIS

# Jobs respond to access and mobility

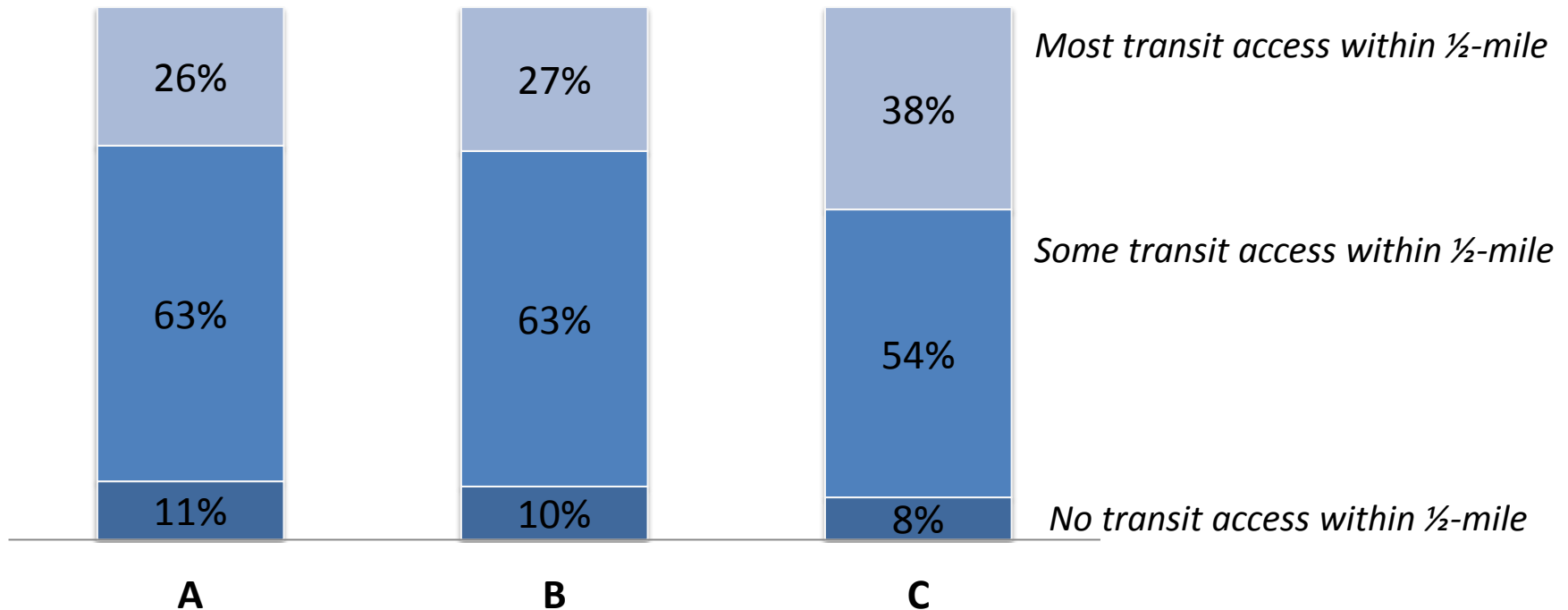
Share of new jobs in Metro urban growth boundary  
in 2035



Source: MetroScope

# Most new jobs locate near transit

Share of new jobs near transit service in 2035



Source: MetroScope and GIS



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# **EARLY TAKEAWAYS**

**1**

**Past planning and investments to implement the 2040 Growth Concept vision make the target attainable**

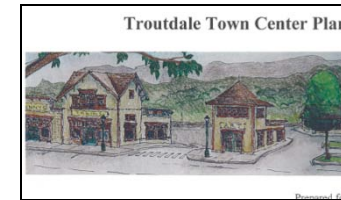
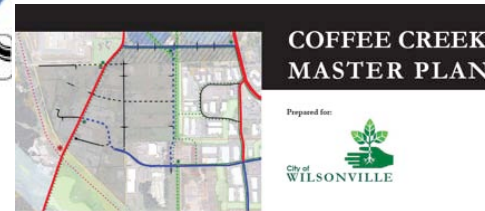
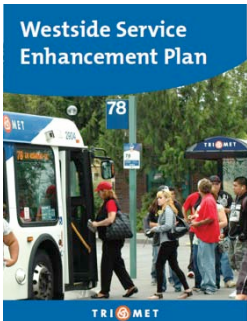
*2040 Growth Concept adopted in 1995*

# 2

## More work is needed to realize local and regional visions



Beaverton Civic Plan  
*growing together*



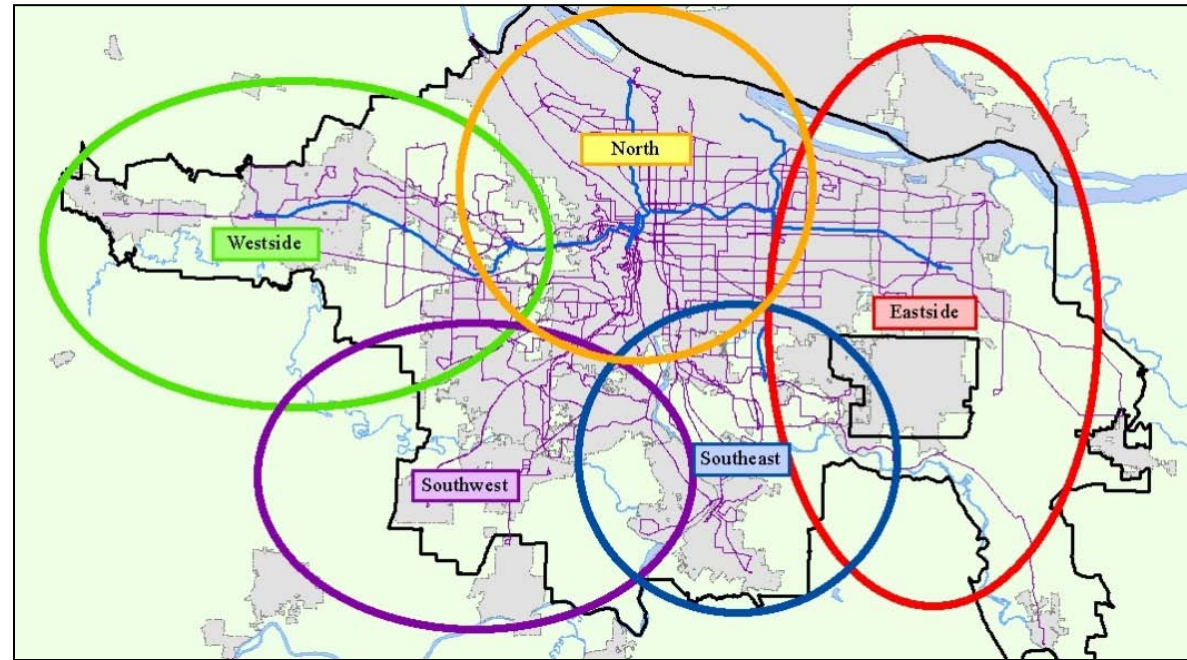
# 3

## Investing in communities is essential to success



# 4

## Growing transit across the region is essential to success



Transit growth will be guided by locally-developed TriMet Service Enhancement Plans, the TriMet Board's Strategic Financial Plan and South Metro Area Regional Transit (SMART) plans

# 5

## Investments and actions that reduce GHG emissions provide community benefits



*Photo credit: Urban Advantage and SACOG*

# 6

Each community is unique:  
*one size does not fit all*



# Moving forward to 2014

## TODAY

- Launch Phase 3
- Report emissions, travel, air quality, housing and job outcomes

## DECEMBER

- Review costs relative to health, social equity and fiscal outcomes
- Identify policy areas for further discussion and input in 2014

## JANUARY

- Recommend policy areas for further discussion and input in 2014

CLIMATE  
SMART  
COMMUNITIES  
SCENARIOS PROJECT

### Challenges

- Fiscal
- Civic
- Regulatory





# DISCUSSION



---

# **SUPPLEMENTAL MATERIALS**

# Region's response to state target

- Working together with city, county, state, business and community leaders
- Researching how land use and transportation strategies can advance public and private investments that
  - support local visions and plans
  - create jobs and healthy communities
  - meet state targets for reducing carbon emissions



# Where we've been & where we are headed

## PHASES 1 & 2

**Understand Choices**  
2011-2012

**Shape Choices**  
Jan.-Oct. 2013

## PHASE 3

**Shape Preferred**  
Nov. 2013-May 2014

**Adopt Preferred**  
Sept.-Dec. 2014



**WE ARE HERE**

---

# 2014: Shaping a preferred approach

## **JAN. TO MAY 2014**

Discuss choices and tradeoffs to shape a draft preferred approach

## **MAY 2014**

Council direction to staff on the draft preferred approach

## **JUNE TO AUGUST 2014**

First look at the preferred approach; staff completes final evaluation and prepares adoption package

## **SEPT. TO DEC. 2014**

Public comment period and Council considers final adoption of preferred approach

# Outcomes to help inform community choices discussion in 2014



**GHG emissions**



**Access & mobility**



**Air quality**



**Jobs and housing**



**Economy**



**Public health**



**Cost**



**Social equity**

*Evaluation criteria approved by Metro advisory committees and the Metro Council in May and June 2013*

An aerial photograph of a city at dusk. The sky is a deep purple and blue, with some light clouds. In the background, a large, snow-capped mountain rises above the city. The city itself is densely packed with buildings, many of which are illuminated with warm lights, creating a golden glow. The foreground shows the tops of trees and the lower parts of buildings, also illuminated by the city lights.

# Preparing for Climate Change: Impacts and Strategies for our Region

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# Portland/Multnomah Climate Action Plan

**2050 Goal: 80% reduction in GHG emissions**

- 1** BUILDINGS AND ENERGY
- 2** URBAN FORM AND MOBILITY
- 3** CONSUMPTION AND SOLID WASTE
- 4** URBAN FORESTRY AND NATURAL SYSTEMS
- 5** FOOD AND AGRICULTURE
- 6** COMMUNITY ENGAGEMENT
- 7** CLIMATE CHANGE PREPARATION
- 8** LOCAL GOVERNMENT OPERATIONS



# GHG mitigation vs. climate preparation



**Mitigation:** Efforts to reduce greenhouse gas emissions caused by energy production and use, land use, housing, transportation and consumption

**Preparation:** Building community resiliency against the impacts of climate change

(Note: often called **adaptation**)

# How have we approached the work?

## Three joint City/County workgroups:

- Natural Systems
- Built Infrastructure
- Public Health and Human Services

## Process:

- Gather information
- Complete vulnerability assessments
- Identify and prioritize actions

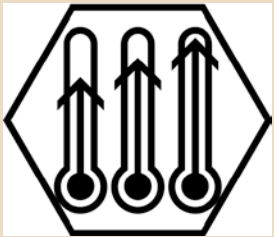
# We are already seeing impacts

- Increased average annual temperatures
- Declines in Cascade snowpack
- Shifts in seasonal stream flows
- Sea level rise
- Receding glaciers

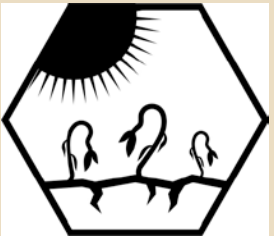


# Impacts will increase in severity

## Hotter, drier summers



Increased temperatures



Increased drought



Increased wildfire frequency and intensity

# Impacts will increase in severity

## Warmer, wetter winters



Increased incidence and magnitude of damaging floods



Increased landslides

# Natural Systems – Projected Impacts

## Hotter, drier summers

- drought stress on wildlife and habitat, increased invasive species, fire risk, loss of wetland habitat

## Warmer, wetter winters

- flooding, increased erosion, landslides



# Natural Systems – Preparation Strategies

- ❑ Cool urban streams
- ❑ Increase ability of plantings to withstand drought
- ❑ Address invasive species, and support species needing to alter their range
- ❑ Reduce urban-wildland interface fire risk
- ❑ Restore floodplains and prepare to manage increased runoff in streams



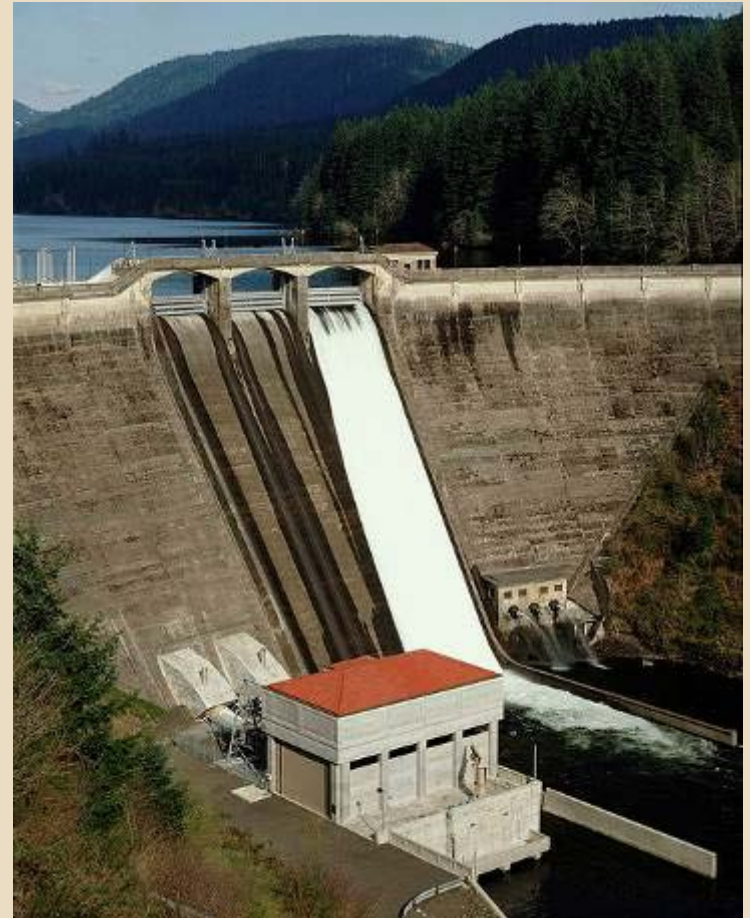
# Infrastructure – Projected Impacts

## Hotter, drier summers

- increased wastewater temperatures, pavement buckling, rail warping, increased outdoor use water demand

## Warmer, wetter winters

- erosion and turbidity of water supply, landslides, overwhelming of stormwater facilities, flooding of roadways and bike paths





# Infrastructure – Preparation Strategies

- ❑ Expand capacity of groundwater system and improve water efficiency
- ❑ Continue to assess potential impacts to Bull Run watershed
- ❑ Work with partners to update floodplain data and maps
- ❑ Incorporate landslide hazard reduction techniques into construction projects
- ❑ Incorporate climate change as a risk in asset management



# Human Systems – Projected Impacts

## Hotter, drier summers

- heat-related illness and respiratory disease, demand for cooling centers, disease vectors, allergies

## Warmer, wetter winters

- mold and associated health conditions, personal and property damage from floods and landslides, increased demand for emergency services



# Human Systems – Preparation Strategies

- ❑ Increase tree canopy and greenspace
- ❑ Improve extreme heat preparation and response plans
- ❑ Manage habitat for vector populations (e.g. mosquitoes)
- ❑ Improve community capacity to prepare and respond
- ❑ Advance new research on climate impacts on health



# Other key concepts

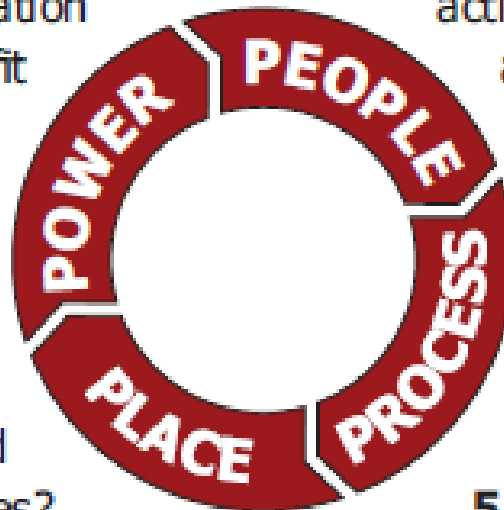
- Co-benefits – look to achieve multiple objectives through shared strategies.
- Climate equity – vulnerable populations; who will be burdened and who will benefit?

# Climate/Health Equity

**1.** Who stands to benefit most from a climate adaptation action? Who will benefit the least?

**2.** Does the climate adaptation action address root causes of current and historical racial and socioeconomic disparities?

**3.** How are those most impacted engaged and empowered through development and implementation of this plan?

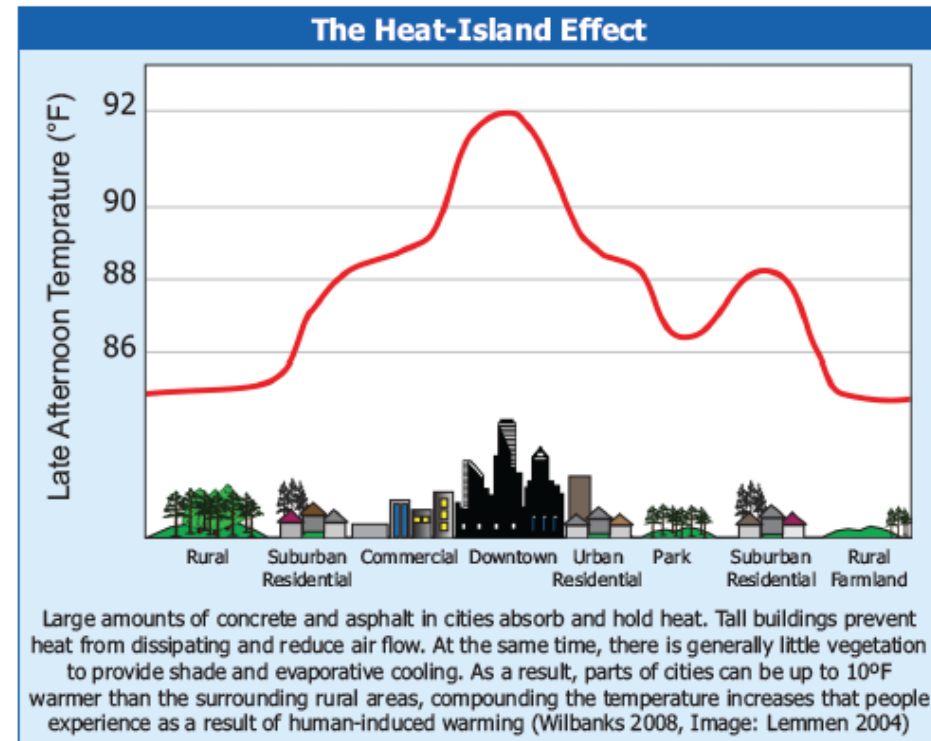
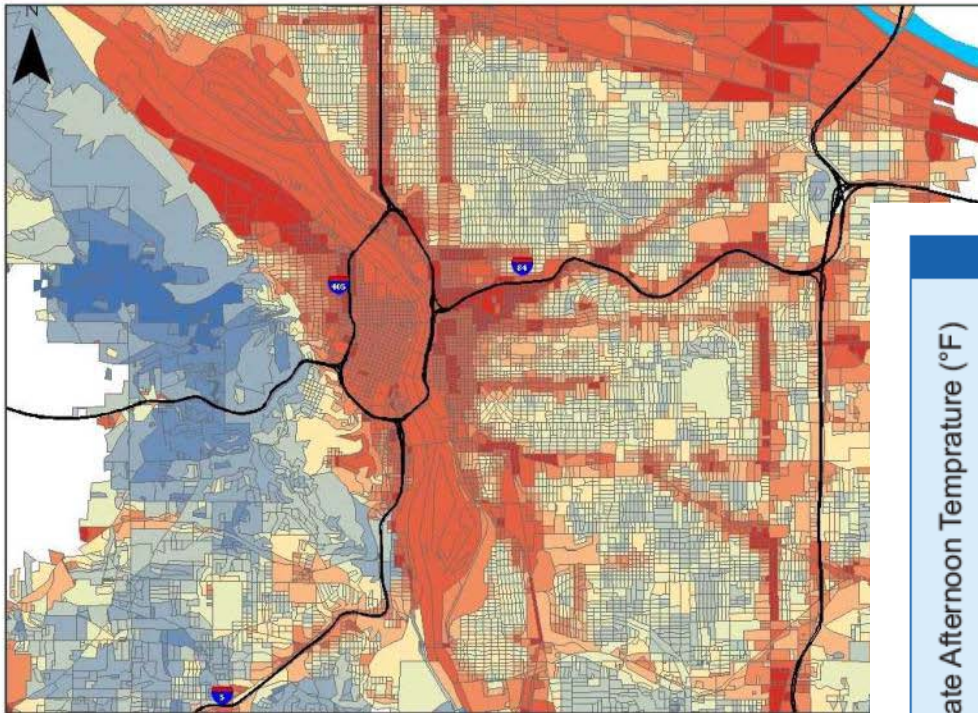


**4.** Does the climate adaptation action result in unintended adverse consequences for people of color or low-income communities? If so, how can these impacts be avoided or mitigated?

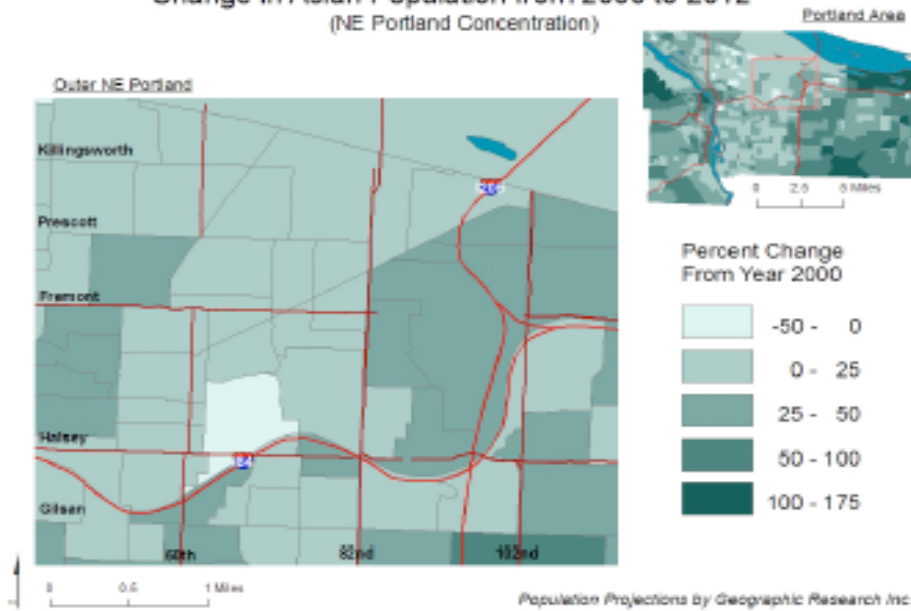
**5.** How are public resources and investments distributed geographically?

# Equity implications for climate preparation: Reducing urban heat island effect

## Urban Heat Islands in Portland

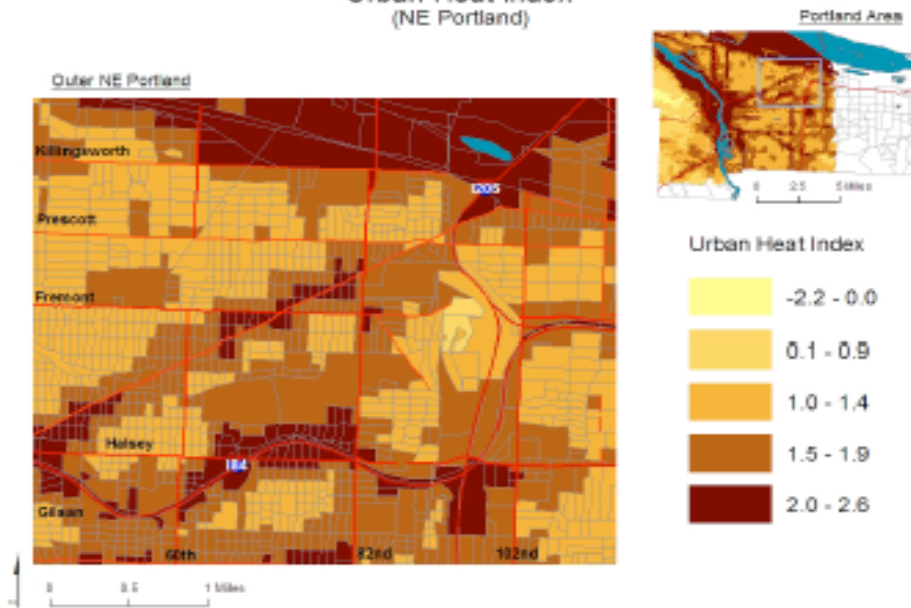


Change in Asian Population from 2000 to 2012  
(NE Portland Concentration)



# Asian Population in NE Portland and Urban Heat Island Effect

Urban Heat Index  
(NE Portland)



# Place Matters



Burmese family  
Lives in outer NE Portland  
High traffic corridor  
Private Multifamily housing  
Resettled two years ago  
Two children with asthma  
Mold in three rooms

Increased temperature + increased ozone  
Warmer, wetter winters



Warmer inside and outside temps  
Worse air quality



Asthma exacerbation = medication costs  
\$3000 hospitalization, ER utilization expenses  
Missed school/work



Forced choice

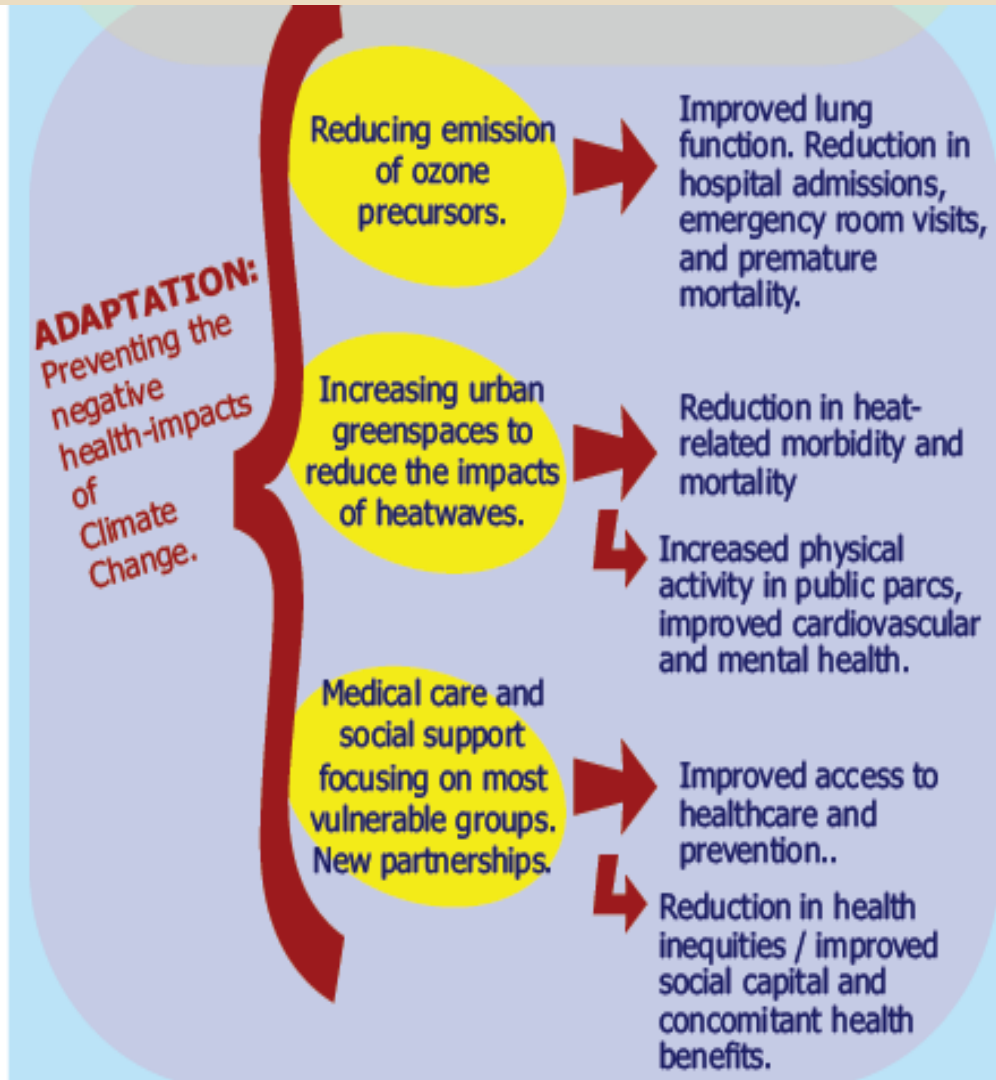


# Social Determinants of Health

## Housing and Early Childhood Development

- Mold/mildew – Ensuring habitable housing
- High transit corridor – reducing VMT and improving access and encouraging use of alternative transit (ensuring transit lines to vulnerable communities)
- Aligning housing affordability with employment availability to reduce transportation costs and use (consider unintended consequences of gentrification; inclusionary zoning )
- Prioritizing greenspace and tree canopy decisions in areas with hot spots and vulnerable populations

# Health equity



- Who stands to benefit from more greenspace?
- How are we prioritizing investments in areas with high negative health outcomes?
- How do hot spots inform our land use decisions?
- Who will be burdened?

# Questions to consider

- What are the likely impacts of climate change that policymakers need to be taking into consideration?
- How do we assure that our policy and investment decisions do not have unintended consequences on health outcomes and vulnerable populations?

# Questions?

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