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Portland, OR 97232-2736
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Metro | *Agenda*

Meeting: Metro Policy Advisory Committee (MPAC)
Date: Wednesday, Feb. 23, 2011
Time: 5 to 7 p.m.
Place: Council Chambers

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5 PM	**1.**		**CALL TO ORDER**	**Charlotte Lehan, Chair**
5:02 PM	**2.**		**SELF INTRODUCTIONS & COMMUNICATIONS**	**Charlotte Lehan, Chair**
5:05 PM	**3.**		**CITIZEN COMMUNICATIONS ON NON-AGENDA ITEMS**	
5:10 PM	**4.**	*	**Consideration of the MPAC Minutes for January 12, 2011**	
5:12 PM	**5.**		**COUNCIL UPDATE**	
	6.		**ACTION ITEMS**	
5:15 PM	6.1		Election of Second Vice Chair – ACTION REQUESTED	**Jack Hoffman**
	7.		**INFORMATION / DISCUSSION ITEMS**	
5:20 PM	7.1	*	Proposed MPAC and MTAC Bylaw Amendments – DISCUSSION	**John Williams**
5:30 PM	7.2	*	2011 MPAC Work Program and Calendar – INFORMATION / DISCUSSION	**Robin McArthur**
5:40 PM	7.3	*	Creating a Climate Smart Communities Strategy: How we get there from here *(5 min. presentation, 10 min. discussion)* Outcomes: • What are the Climate Smart Communities scenarios and how will they help you develop your downtowns and employment areas. • What is MPAC's role?	**Kim Ellis**
5:55 PM	7.3.1	*	Putting protection and preparedness in place to address impacts our region can expect from a changing climate *(5 min. presentation, 10 min. discussion)* Outcomes: • Learn about the potential climate impacts to the region and recommendations for specific actions that policymakers can take now. • Discuss how these impacts may affect your community and share examples of what your community is already doing.	**Steve Adams, Climate Leadership Initiative**

Continued on back

6:10 PM	7.3.2	*	Making the Case for Climate Action: Leadership and innovation will be required to meet state climate goals (*5 min. presentation, 15 min. discussion)* Outcomes: • Learn about the Oregon Global Warming Commission 2020 Roadmap land use and transportation recommendations. • Identify opportunities and challenges for our region's climate smart communities scenarios effort.	**Angus Duncan, Oregon Global Warming Commission**
6:30 PM	7.3.3	*	Setting greenhouse gas emissions reduction targets for the Portland region (*10 min. presentation, 15 min. discussion*) Outcomes: • Learn about the research and process used to establish greenhouse gas (GHG) emissions reduction targets for light vehicle travel in Oregon's metropolitan areas, including the Portland region. • Share concerns and issues that should be addressed through the state rulemaking process.	**Richard Whitman, Dept. of Land Conservation and Development**
6:55 PM	**8.**		**MPAC MEMBER COMMUNICATION**	
7 PM	**9.**		**ADJOURN**	**Charlotte Lehan, Chair**

Upcoming MPAC meetings:
- Regular MPAC meeting scheduled for Wednesday, March 9, 2011 from 5 to 7 p.m. at Metro, Council Chambers.
- Regular MPAC meeting scheduled for Wednesday, March 23, 2011 from 5 to 7 p.m. at Metro, Council Chambers.
- Climate Leadership Summit: Joint MPAC/JPACT meeting scheduled for Friday, April 1, 2011 from 8 a.m. to noon, at the Oregon Convention Center, F150-151.

* Material included in the packet.
\# Material will be provided at the meeting.

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

MPAC Meeting Ground Rules

Agreed upon by group; group members are responsible for monitoring ground rules; review regularly

Preamble: To accomplish objectives in a way that is respectful to all in the group, we have the following ground rules:

Respectful process

- Be on time/end on time
- It's okay to disagree – question topics, not people
- Respect each other's views
- Stay on task, on topic – no side conversations
- Turn off electronic devices

Efficient and cost-effective process

- Define clear meeting purpose
- Establish roles as needed
    - Chair: Responsible for facilitating the meeting and discussions, and summarizing feedback or decisions
- Establish outcomes
- Define decision-making protocol
- Move on after each decision point

Prepared participants

- Read agenda and materials beforehand
- Every attendee owns the process; if the meeting gets off track, speak up!
- If you don't speak up, own your silence (silence means agreement)
- Listen actively
- If you miss a meeting, be responsible for catching up
- Consult and communicate with and represent the concerns and interests of the governments, organizations and constituents a member represents

Registration is required.

Joint Policy Advisory Committee on Transportation & Metro Policy Advisory Committee

Climate Leadership Summit

Working together to build livable, prosperous, equitable and climate smart communities

8 A.M. TO NOON FRIDAY, APRIL 1, 2011

JPACT and MPAC members, other elected officials, and business and community leaders will work together at this half-day event to identify strategies to reduce the region's greenhouse gas emissions and create great communities.

The summit is designed to help participants:

- Learn how local aspirations can help achieve climate goals and gain momentum from climate strategies.
- Provide input on the combinations of land use and transportation strategies that should be tested this summer.
- Learn about public attitudes about climate change.
- Discuss which land use and transportation strategies are most effective in reducing greenhouse gas emissions and what it may take to meet state targets.

Oregon Convention Center

Room F150 - 151
777 NE Martin Luther King, Jr. Blvd.
Portland

TriMet MAX light rail service at Convention Center stop. Bus route #6 stops at the front entrance. Covered bicycle parking available in Lloyd Blvd parking garage.

For more information, contact Dylan Rivera at dylan.rivera@oregonmetro.gov or call 503-797-1551.

For registration information, contact Kelsey Newell at kelsey.newell@oregonmetro.gov or call 503-797-1916.

Metro | *Making a great place*

Seven rules for sustainable communities

Discover how creating livable, sustainable communities can mitigate the effect of climate change with Patrick Condon, UBC professor and expert on sustainable communities.

11:30 A.M. TO 1 P.M. TUESDAY, MARCH 29

Patrick Condon believes changing the way cities are built and retrofitted can have a significant mitigating effect on climate change. In fact, he travels the country advising policymakers and planners on how to do just that. A dynamic speaker, Condon shares new ideas from his latest book, *Seven Rules for Sustainable Communities*. His combination of in depth research and case studies challenge and entertain anyone with an interest in creating livable, sustainable communities.

The Seven Rules

1. Restore the streetcar city
2. Design an interconnected street system
3. Locate commercial services, frequent transit and schools within a five-minute walk
4. Locate good jobs close to affordable homes
5. Provide a diversity of housing types
6. Create a linked system of natural areas and parks
7. Invest in lighter, greener and cheaper infrastructure

Metro Regional Center

Council chamber
600 NE Grand Ave.
Portland

Take TriMet MAX light rail service to the Convention Center stop. Bus route No. 6 stops on Grand Avenue at the front entrance. Bicycle parking available.

For more information, contact Janna Allgood at janna.allgood@oregonmetro.gov or call 503-813-7589.

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METRO POLICY ADVISORY COMMITTEE
January 12, 2011
Metro Regional Center, Council Chambers

MEMBERS PRESENT	AFFILIATION
Jody Carson	City of West Linn, representing Clackamas Co. Other Cities
Pat Campbell	City of Vancouver
Steve Clark	TriMet Board of Directors
Shirley Craddick	Metro Council
Nathalie Darcy	Washington County Citizen
Dennis Doyle	City of Beaverton, representing Washington Co. 2nd Largest City
Andy Duyck	Washington County Commission
Amanda Fritz	City of Portland Council
Jack Hoffman	City of Lake Oswego, representing Clackamas Co. Largest City
Carl Hosticka	Metro Council
Robert Liberty	Metro Council
Keith Mays	City of Sherwood, representing Washington Co. Other Cities
Annette Mattson	Governing Board of School Districts
Marilyn McWilliams	Washington County Special Districts
Doug Neeley	City of Oregon City, representing Clackamas Co. 2nd Largest City
Wilda Parks	Clackamas County Citizen
Loretta Smith	Multnomah County Commission
Steve Stuart	Clark County, Washington Commission
William Wild	Clackamas County Special Districts
Jerry Willey, Second Vice Chair	City of Hillsboro, representing Washington County Largest City

MEMBERS EXCUSED	AFFILIATION
Sam Adams	City of Portland Council
Shane Bemis	City of Gresham, representing Multnomah Co. 2nd Largest City
Matt Berkow	Multnomah County Citizen
Michael Demagalski	City of North Plains, representing Washington Co. outside UGB
Charlotte Lehan, Vice Chair	Clackamas County Commission
Mike Weatherby, Chair	City of Fairview, representing Multnomah County Other Cities
Richard Whitman	Oregon Department of Land Conservation & Development

ALTERNATES PRESENT STAFF:	AFFILIATION
Jim Bernard	Clackamas County Commission
Jim Kight	City of Troutdale, representing Multnomah County Other Cities

Staff present: Dick Benner, Aaron Brown, Nick Christensen, Dan Cooper, Andy Cotugno, Councilor Kathryn Harrington, Council President Tom Hughes, Robin McArthur, Sherry Oeser, Ken Ray, Ted Reid, Ray Valone, Sheena VanLeuven, Nikolai Ursin, John Williams.

1. CALL TO ORDER AND DECLARATION OF A QUORUM

Second Vice Chair Jerry Willey declared a quorum and called the meeting to order at 5:08 p.m.

2. SELF INTRODUCTIONS AND COMMUNICATIONS

Audience and committee members introduced themselves.

3. CITIZEN COMMUNICATIONS ON NON-AGENDA ITEMS

There were none.

4. CONSIDERATION OF THE MPAC MINUTES FOR NOVEMBER 17, 2010

Chair Andy Duyck asked that the minutes be revised to recognize Mayor Truax as Mayor of Forest Grove instead of Tualatin.

MOTION: Ms. Wilda Parks moved, and Mayor Jim Kight seconded, to approve the November 17, 2010 MPAC minutes as revised.

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

5. COUNCIL UPDATE

Metro Councilor Carl Hosticka updated the committee on:

- At the December 16 meeting, the Metro Council adopted the capacity ordinance that guide residential and employment growth over the next 20 years. The Council will vote on proposed changes to Title 11 at its January 13 meeting;
- In February Metro will host three "Metro 101" sessions for local elected officials and planning commissioners to provide an overview of Metro and roles. A handout was given to MPAC members with event details;
- Metro will co-sponsor the "Building Tomorrow's Jobs" breakfast forum to discuss tools featured in Metro's toolkit on eco-efficient employment on February 1 in Wilsonville;
- Metro has launched online tool, Opt In, which gathers public opinion from residents in the Portland-Vancouver metropolitan area. Panelists will be asked to participate in two or three short online surveys each month and can sign up at www.oregonmetro.gov/connect;
- Following Councilor Liberty's resignation, there will be a process to appoint a new District 6 Councilor with details on this process to follow.

6. ELECTION OF 2011 MPAC OFFICERS

Mayor Jack Hoffman, speaking on behalf of the nominating committee, nominated Commissioner Charlotte Lehan as MPAC Chair and Mayor Jerry Willey as Vice Chair for 2011. He noted that Commissioner Loretta Smith would be nominated as second Vice Chair pending her consent.

MOTION: Mayor Jack Hoffman moved, and Mayor Doug Neeley seconded, to nominate Commissioner Charlotte Lehan as Chair and Mayor Jerry Willey as Vice Chair for MPAC in 2011.

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

7. MAKING THE GREATEST PLACE OVERVIEW

Ms. Robin McArthur of Metro gave an overview of the work that MPAC undertook in 2010 and the resulting framework for policy decisions in 2011, namely that the work will now focus on implementing policies and investments including Greenhouse Gas scenario work, the Community Investment Strategy, and new mobility corridors. She asked for committee members' input on what MPAC would like to accomplish in the next year.

Committee member discussion included:

- Support for having a goal-setting session at an MPAC meeting;
- Support for developing strategies to foster employment and economic growth;
- The possibility of dividing monthly MPAC meetings into one focused on informational items and one focused on action items;
- The importance of quality K-12 and higher education systems as a means to economic and job growth.

8. ORDINANCE 10-1252: AMENDING TITLE 11

Councilor Robert Liberty gave a brief history on the issue of housing choice in the region, Metro's adoption of Title 7 and 11, and MPAC's involvement in revising Title 11. He discussed the final set of revisions recommended by the MPAC Housing Planning subcommittee.

Mr. John Williams of Metro outlined the context for concept planning for future urban areas, noting that this revised language would take effect December 2011.

Mr. Ray Valone of Metro presented on his experience working on concept planning for the North Bethany area.

Mr. John Fregonese of Fregonese Associates presented on the software that Metro uses to conduct scenario planning and how it applies to housing choice.

Members of the subcommittee including Mayor Jack Hoffman, Councilor Jody Carson, Mayor Denny Doyle, Councilor Shirley Craddick, and Mayor Jerry Willey spoke to how the subcommittee arrived at the proposed revisions.

Committee discussion included:

- Acknowledgement of a letter from Commissioner Fish supporting the formation of a permanent housing planning subcommittee;

- The importance of collaboration among a broad base of partners, including transit agencies, in achieving the aspirations contained in the Title 11 language;
- How the revised language is an important step in addressing inequality;
- That the revised language will allow for a better outcome in expansion areas and give flexibility to provide room for cities to grow.

MOTION: Mayor Jack Hoffman moved, and Mayor Denny Doyle seconded, to recommend to the Metro council adoption of the amendments contained in Exhibit A in Resolution 10-1252, revised in section 3.07.1110.c.4 to read "…this concept plan shall identify the general number, *price* and type of market and nonmarket-provided housing."

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

MOTION: Commissioner Amanda Fritz moved, and Ms. Nathalie Darcy seconded, to recommend that Metro establish an ongoing housing subcommittee and look at amendments to title 7.

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

9. MPAC MEMBER COMMUNICATIONS

Mayor Willey thanked Councilor Robert Liberty for his service to Metro and to the region.

10. ADJOURN

Vice Chair Willey adjourned the meeting at 6:38 p.m.

Respectfully submitted,

Recording Secretary

ATTACHMENTS TO THE PUBLIC RECORD FOR JANUARY 12, 2011:

The following have been included as part of the official public record:

ITEM	DOCUMENT TYPE	DOC DATE	DOCUMENT DESCRIPTION	DOCUMENT NO.
5	Handout	1/2011	Metro 101 sessions flyer	011211m- 01
5	Handout	1/2011	Building Tomorrow's Jobs flyer	011211m -02
8	Handout	1/12/2011	Ordinance No. 10-1252 Exhibit A, redline version	011211m -03
8	Handout		6 Desired Outcomes	011211m -04
8	Letter	1/7/2011	To: MPAC, From: Denny Doyle, Re: Capacity Ordinance: Title 11 amendment	011211m -05
8	Letter	1/11/2011	To: MPAC, From: Nick Fish, Re: Capacity Ordinance: Title 11 amendment	011211m -06
8	Letter	1/11/2011	To: MPAC, From: Lou Ogden, Re: Title 11 amendments	011211m-07

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Metro | *Memo*

Date: Tuesday, February 15, 2011
To: MPAC
From: John Williams, Deputy Director of Community Development
Subject: Proposed MPAC Bylaws Changes

During the past year, MPAC members and staff have identified potential changes that MPAC might want to consider making to the MPAC bylaws. Attached is a memo from Kelsey Newell concerning the MPAC recruitment and appointment process. Also attached are proposed changes to the MTAC member recruitment and appointment process. As you know, each year MPAC must approve the list of MTAC members. Staff is proposing some minor changes to MTAC's membership and the bylaws governing MTAC to help ensure that MTAC fulfills its technical assistance role to MPAC.

Background

- MTAC is established in MPAC's bylaws and nominations are subject to annual approval by MPAC. Metro Council does not have a role in approving MTAC positions (unlike TPAC).
- MPAC bylaws establish 35 positions including one non-voting Planning Department member as chair. Attendance by public representatives remains strong, attendance by others has faltered in some cases.

Proposed changes (see attachment for full membership list)

- Replace three private utility positions (currently designated for electric, natural gas and telecommunications) with one. The utility representative can bring in others as needed and be responsible for sharing a private utility view about working together towards a more sustainable future.
- Specifically designate a water provider position instead of the current, more general, special district position. A water provider has traditionally been the representative anyway, and it's the service most applicable to many of the topics we'll be taking on.
- Add a new position for a parks provider to strengthen the representation of parks, trails and natural areas in making a great place considerations.
- Broaden the ability to solicit representatives from the commercial and industrial development community by eliminating the requirement to solicit nominations for this position only from the Association of General Contractors.
- Re-title the "architect association" and "landscape architect" positions to "mixed use development" and "green infrastructure" to emphasize the types of expertise we need.

With your concurrence, we propose to ask the Office of Metro Attorney to review the MPAC bylaws and to prepare formal amendments to the bylaws for MPAC and Metro Council consideration.
In addition to the bylaw changes, we're planning for greater participation of MTAC members in MPAC presentations with the goal of bringing a broader view of the issues for MPAC consideration.

Proposed MTAC Position Summary

Position Categories	Recruitment approach/contacts	Total # of positions
Citizen Representatives	County Coordinating Citizen Chairs	3
Local Jurisdictions • City *(including Vancouver)* • County *(including Clark Co.)*	 Mayor and Planning Director County Chair and Planning Dir.	 10 4
State Agencies • ODOT • DLCD	Directors and staff	2
Service Providers <u>Special Districts</u> • Water[1] • Parks[2] • School Districts <u>Other Providers</u> • Utilities[3] • Port of Portland • TriMet	 Water Providers Consortium Parks providers in region All school districts Power & electric companies Executive Director Executive Director	6
Private Economic Development Association	Geographically-based associations (Westside Economic Alliance, Clackamas County Business Alliance, etc.)	1
Public Economic Development Association	Regional Partners	1
Other Organizations: • Land Use • Environmental • Housing Affordability • Residential • Mixed Use • Commercial/Industrial[4] • Green infrastructure & design	 Coalition for a Livable Future (CLF) & land use organizations CLF & environmental organizations CLF & affordable housing organizations Home Builders Association American Institute of Architects Commercial Real Estate Economic Coalition (CREEC), Associated General Contractors (AGC), National Association of Industrial and Office Properties (NAIOP) American Society of Landscape Architects	7
Plus Non-voting Chair		**1**
	Total MTAC Positions	**35**

[1] Proposed bylaw change: Special District Water Provider position created from more general special district position
[2] Proposed bylaw change: New Special Districts (Parks Providers) position created to represent parks, trails & natural areas
[3] Proposed bylaw change: Replace 3 private utility positions with 1 private utility position (member can bring in other utility views as needed)
[4] Proposed bylaw change: Broaden solicitation from commercial/industrial industry by expanding recruitment from only AGC

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Metro | *Memo*

Date: Oct. 12, 2010

To: Prep-MPAC

From: Kelsey Newell

Subject: Proposed updates for the MPAC bylaws

Over the past year MPAC members and Metro staff have identified a series of inefficiencies with the MPAC member appointment and recruitment processes, and roles and responsibilities for the Chief Operating Officer and Council President.

Below is a list of the issues identified, proposed amendments, and the sources from which the comments were received. The recommendations are a starting point for further discussion by Prep-MPAC and ultimately the entire committee.

Issue Identified	**Proposed Amendment**	**Source**
Currently, the Bylaws call for the representatives from the small cities of Clackamas, Multnomah and Washington counties to be designated for a term, no less than two years, and that the member and alternate terms be staggered to ensure continuity between transitions. Many MPAC representatives have served long terms, some predating the formal formation of MPAC (i.e. Former Forest Grove Mayor Richard Kidd). From a records standpoint, it has been difficult for staff to confirm when members were first appointed and the duration of their initial appointment. Consequently it is difficult to track the number of two-year terms served, etc.	Revise the MPAC Bylaws, Article III, Section 2.b to read: "Members and alternates from the cities of Multnomah, Clackamas, and Washington Counties, other than those directly entitled to membership, will be appointed jointly by the governing bodies of those cities represented. The member and alternate will be from different jurisdictions. The member and alternate will ~~be appointed to designated terms of length to be determined by the appointing authority, but not for a period of not less than two years.~~ serve until either he or she leaves office or he or she is replaced by an appointment by the governing bodies of those cities represented. The member and alternate may be reappointed. ~~Terms of the member and alternate will be staggered to ensure continuity.~~ In the event the member's position is vacated, the alternate will automatically become the member ~~and complete the original term of office~~ and serve until the governing bodies of those cities represented have appointed or reappointed representatives. *The proposed amendments would streamline the current process by allowing the member and alternate to serve until either leaving their agency and/or removed by the governing body.*	Metro staff

Issue Identified	Proposed Amendment	Source
According to the Bylaws, the counties' special district representatives must be appointed by the special district caucus. Difficulty in scheduling these meetings and limited interest and participation from special district members makes the current process highly inefficient. Furthermore, the Special Districts Association of Oregon has asked that the Bylaws specify that the organization act as a coordinator to solicit nominations from all districts within individual counties by either a mail or e-mail ballot to district directors for a vote on the nominees. And allow special district managers to be an alternate when the elected director representative is unable to attend.	Revise the MPAC Bylaws, Article III, Section 2.c to read: Members and alternates from the special districts with territory in Multnomah, Clackamas, and Washington Counties will be appointed ~~by special district caucus.~~ jointly by the governing bodies of those districts represented. The member and alternate will be from different organizations. The member and alternate will ~~appointed to designated terms of length to be determined by the appointing authority, but for a period not less than two years.~~ serve until either he or she leaves the district or he or she is replaced by an appointment by the governing bodies of those districts represented. The member and alternate may be reappointed. ~~Terms of the member and alternate will be staggered to ensure continuity.~~ In the event the member's position is vacated, the alternate will automatically become the member and ~~complete the original term of office.~~ serve until the governing body of those districts represented have appointed or reappointed representatives. *Removing reference to the special district caucus allows the districts to convene a nomination and appointment process in any form, including hard copy and electronic ballot. It also streamlines the process, allowing for members to serve until leaving their agency and/or removed by the governing body. The proposed revisions maintain consistency with the small cities representatives.* *This recommendation does not specify that the SDAO serve as coordinator or speak to who should be eligible to serve as a representative. This discussion should be reserved for further MPAC discussion.*	Kelly Ross Greg Baker
The Metro Council is represented on the Committee with three non-voting liaison delegates appointed by the Metro Council President. Currently, the Council President does not appoint the Council delegates based on their representation within the Metro boundary.	Revise the MPAC Bylaws, Article III, Section 2.d to read: Metro Council delegates will be appointed by the Metro Council President ~~and will represent each county in the region~~. The delegates may be removed by the Council President at any time. *The proposed amendment would update the Bylaws to be consistent with Metro's current practice.*	Metro staff

Similar to the existing appointment process for special districts, the school board member and alternate must be appointed by a caucus or organization of the school boards in the Portland metro region. Additionally, the member and alternate must represent different districts. Again, due to time constraints and limited staff support, school board representatives have proposed that Metro manage the solicitation of potential representatives and coordinate the appointment process for the school districts. Additionally, representatives have recommended that the board's representation be revised to one member and two alternates; with each representing one of the three counties.	Revise the MPAC Bylaws, Article III, Section 2.i to read: The member and alternate from the school boards in the Metro Region will be appointed jointly by the governing bodies of the school districts represented. ~~will be appointed by a caucus or organization of school boards from districts within the Metro region. If there is no caucus or organization of school boards within the region, the Executive Officer will facilitate the appointment by the school boards.~~ The member and alternate will be from different districts. The member and alternate will ~~be appointed to designated terms of a length determined by the appointing authority, but for a period of no less than two years.~~ serve until either he or she leaves office or he or she is replaced by an appointment by the governing bodies of those school districts represented. The member and alternate may be reappointed. ~~Terms of the member and alternate will be staggered to ensure continuity. The members and alternate will be from different school districts in the Metro Region.~~ In the event the member's position is vacated, the alternate will automatically become the member and ~~complete the original term of office~~. serve until the governing bodies of those school districts represented have appointed or reappointed representatives. *The proposed revisions would remove reference to a caucus and board organization and allow the school districts to convene a nomination and appointment process in any form, including hard copy and electronic ballot. The proposed revisions maintain consistency with the special districts and small cities representatives. Additionally staff has removed the text regarding the Executive Officer – as Metro no longer maintains this position.* *This recommendation does not specify that Metro coordinate the appointment process. Additionally, while staff doesn't foresee any issues with appointing one member and two alternates – with a representative from each of the three counties, this discussion should be reserved for further MPAC discussion.*	Dilafruz Williams Ruth Adkins

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Metro | *Memo*

Date: February 16, 2011
To: Metropolitan Policy Advisory Committee (MPAC)
From: Robin McArthur, AICP, Planning and Development Department Director
John Williams, Deputy Director of Community Development
Subject: MPAC/MTAC topics for 2011

This memo recommends general topic areas for MPAC/MTAC discussion in 2011. We will evolve work program details with direction from you, the Metro Council and its recommending bodies.

OVERVIEW
We are very pleased to usher in a new era. Over the past five years, Metro has worked with you and many others to establish an outcomes-based policy and planning framework encompassing transportation, land use and community development elements to guide decisions in the region over the next 20+ years.

It's time to turn our full attention to implementation efforts.
Our efforts will support the Council's vision and its six Desired Outcomes:

- Vibrant communities
- Economic prosperity
- Safe and reliable transportation
- Clean air and water
- Regional climate change leadership
- Equity

The Planning and Development Department will prioritize its resources in a way that best supports development on the ground consistent with shared local and regional aspirations. Consequently, we must develop a better understanding of the development needs of communities throughout the region.

MPAC and MTAC are well suited to advise us on how to do that. We need to target infrastructure investments to foster climate smart and economically viable communities, to integrate parks, trails and open spaces into the fabric of community life, and to create shovel-ready employment areas.

SPECIFIC PROJECTS
Projects and programs MPAC and MTAC will address in 2011 include:

- Climate Smart Communities scenarios development: Developing a regional land use and transportation strategy to reduce carbon emissions while advancing the Region 2040 Growth Concept and local aspirations.
- Integrated Corridor Planning: Southwest Corridor and East Metro Connections Plan: Developing integrated community investment strategies in these areas to leverage private investment through the use of scarce public dollars.

- Community Investment Initiative: Developing innovative financial solutions to address our region's infrastructure challenges.
- Intertwine System Development: Coordinating regional parks, trails and natural areas system development in order to identify funding priorities and opportunities.
- Urban Growth Boundary: Recommendation to the Metro Council to address regional 20-year capacity needs for jobs and housing. This will follow up on the 2010 Capacity Ordinance (adopted December 2010) and Urban and Rural Reserves decisions.
- Industrial and employment areas: Recommending programs and projects to create development-ready land for job creation in industrial and employment areas. Includes follow-up to MPAC employment subcommittee work and on the recently released "Eco-Efficient Employment Areas" toolkit.
- Downtowns, main streets and station communities: Identifying and implementing programs and projects to catalyze development in the region's downtowns, main streets and station communities. These efforts will implement the updates to the Regional Framework Plan (policy guidance) and Regional Functional Plan (code language) adopted in December 2010.
- Greater Portland Vancouver Indicators Project: Developing metrics to measure regional and local success.
- Affordable housing/equity: Following up on MPAC's recommendations to consider affordable housing and equity issues in our policy and investment decisions.
- Solid Waste Road Map: Consider how long-term plans to deal with the region's solid waste may be integrated into community development.

POLICY GUIDANCE

Metro Council
The Metro Council provides policy direction on all our projects and programs. It also adopts legislation to implement decisions within its purview. It seeks input from MPAC and other stakeholders on policy initiatives, programs and investments needed to develop downtowns, mainstreets and employment areas consistent with the Region 2040 Growth Concept.

MPAC and MTAC
After a busy 2010, MPAC will have fewer formal votes on legislative actions in 2011 (the urban growth boundary decision being the main exception). The topics listed in this memo will require MPAC to think creatively about how to implement a community investment strategy at the regional and local level. A main theme of the year will be identifying investment options. Working with the Joint Policy Advisory Committee on Transportation (JPACT), MPAC will advise the Council on:

- What combination of land use and transportation actions are needed to address green house gas emissions targets?
- What should Metro and its local partners do to create jobs?
- How can we target regional and local investments toward shared outcomes?
- How can we be sure that the benefits of growth are distributed equitably across the region?
- What effect will our actions have on low income and minority segments of the community and their transportation and housing choices?

Recognizing that integrated transportation and community development investments are needed to leverage results on the ground, staff will strive to increase coordination between JPACT and MPAC. MTAC will play a key role in advising MPAC on these topics.

MPAC Worksheet

Agenda Item Title: Creating A Climate Smart Communities Strategy: How We Get There From Here

Presenter: Kim Ellis

Contact for this worksheet/presentation: Kim Ellis (797-1617)

Council Liaison Sponsor: Councilor Collette

Purpose of this item (check no more than 2):

Information	__X__
Update	_____
Discussion	__X__
Action	_____

MPAC Target Meeting Date: _____February 23, 2011_____

Amount of time needed for:

Presentation	_5__
Discussion	_10__

Purpose/Objective:
The purpose of this item is to prepare MPAC for an April 1 climate change retreat with the Joint Policy Advisory Committee on Transportation (JPACT) and other elected officials and business and community leaders.

Staff will present an update of the Climate Smart Communities Scenarios effort, followed by presentations from other state-level efforts that will shape the region's climate activities:

- a report on the potential climate impacts to the region and actions local governments can take now;
- the Oregon Global Warming Commission 2020 Roadmap recommendations; and
- process and timeline for setting GHG emissions reduction targets for cars and light trucks in the Portland region.

Action Requested/Outcome:

- Learn about the Climate Smart Communities scenarios process and how it will advance 2040 implementation, the region's six desired outcomes and local aspirations.
- Discuss MPAC's role in shaping the region's strategy for meeting state climate goals, and identify opportunities for coordination and collaboration with local planning efforts that are underway.

Background and context:
In 2007, the Legislature established statewide goals for greenhouse gas emissions (GHGs) – calling for stopping increases in emissions by 2010; a 10 percent reduction below 1990 levels by 2020 and a 75 percent reduction below 1990 levels by 2050. The targets apply to all emission sectors, including energy production, buildings, solid waste and transportation.

In 2009, the Legislature passed House Bill 2001, directing Metro to "develop two or more alternative land use and transportation scenarios" by January 2012 that are designed to reduce greenhouse gas emissions from light-duty vehicles. The legislation also mandates adoption of a preferred scenario after public review and consultation with local governments, and local government implementation through comprehensive plans and land use regulations that are consistent with the adopted regional scenario. The Climate Smart Communities Scenarios effort responds to these mandates.

In 2010, the Legislature approved Senate Bill 1059, providing further direction to GHG scenario planning in the Metro region and the other five metropolitan areas in Oregon. Aimed at reducing GHG emissions from transportation, the legislation mandates several state agencies to work with stakeholders to develop a statewide transportation GHG emission reduction strategy, metropolitan-level GHG emissions reduction targets for cars and light trucks, guidelines for scenario planning, and a toolkit of actions to reduce GHG emissions.

In 2010, Metro's Making the Greatest Place initiative resulted in Council adoption of six desired outcomes, the Community Investment Strategy, urban and rural reserves and an updated Regional Transportation Plan. All of these actions provide the policy foundation for better integrating land use decisions with transportation investments to create prosperous and sustainable communities and meet state climate goals.

What has changed since MPAC last considered this issue/item?
A number of activities are underway at the state and regional level to respond to the state climate goals and subsequent legislative mandates, and to implement the 2010 Council actions.

What packet material do you plan to include?
- April 1 JPACT and MPAC Climate Leadership Summit flyer
- **Memo:** Creating A Climate Smart Communities Strategy Using Scenarios (dated Feb. 16, 2011).

What is the schedule for future consideration of item?

Feb. 23 – **MPAC** discussion on several climate-related topics: the Climate Smart Communities scenarios process and opportunities for coordination; a report on the potential climate impacts to the region and actions local governments can take now; the Oregon Global Warming Commission 2020 Roadmap recommendations; and setting GHG emissions reduction targets for the Portland region.

March 1 – ODOT releases Agency Technical Report, describing the technology and fuels assumptions to be included in region's scenario analysis.

March 3 – **JPACT** discussion on the Climate Smart Communities scenarios approach, evaluation framework and toolbox of strategies; and setting GHG emissions reduction targets for the Portland region.

March 9 – **MPAC** discussion on the Climate Smart Communities scenarios approach, evaluation framework and toolbox of strategies.

March 29 - Council discussion on the Climate Smart Communities scenarios approach, evaluation framework and toolbox of strategies. (tentative date)

April 1 – **JPACT and MPAC Climate Leadership Summit** to learn about opinion research and local case studies and provide input on the combinations of land use and transportation strategies to be tested during the summer.

April 1 – **DLCD releases draft Metropolitan Greenhouse Gas Emissions Reduction Targets** rule and GHG emissions reduction target for Metro region and other metropolitan areas.

April 12 - Council work session to ask questions and provide comments to DLCD staff on the draft Metropolitan Greenhouse Gas Emissions Reduction Targets rule and Metro region targets. LCDC is expected to act on the draft rule at their May 19 meeting.

April 13 - MPAC discussion on April 1 summit and scenarios evaluation approach.

April 14 - JPACT discussion on April 1 summit and scenarios evaluation approach.

May 11 - MPAC direction on scenarios evaluation approach and strategies to test.

May 12 - JPACT direction on scenarios evaluation approach and strategies to test.

Fall 2011 - JPACT and MPAC Summit to learn about the results of the scenarios evaluation and shape recommendations to be reported to the 2012 Legislature.

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Metro | *Memo*

Date: February 16, 2011

To: MPAC and interested parties

From: Kim Ellis, Principal Transportation Planner

Re: Creating A Climate Smart Communities Strategy Using Scenarios

PURPOSE

The purpose of this agenda item is to share information about the Climate Smart Communities Scenarios Project and receive input on information needs and opportunities for collaboration and partnerships through this process.

BACKGROUND

In 2007, the Legislature established statewide goals for greenhouse gas emissions (GHGs) – calling for stopping increases in emissions by 2010; a 10 percent reduction below 1990 levels by 2020 and a 75 percent reduction below 1990 levels by 2050. The targets apply to all emission sectors, including energy production, buildings, solid waste and transportation.

In 2009, the Legislature passed House Bill 2001, directing Metro to "develop two or more alternative land use and transportation scenarios" by January 2012 that are designed to reduce greenhouse gas emissions from light-duty vehicles. The legislation also mandates adoption of a preferred scenario after public review and consultation with local governments, and local government implementation through comprehensive plans and land use regulations that are consistent with the adopted regional scenario. The Climate Smart Communities Scenarios effort responds to these mandates.

In 2010, the Legislature approved Senate Bill 1059, providing further direction to GHG scenario planning in the Metro region and the other five metropolitan areas in Oregon. Aimed at reducing GHG emissions from transportation, the legislation mandates several state agencies to work with stakeholders to develop a statewide transportation GHG emission reduction strategy, metropolitan-level GHG emissions reduction targets for cars and light trucks, guidelines for scenario planning, and a toolkit of actions to reduce GHG emissions.

In 2010, Metro's *Making the Greatest Place* initiative resulted in Council adoption of six desired outcomes, the Community Investment Strategy, urban and rural reserves and an updated Regional Transportation Plan. All of these actions provide the policy foundation for better integrating land use decisions with transportation investments to create prosperous and sustainable communities and meet state climate goals.

Work is underway at the state and regional level to respond to the legislative mandates and implement the 2010 Council actions.

The region's six desired outcomes – adopted by the Metro Council on December 16, 2010.

STATE RESPONSE – OREGON SUSTAINABLE TRANSPORTATION INITIATIVE[1]

The Oregon Department of Transportation (ODOT) and the Department of Land Conservation and Development (DLCD) are leading the state response through the Oregon Sustainable Transportation Initiative (OSTI). A summary of the state activities is attached for reference.

A draft Technical Report will be released on March 1, 2011 to support Metro's work and the DLCD metropolitan-level target setting process. The Land Conservation and Development Commission (LCDC) is expected to adopt GHG emissions reduction targets for the Metro region on May 19, 2011; draft targets will be released on April 1, 2011.

DLCD director Richard Whitman will brief MPAC on the target setting process at the February 23 meeting, providing an opportunity for MPAC members to raise concerns and issues that should be considered as the target setting process moves forward.

REGIONAL RESPONSE – CLIMATE SMART COMMUNITIES SCENARIOS

The Climate Smart Communities Scenarios effort will build on the state-level work conducted to date and the 2010 Metro Council actions. The project presents an opportunity to learn what combination of land use and transportation strategies will be required to meet the state GHG targets and how well the strategies support all of the region's desired outcomes.

The project will use existing policy and technical advisory committees and lead to adoption of a "preferred" land use and transportation strategy by the Joint Policy Advisory Committee on Transportation (JPACT) and Metro Council. The Metro Policy Advisory Committee (MPAC), JPACT and the Metro Council will make recommendations at key decision points based on input from the Transportation Policy Advisory Committee (TPAC), the Metro Technical Advisory Committee (MTAC) and the stakeholder engagement process.

- **Phase 1: Understanding the Choices** (**Scenario Framing and Research)**

  The first phase of regional-level scenario analysis will occur during Summer 2011 and focus on learning what combinations of land use and transportation strategies are required to meet the state GHG targets. Land use and transportation strategies (e.g. market incentives, mixed-use, transit supportive development and expanded transit service) as well as operational and pricing strategies (e.g. traffic signal timing, parking pricing and other user-based fees) will be evaluated through regional-level scenarios. Potential impacts and benefits will be identified through a comprehensive array of measures that link back to the six desired outcomes. The tools used for this analysis will limit the strategies, impacts and benefits that can be evaluated during this phase of the process.

  The April 1 MPAC and JPACT Climate Leadership Summit is aimed at gathering input from elected officials and business and community leaders on the combinations of strategies to be tested. Findings and recommendations from the analysis will be reported to MPAC, JPACT and the Metro Council in Fall 2011 before being finalized for submittal to the Legislature in January 2012. The recommendations will also guide future phases of the project, as shown in Figure 1.

- **Phase 2: Shaping the Direction** (**Alternative preferred scenario analysis)**

  In 2012, Metro and local government staff will further analyze alternative regional-level scenarios that apply the lessons learned and recommendations from Phase 1 in a more tailored manner to develop a "draft" preferred land use and transportation scenario. This phase provides an

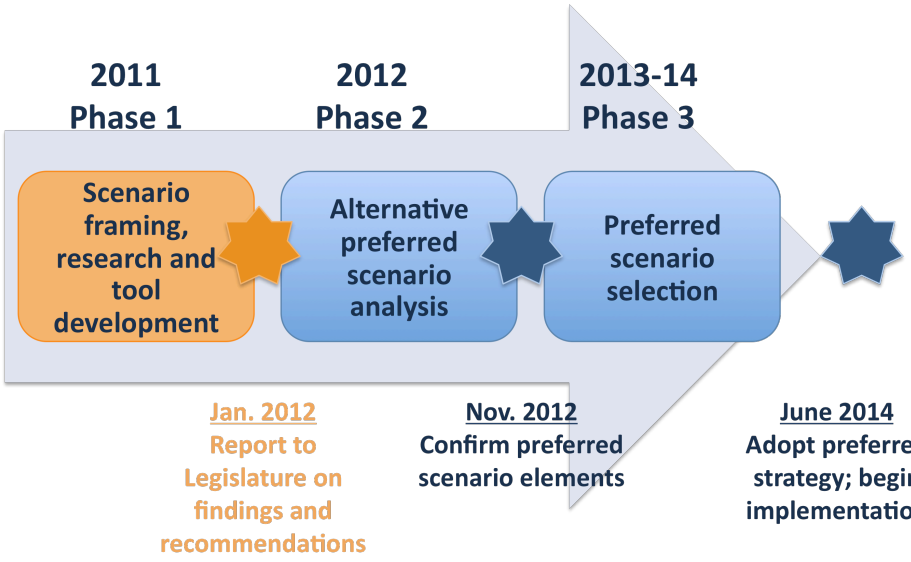
[1] For more information, go to http://www.oregon.gov/ODOT/TD/TP/OSTI.shtml

opportunity to incorporate strategies and new policies identified through local and regional planning efforts that are underway in the region (e.g., SW Corridor Plan, East Metro Connections Plan, Portland Plan, and other local periodic review and transportation system plan updates). By the end of 2012, MPAC, JPACT and the Metro Council will be asked to confirm a "draft" preferred scenario that will be brought forward to the final phase of the process.

- **Phase 3: Building the Strategy and Implementation (Preferred Scenario Selection)**

  The final project phase, in 2013 and 2014, will lead to adoption of a "preferred" land use and transportation strategy. The analysis in this phase will be conducted using the region's most robust analytic tools and methods – the regional travel demand model, MetroScope and regional emissions model, MOVES. Additional scoping of this phase will occur in 2012 to better align this effort with mandated regional planning and growth management decisions. This phase will identify needed changes to regional policies and functional plans, and including updates to the Regional Transportation Plan and region's growth management strategy. Implementation of approved changes to policies, investments, and other actions would begin in 2014 at the regional and local levels to realize the adopted strategy.

Figure 1. Climate Smart Communities Scenarios Process



A more detailed schedule that includes state coordination milestones is attached for reference.

NEXT STEPS

A goal of this effort is to further advance 2040 implementation, local aspirations and the public and private investments needed to build great communities and meet state climate goals. Addressing the climate change challenge will take collaboration and partnerships in the public and private sectors and focused policy and investment discussions and decisions by elected leaders, stakeholders and the public.

Work is underway to compile a toolbox of strategies to be evaluated and develop analytic tools and methods to support the scenario analysis to be conducted this summer. Staff is also conducting stakeholder interviews and opinion research to further inform the project's communication and engagement strategy. The strategy is being coordinated with the state's climate activities, other Metro climate activities and implementation of Community Investment Strategy. Upcoming meetings will be

focused on engaging and preparing the Metro Council, MPAC and JPACT members for the April 1 summit, and subsequent meetings to provide direction on the scenarios to be evaluate in Phase 1. A summary of upcoming policy discussions and milestones is provided for reference:

- **Feb. 23** – **MPAC** discussion on several climate-related topics: the Climate Smart Communities scenarios process and opportunities for coordination; a report on the potential climate impacts to the region and actions local governments can take now; the Oregon Global Warming Commission 2020 Roadmap recommendations; and setting GHG emissions reduction targets for the Portland region.
- **March 1 – ODOT releases Agency Technical Report**, describing the technology and fuels assumptions to be included in region's scenario analysis.
- **March 3** – **JPACT** discussion on the Climate Smart Communities scenarios approach, evaluation framework and toolbox of strategies; and setting GHG emissions reduction targets for the Portland region.
- **March 9** – **MPAC** discussion on the Climate Smart Communities scenarios approach, evaluation framework and toolbox of strategies.
- **March 29** - **Council** discussion on the Climate Smart Communities scenarios approach, evaluation framework and toolbox of strategies. (tentative date)
- **April 1** – **JPACT and MPAC Climate Leadership Summit** to learn about opinion research and local case studies and provide input on the combinations of land use and transportation strategies to be tested during the summer.
- **April 1** – **DLCD releases draft Metropolitan Greenhouse Gas Emissions Reduction Targets** rule and GHG emissions reduction target for Metro region and other metropolitan areas.
- **April 12** - **Council** work session to ask questions and provide comments to DLCD staff on the draft Metropolitan Greenhouse Gas Emissions Reduction Targets rule and Metro region targets. LCDC is expected to act on the draft rule at their May 19 meeting.
- **April 13 - MPAC** discussion on April 1 summit and scenarios evaluation approach.
- **April 14 - JPACT** discussion on April 1 summit and scenarios evaluation approach.
- **May 11 - MPAC** direction on scenarios evaluation approach and strategies to test.
- **May 12 - JPACT** direction on scenarios evaluation approach and strategies to test.
- **June – Aug. –** Scenarios development and evaluation with technical committees.

/Attachments

- Oregon Sustainable Transportation Initiative Overview *(dated 11/23/10)*
- Climate Smart Communities Scenarios Schedule *(dated 2/4/11)*

Oregon
Sustainable Transportation Initiative

Statewide Transportation Strategy

Statewide strategy for reducing GHG emissions from all transportation modes in all areas of Oregon.

- ODOT
- STS Technical Advisory Committee
- STS Policy Committee
- OTC

Draft by March–May 2011

§2 SB 1059

Agency Technical Report

Estimates of 1990 light vehicle GHG emissions and forecasts of future 2035 vehicle fleet and fuel characteristics.

- ODOT
- DEQ
- ODOE

Due by March 1, 2011

§5(2) SB 1059; §37(7) HB 2001

Scenario Planning Guidelines

Guidelines and process for metropolitan areas to develop land use and transportation scenarios to meet GHG reduction targets.

- ODOT
- DLCD
- SP Technical Advisory Committee

Draft by March–May 2011

§3 SB 1059

Toolkit

Information on actions and programs local governments may undertake to reduce GHG emissions from light vehicles.

- ODOT
- DLCD

Draft by March–May 2011

§4 SB 1059

Public Education

Statewide public education about the need to reduce GHG emissions from light vehicles and about the costs and benefits of doing so.

- ODOT
- DLCD

No deadline

§6 SB 1059

Scenario Planning Financial Report

Report to 76th Legislative Assembly on financing scenario planning.

- ODOT
- DLCD

Due by January 2011

§8 SB 1059

Target Rulemaking

Rules identifying reduction targets for GHG emissions from light vehicles in metropolitan areas.

- DLCD
- ODOT
- Technical Rulemaking Advisory Committee (TRAC)
- LCDC

Due by June 1, 2011

§5(1) SB 1059; §37(6) HB 2001 for Metro

Progress and Recommendations Report

Report to 77th Legislative Assembly regarding SB 1059 progress.

- ODOT
- DLCD

Due by January 2012

§9 SB 1059

Oregon Department of Transportation

www.oregon.gov/ODOT/TD/TP/OSTI.shtml

Last revised 11/23/2010

Metro | *Making a great place*

Updated February 4, 2011

Climate Smart Communities Scenarios Schedule

UNDERSTANDING THE CHOICES														SHAPING THE DIRECTION												BUILDING THE STRATEGY AND IMPLEMENTATION 2013-14
2010			2011											2012												
Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	

Technical Work and Policy Development

Develop and select a preferred land use and transportation scenario that meets GHG reduction targets and advances 2040 Growth Concept implementation, local aspirations and the region's desired outcomes

Scenario Framing and Research

Identify land use and transportation strategies to be evaluated through regional scenario alternatives relative to greenhouse gas reduction (GHG) targets and the region's desired outcomes

Identify strategy options

Research GHG emissions reduction potential of land use and transportation strategies, co-benefits and options for applying strategies in the region

- 2040-based land use types
- Case studies
- Strategy Toolbox

◆ *Council, MPAC & JPACT provide direction on strategies to test (May 2011)*

Test strategy options

Evaluate reference case and alternatives designed to meet GHG targets

- Reference Case
- Scenario A
- Scenario B
- Scenario C

◆ *Council, MPAC & JPACT confirm strategy options to move forward, research findings & recommendations for report to 2012 Legislature (Nov. 2011)*

Preferred Scenario Development

Develop and evaluate alternative regional scenarios to identify the combination and phasing of local and regional strategies needed to meet GHG targets and achieve the region's desired outcomes

- Scenario A
- Scenario B
- Scenario C

→ Draft Preferred Land Use and Transportation Scenario

◆ *Council, MPAC & JPACT confirm elements to be included in preferred scenario (Nov. 2012)*

Preferred Scenario Selection

Select and implement local and regional policies, investments, tools and actions to meet GHG targets and achieve the region's desired outcomes

Final preferred strategy

- *Policies*
- *Investments*
- *Tools*
- *Actions*
- *2040 Growth Concept map, RTP, functional plan and framework plan changes*

◆ *Council adopts preferred strategy; local implem-entation begins (June 2014)*

Data and Tools Development and Research

Develop and enhance tools, data and methods to evaluate the costs, benefits, impacts and effectiveness of land use and transportation choices relative to GHG reduction targets and the region's desired outcomes

- Data needs/ gaps
- Sketch planning tool(s)
- Visualization tool(s)
- Travel model
- Land use model
- Emissions model
- Portland-Vancouver Regional indicators
- Equity analysis
- Economic analysis
- Public health analysis
- Environmental analysis

Communications and Outreach

Convene a collaborative regional process to achieve GHG reduction targets and advance 2040 Growth Concept implementation, local aspirations and the region's desired outcomes

◆ *Public opinion research and stakeholder engagement on toolbox of strategies (Winter 2010-11)*

◆ *MPAC and JPACT summit to discuss opinion research and refine strategy options (April 1, 2011)*

◆ *MTAC and TPAC technical workshop to develop alternative scenarios (June 2011)*

◆ *MPAC and JPACT summit to discuss research findings and recommendations (Fall 2011)*

◆ *Stakeholder engagement to share findings and gather input on preferred strategy elements (Winter 2012)*

◆ *Stakeholder workshop(s) to develop alternative scenarios (Spring 2012)*

◆ *MPAC and JPACT summit to discuss findings and recommendations (Fall 2012)*

◆ *Stakeholder engagement to develop preferred strategy (2013)*

◆ *Final public review and adoption process (Spring 2014)*

Coordination with State Scenario Planning and Policy Development

Coordinate with and inform state GHG target setting process and development of statewide transportation strategy, GHG toolkit and scenario planning guidelines

◆ *ODOT and DLCD Report to 2011 Legislature (Feb. 2011)*

◆ *ODOT/DEQ/ DOE provide Metro region VMT estimate, fuel and technology assumptions (March 1, 2011)*

◆ *LCDC provides draft Metro region and other MPOs GHG targets (April 2011)*

◆ *ODOT/DLCD establish draft GHG toolkit and scenario planning guidelines (Spring 2011)*

◆ *LCDC adopts Metro region and other MPO GHG targets (May 2011)*

◆ *OTC adopts Statewide Transportation Strategy (Dec. 2011)*

◆ *State Commissions briefings (Jan. 2012)*

◆ *ODOT and DLCD Report to 2012 Legislature (Jan. 2012)*

ODOT/DLCD develop rules and process for scenario planning:

- *Process for cooperative selection of preferred scenario*
- *Minimum planning standards*
- *Planning assumptions and approaches*
- *Cycle for local plan adoption and update*

◆ *State Commissions briefings (Jan. 2013)*

◆ *LCDC adopts rules and process for selecting preferred land use and transportation scenario (Jan. 2013)*

◆ *ODOT and DLCD Report to 2014 Legislature (Feb. 2014)*

◆ = *Technical and policy development milestones*

◆ = *Communication and outreach milestones and events*

◆ = *State scenario planning and policy development milestones*

MPAC Worksheet

Agenda Item Title: Putting protection and preparedness in place to address impacts our region can expect from a changing climate

Presenter: Steve Adams, Climate Leadership Initiative

Contact for this worksheet/presentation: Kim Ellis (797-1617)

Council Liaison Sponsor: n/a

Purpose of this item (check no more than 2):

Information	__X__
Update	_____
Discussion	__X__
Action	_____

MPAC Target Meeting Date: _____February 23, 2011_____

Amount of time needed for:

Presentation	_5__
Discussion	_15__

Purpose/Objective:
The purpose of this item is to prepare MPAC for an April 1 climate change retreat with the Joint Policy Advisory Committee on Transportation (JPACT) and other elected officials and business and community leaders.

Steve Adams will present a recently released report describing potential climate impacts to the region and recommended actions.

Action Requested/Outcome:
- Learn about the potential climate impacts to the region and recommendations for specific actions that policymakers can take now.
- Discuss how these impacts may affect your community and share examples of what your community is already doing.

Background and context:
The Climate Leadership Initiative's new report, Building Climate Resiliency in the Lower Willamette Region of Western Oregon caps an 18-month project to engage local experts and stakeholders in how to prepare the Lower Willamette region for a changing climate. Modeling provided by the Oregon Climate Change Research Institute projects that the region's average summer temperature will increase 10 to 15°F this century, along with more extreme weather events and a loss in snowpack approaching 80 percent below current levels.

While these climate impacts will have significant regional effects on the local economy, social welfare, environment and quality-of-life, more than 200 local stakeholders found ample opportunity for government, private businesses, and individuals to reduce harm by preparing now. Stakeholders provided 40 recommendations including hardening infrastructure, reducing energy use, encouraging preventative health, diversifying the local businesses and restoring floodplains and wetlands. These measures will enhance existing sustainability initiatives, create the basis for a resilient regional economy, and assure continued prosperity for the region.

A more in depth webinar will be held on Wednesday, February 23rd from 10-11am PST. To register, go to: https://www3.gotomeeting.com/register/637338878

What has changed since MPAC last considered this issue/item?
This is a new informational item.

What packet material do you plan to include?
- Building Climate Resiliency in the Lower Willamette Region of Western Oregon: Summary For Decision-makers (January 12, 2011)

For more background information and to download the full report go to:
http://www.theresourceinnovationgroup.org/building-climate-resiliency/

What is the schedule for future consideration of item?
This item is not currently scheduled for future discussion or consideration.

Building Climate Resiliency

in the Lower Willamette Region of Western Oregon

Summary for Decision Makers

The Resource Innovation Group's
Climate Leadership Initiative

January 2011

Acknowledgments

A special thank you to those who participated on the advisory or science teams and contributed to the drafting of the report:

Jeff Weber, Heejun Chang, Vivak Shandas, Michael Armstrong, Dianne Riley, Holly Michael, John Fazio, Sarah O'Brien, Lorna Stickel, Kat West, Heidi Rahn, Lori Hennings, Kari Lyons, Dan Blue, Michael Heumann, Eric Hesse, Dave Waffle, Ethan Rosenthal, Eben Polk, Linda Modrell, Charlie Fautin, John Sechrest, Dave Ecker, Charlie Tomlinson, Peter Kenagy, Wes Hare, Greg Burn, Ali Bonakdar, Theresa Conley, Tara Davis, Xan Augerot, Brad Withrom-Robinson, Claire Puchy, Anita Morzillo, Doug Drake, Char Corkran, Georgia Edwards, Andy Walker, Brian Finneran, Bobby Cochran, Martin Nugent, Gary Galovich, Dana Sanchez, Mary Coolidge, Frank Isaacs, Michael J. Adams, Lily House-Peters, Jordannah Baker, Tiffany Danielson, Beteher Nedi, and Jamie Stephenson.

We greatly appreciate the cities and their staff that hosted workshops, including Oregon City, Clackamas County, Gresham, Cornelius and Albany. Thank you to the numerous participants that provided extensive review and comments on the draft report.

CLI University of Oregon Research Interns: Hannah Satein (Bachelors in Planning, Public Policy and Management, 2010), Elena Fracchia (Masters in Public Administration, anticipated 2011), Caroline Moore (Masters in Public Administration, anticipated 2011), Monique Garcia Lopez (Masters in Community Regional Planning, anticipated 2012).

Layout and design by Holly Spencer.

Our sincere appreciation to the following for making this project possible:

Bullitt Foundation
Harder Foundation
Kresge Foundation
Lazar Foundation
Oregon Watershed Enhancement Board

The Resource Innovation Group (TRIG)

TRIG is a 501(c)(3) that provides innovative solutions to the challenges of sustainability, climate change and other social, economic and ecological concerns. TRIG was founded in 1996, as an affiliate of the Portland State University Hatfield School of Government. In 2005, TRIG established the Climate Leadership Initiative (CLI) with a specific mission of fostering the development and application of innovative thinking and approaches to the complex causes and solutions to climate change. From 2001 through 2010 TRIG had an affiliation with the Institute for a Sustainable Environment at the University of Oregon. Today, TRIG is engaged in partnerships with a number of academic institutions, non-profits, private companies and government agencies nationwide.

Building Climate Resiliency

in the Lower Willamette Region of Western Oregon

A Report on Stakeholder Findings and Recommendations

Summary for Decision Makers

The Resource Innovation Group's Climate Leadership Initiative

Written by: Stacy Vynne, Steve Adams, Roger Hamilton, Bob Doppelt

January 2011

A program of The Resource Innovation Group
PO Box 51182 ▪ Eugene, OR ▪ 97405
www.theresourceinnovationgroup.org

Introduction

In 2010, the Climate Leadership Initiative (CLI) engaged over 200 experts from the Lower Willamette region of western Oregon in a series of workshops called Climate Futures Forums. Individuals from the following counties participated: Benton, Clackamas, Linn, Marion, Multnomah, Polk, Washington and Yamhill. Forum participant expertise expanded across the following systems: natural, built, economic, human and cultural.

Based on Intergovernmental Panel on Climate Change (IPCC 2007) modeling of two possible future emissions scenarios ("Business as Usual" and a greener scenario) for mid and end of century, the Oregon Climate Change Research Institute (OCCRI) developed downscaled projections of impacts for the Lower Willamette. These projections, coupled with other local research, provided the basis for the CLI Lower Willamette project.

The Climate Futures Forums had the following objectives:

- Assess regional climate change projections;
- Identify likely impacts to systems throughout the region; and
- Recommend strategies to prepare for those impacts.

CLI facilitated participant discussion to integrate strategies across the natural, built, economic, human and cultural systems and ensure that climate change preparedness actions produce complementary benefits the different sectors within the systems as well as reduce conflicting costs.

This document provides policy and decision makers with a summary of findings from CLI's 2010 Lower Willamette project. The full report, which contains a detailed description of the Climate Futures Forums, the modeling process and projections, and the impacts and recommendations, is available at www.theresourceinnovationgroup.org. The complementary modeling projections report from OCCRI is also available.

While this summary and the accompanying report identify a number of consequences from climate change in the Lower Willamette, many opportunities are also presented. Climate change may bring new prospects for locally focused businesses, increased self-sufficiency among residents, and innovative networks to support vulnerable populations. These responses will make the region more resilient not only to climate change impacts, but could also buffer the local economy to rising energy costs and turbulent global markets.

The Climate Futures Forums and the results presented in this summary are only the beginning. Forum participants and stakeholders in the Lower Willamette must begin to assess the recommended strategies, identify priorities based on benefits and costs, and begin implementation. Effective implementation depends on broad coordination and collaboration across the many jurisdictions within Lower Willamette region: state and federal agencies, the private sector, institutions of higher learning, and non-profit organizations. Individuals from each of these institutions are encouraged to use the report to initiate dialogue on building resilience to the impacts of climate change in the Lower Willamette.

The people and institutions of the Lower Willamette have the capacity and innovation needed to effectively prepare for climate change. The region is likely one of the more resilient in the country. By initiating a process now to prepare the natural, built, economic, human, and cultural systems for climate change, the Lower Willamette will continue to prosper well into the future.

Overview of Findings and Recommendations

Key Projections

Key projections participants responded to include:

- Overall warming trend, with an increase of 10-15° F in summer under the Business as Usual emissions scenario;
- Changes in precipitation patterns (more rain, more precipitation falling in a shorter amount of time);
- Change in conditions to favor warmer vegetation types;
- Significant loss of snowpack in the Cascades of about 80% compared to current conditions by end of century;
- Higher stream runoff in winter and early spring (due to more precipitation falling as rain and in shorter periods), and decreased flows in summer for some locations; and
- Higher intensity and increased distribution of fires.

Key Impacts

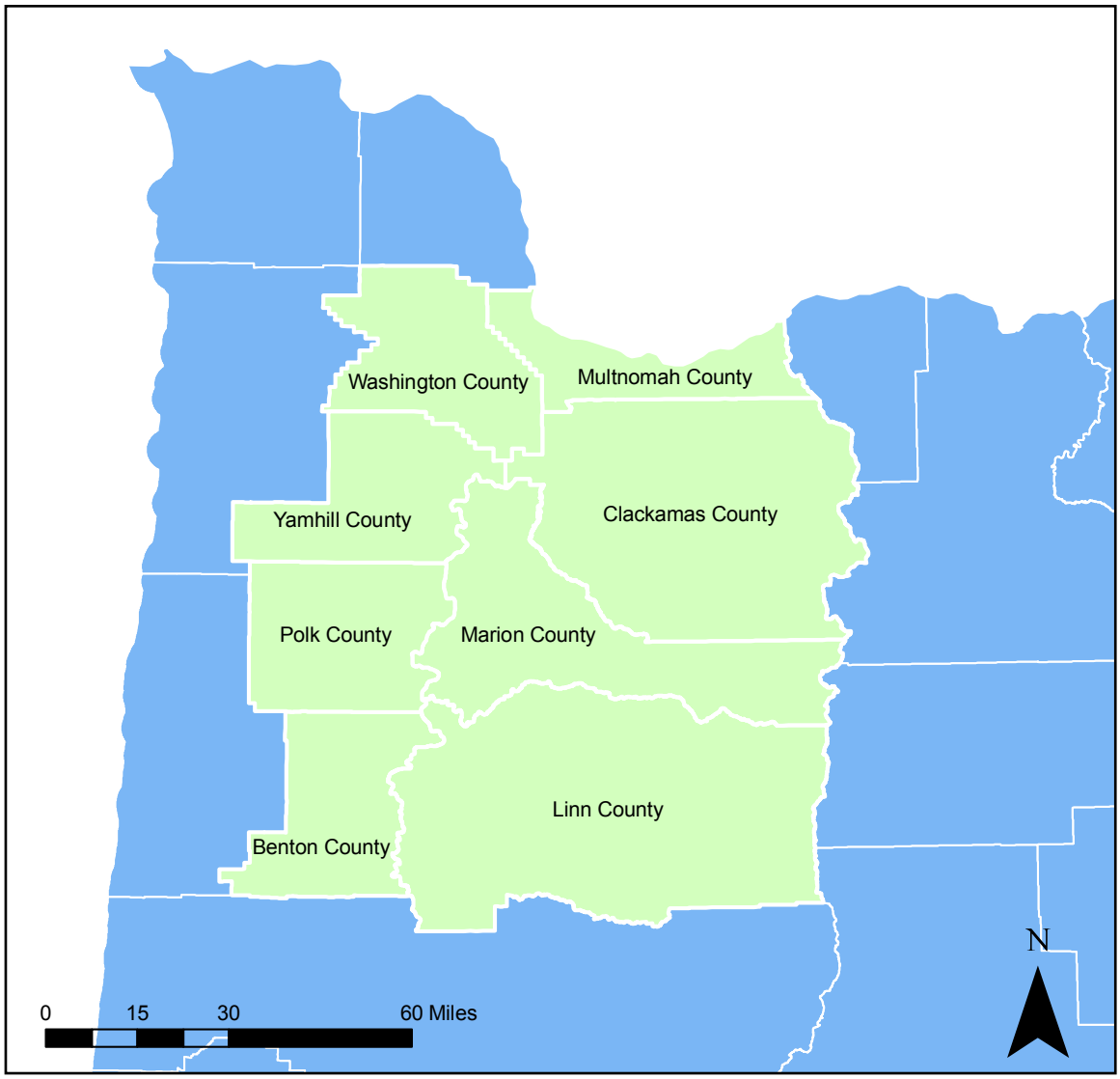
Common themes of impacts identified by participants include:

- Reduced water quality and shifts in water availability (i.e. more in winter, less in summer);
- Mis-match in life history timing of many species, possibly leading to population decline due to diminishing availability of essential resources when needed by each species;
- Decline in efficiency of, and potentially significant damage to, public works, transportation, and communication infrastructure;
- Extended duration and shifts in timing of seasonal peak water demands;
- Diminished productivity or total loss of some agricultural commodities, but potential opportunities for new crops and longer growing seasons;
- Increases in number of invasive, non-native plant and animal species (i.e. additional species coming into the area), and expansion of ranges (i.e. spread) of others.
- Increased instances of heat illness, vector- and water-borne disease, mental health illness, respiratory distress; and
- Loss of cultural resources (e.g. salmon) and historical landmarks (e.g. covered bridges, century old barns and iconic natural features).

Key Recommendations

Common themes of recommendations identified by participants include:

- Protect floodplains, wetlands, and groundwater recharge areas;
- Further assess anticipated habitat changes in order to preserve existing high quality habitat and promote restoration where feasible;
- Preserve, expand, and connect existing high quality habitat and restore habitat of lesser quality that is crucial to species' survival;
- Update infrastructure with projections for future population growth and climate change;
- Anticipate increased energy needs and provide incentives for efficiency and conservation;
- Diversify businesses, as well as agricultural and timber crops;
- Increase preventative health initiatives, notification and warning systems, and diversify health and emergency management partnerships; and
- Protect key cultural resources and improve historical architecture resiliency to extreme events.



The counties of focus for this report are presented here. The Oregon Department of Environmental Quality (DEQ) defines the Mid Willamette as the Willamette River at Canby, including the North and South Santiam, Yamhill, and Molalla-Pudding subbasins, and the Lower Willamette as the region around the mouth of the Willamette River and the Tualatin and Clackamas subbasins. Willamette Falls (located between Oregon City and West Linn in Clackamas County) is the upper end of tidal influence. Map courtesy of Kathie Dello, Oregon Climate Change Research Institute.

Impacts and Recommendations for Natural Systems

Likely Impacts to Natural Systems

Shifts in stream flow. Extreme precipitation events could result in short- and long-term changes to river and stream morphology (i.e. shape and pattern), with a potential long-term shift to a different hydrologic regime such as timing and magnitude of flow. Some aquatic experts project increasing 'flashiness' of streams (a high stream flow lasting for a short period- typically less than six hours- following rainfall or snowmelt) due to increased warming and rainfall. These events may reshape the stream systems. While some aquatic organisms and habitats are adapted to flashiness, typically these events result in increased erosion, flushing of organisms due to excessive flows, scouring of streambeds, and loss of opportunity for ground water recharge.

Reduced air quality. Climate change amplifies air pollution problems in both rural and urban areas, increasing ground level ozone and particulate matter concentrations. Reduced air quality can disrupt regional ecosystem processes and genetic and population diversity, cause extensive damage to vegetation, and also lead to acidification of ecosystems. This could result in Clean Air Act noncompliance.

Reduced water quality. Increased precipitation events and runoff could lead to erosion and increased nonpoint pollutant loading to streams. Increasing stream temperatures may also lead to decreased water quality from nutrient loading and algae blooms. This could result in Clean Water Act noncompliance.

Loss of genetic diversity and shift in species gender balance. Reptiles such as the western pond turtle and western painted turtle may experience changes in male to female ratios, since gender is temperature dependent: females are produced at higher incubation temperatures than males. Cold water aquatic species or high alpine terrestrial species are also at greater risk by increasing stress, possibly leading to localized species extinctions and a loss of genetic diversity.

Shifts in quality of habitat and refugia. Wetlands are likely to experience increased drying during the summer months, impacting local amphibian and turtle populations, mammals, native vegetation and birds. Prairie habitat will be threatened with further fragmentation risk through shifting precipitation patterns and increased fire, impacting the ability of prairie-dependent species to migrate. Forest species that rely on soil and ground cover may experience habitat loss, as well as species that require extensive habitat (impacting species management under the Endangered Species Act).

Reduction in ecosystem services. Climate change may impact the natural storage, filtration and pollination services provided by the systems of the Lower Willamette.

Shifts in extreme events. Extreme events, such as precipitation, fire, and wind, are expected to increase with climate change. These events will pose threats and opportunities for natural systems in the Lower Willamette.

Increased intensity of urban heat island effect. Urban areas with substantial impervious surfaces and concrete, devoid of vegetation and wetlands that moderate warming, may experience a more rapid warming compared to rural forested areas and smaller communities. This would lead to greater negative climate impacts on urban forests, parks, waterways, fish, wildlife, and vegetation.

Loss of specialist and low mobility species. Species that specialize in a particular habitat, prey, or whose current populations are rare, unhealthy or isolated, are very susceptible to climate change impacts. Species that must travel long distances to escape heat or find water are susceptible to changes in climate.

Increase in invasive, generalist, and heat tolerant plant and animal species. An increase in high intensity fire may make some ecosystems less resilient to invasive species colonization following disturbance (however, fire can also act as a control for invasives). Invasives may be more adapted to soil disturbances associated with fire and extreme events, as well as to warmer climate. Species that thrive in a variety of habitats and on a variety of food sources (i.e. generalist) may not be impacted severely with climate change.

Shift in migration patterns and habitat range. Generalist butterflies are expanding their ranges under current climate changes whereas specialist

butterfly species have been moving northward or are being squeezed out of their ranges. For birds, potential changes include species no longer present in Oregon during the summer, summer ranges expanding or contracting, and species without a current presence coming to Oregon in the summer. With warmer winters, there may also be an increase in resident waterfowl, leading to overgrazing of grasslands.

Changes in intra-species interactions and life history timing. With changes in vegetation, symbiotic relationships between benthics (bottom dwelling), aquatics, and terrestrial species will change, likely to the detriment of many native species. Key timing for life history requirements may become out of sync for some species, such as food availability not matching ingrained migration timing.

Loss of culturally important species and landscapes. Warmer temperatures and changing vegetation conditions may lead to a loss of species of tribal and general public importance. Scenic areas considered to be part of Oregon's identity might also be impacted (e.g. the glaciers of Mount Hood).

Recommendations for Resilient Natural Systems

Protect and restore floodplains and connect them to their rivers. Maximizing connections between streams and their floodplains will reduce impacts from flooding on human and natural communities and encourage water storage. Management should focus on creating and maintaining off-channel habitats and reserves for deep-water storage in order to support resiliency of the floodplain system during extreme events. Local government, in collaboration with the state, can strengthen floodplain restoration policies and non-structural flood storage to improve flood control and reduce vulnerability to extreme flooding. Zoning and building codes can also be used to reduce development impacts on floodplains. Levee and other flood control management efforts should be integrated with natural systems protection to achieve win-win solutions in adapting to climate change.

Increase the complexity of streams. Stream complexity restoration is an effective strategy for ensuring coldwater availability and reducing stream flashiness. Recruitment of large wood to stream systems supports this, but may require a shift in Oregon Forest Practices to encourage interplanting of evergreens in Riparian Management Areas. The Oregon Water Resources Department, Department of Land Conservation and Development, local governments, Soil and Water Conservation Districts, Department of Forestry and Fish and Wildlife, irrigation districts and watershed councils can all play a role in reviewing and revising local stream policies and restoration projects to identify opportunities for improvement.

Protect, expand and connect (where appropriate) existing, high quality habitat and restore and connect (where appropriate) habitats of lower quality. Habitat protection policies under local, regional and state management, as well as habitat managed by conservation organizations, should prioritize protection and expansion of high quality urban and rural habitat with greater resilience to climate change. Increasing connectivity between habitats using buffers, anchors, and corridors should be encouraged. However, managers should also prevent "highway" corridors through which invasives and diseases can spread rapidly.

Use a landscape approach to conservation. To maximize protection of habitat and increase resiliency of species and ecosystems to climate change impacts, a landscape approach is needed to integrate efforts happening at a more localized scale with broader regional approaches (please see the full report for a more detailed description of landscape approach). ODFW, in coordination with the USFWS, should consider how invasives, as well as Threatened, Endangered and Sensitive (TES) species are identified and managed under a climate change future.

Revise species management. To increase effectiveness and avoid duplication of species management programs and policies, greater communication and collaboration is needed between researchers and land managers. Federal, state, and local species management agencies should increase coordination efforts. Species protection efforts under the federal Endangered Species Act (ESA) will need to be evaluated in light of a changing climate, including the possibility or likelihood that species' current habitats may have limited ability to support these species in the future.

Restore and manage beaver presence in riparian communities. Restoration of beavers will support aquatic habitat resilience, as they are a keystone species with a strong influence on ecosystems as a result of their dam-building and feeding activities. The benefits of beavers will need to be weighed with some of the negative impacts of beaver dams, which can thraten private structures and public infrastructure. Stormwater management facilities will need to plan for beavers, and enact road crossings.

Reassess allocation of water rights. Overappropriation of streams in the region negatively affects water quality and quantity. The Oregon Water Resources Department may need to consider a review of water rights and potential shifts in regulation.

Incorporate climate change preparation strategies into watershed management plans. If not already doing so, watershed councils and local governments should develop, adopt, and begin implementing local watershed management plans that set climate resiliency objectives for hydrology, physical habitat, water quality, and biological communities.

Increase riparian vegetation. Supporting riparian vegetation growth (along river margins and banks) could help to protect water quality from increased erosion and associated pollutants. Increased riparian vegetation will also improve water quality through shading, habitat diversity, and cover for wildlife.

Restore natural fire regime. Natural fire regimes should be restored to build the resilience of ecosystems to climate impacts, as fires maintain diverse assemblages of vertebrate species and forest types.

Reduce impervious surfaces. Local governments should minimize the extent of impervious surfaces to protect the water quality of streams, improve infiltration, and reduce stream flashiness.

Increase and refocus monitoring efforts. Monitoring will need to be more adaptive and integrated with management regimes as a result of shifting climate conditions.

Natural Systems			
Recommendation	**Who**	**Co-Benefits/Costs**	**Mitigation Benefits**
Protect and restore floodplains, connect to rivers	FEMA, local government, private landowners	Reduce damage to infrastructure, increase water storage	
Increase stream complexity	WRD, DLCD, local governments, SWCD, DOF, DFW, irrigation districts and watershed councils, OWEB	May require removal of infrastructure and limit development, supports commercially and culturally valuable species, may reduce health risks	
Protect high quality, restore lower quality habitat	Regional jurisdictions, state agencies, nongovernmental conservation organizations, lottery funds	May limit development, provides ecosystem services, may boost property values, improves air and water quality, supports recovery of culturally important species	Yes, if sequestration
Use landscape approach	Conservation organizations, watershed councils, private landowners, and state and federal agencies	May limit some development	
Revise species management	ODFW, USFWS, watershed councils, and landowners		
Restore beavers	ODFW, USFWS, watershed councils, storm water managers, and landowners	May cause damage or restructuring of water infrastructure, benefits to other species and stream complexity	
Reassess allocation of water rights	WRD	Reduce strain on water infrastructure	Yes, if conserves water
Incorporate climate change preparation strategies into watershed management plans	watershed councils and local governments		
Increase riparian vegetation	watershed councils, landowners	Improve air quality	Yes
Restore natural fire regime	Oregon Department of Forestry, federal and state land manager	Reduce catastrophic fire damage to infrastructure, may impact timber production, supports recovery of culturally important species	
Reduce impervious surfaces	Local governments	Reduce flashflooding events, support species and ecosystem recovery, improves water quality for human use, may limit new development	Yes
Increase and refocus monitoring	conservation organizations, watershed councils, state and federal governmental agencies	Supports recovery of culturally important species as well as commercially valuable crops	

Impacts and Recommendations for Community Systems (Built, Economic, Human and Cultural)

Likely Impacts to Built Systems

Damage to water and sewer infrastructure. The greatest strain on water and sewer infrastructure may be felt during early winter and spring, when projections show an increased likelihood of intense rain events. The possible consequences of system failure due to extreme events include sewage system backup, submersion of sewage treatment plants, overwhelming of filtration systems from silt and other debris, and reduced availability of safe-drinking water through raw sewage leakage. As water utilities face longer summer-demand seasons from their customers, plus reduced summer flows in some or many of their surface water sources, they will increasingly turn towards groundwater as a supplemental source.

Strain on public transportation and road conditions. Roads may buckle due to increased temperatures, fire, or flood. This could cause interruptions in emergency response, as well as decrease worker productivity. With increased storms and runoff there may be large sediment increases in streams from blowouts of forest roads. If climate refugees move to the region as anticipated, the carrying capacity of roads may reach its limit and maintenance and repair may need to be done more frequently

Bridge failure: Structural soundness of these bridges may be compromised with climate impacts, particularly from "flashier" floods following heavy precipitation events.

Air and rail disruptions: Sea level rise may impact rail lines as many miles of railroad are along tidal rivers and streams. Rail lines are also susceptible to icing from winter storms, as well as significant temperature increases. The Portland International Airport (PDX) may experience increasing flight delays or cancellations as a result of extreme weather events.

Impacts to utility transmission and meeting energy demand: Electricity demand will be impacted by changes in future temperature. Less energy may be needed in winter with milder temperatures, while warmer temperatures may increase demand in summer. Power outages may occur on very hot days when peak demand exceeds capacity. Population growth may further exacerbate energy demand and reduce availability. Further, transmission lines may be at risk due to climate change events such as fires or excessive heating during extreme temperatures and high use.

Interruptions in communications infrastructure. Above-ground communication infrastructure (internet, phone, television, etc) is at risk to high temperatures, flooding, fires, and extreme storm events such as wind and precipitation. Interruptions may put communities at greater risk during extreme events due to lack of information from emergency service providers.

Impacts to buildings. Homes, essential service infrastructure, and businesses located in floodplains are at risk to damage from floods. With projections showing wildfire likely to increase in frequency, intensity, and distribution, homes in the wildland-urban interface are likely to be damaged.

Recommendations for Resilient Built Systems

Update and improve water and sewer infrastructure: Water and sewer infrastructure must be designed to cope with bigger and more frequent storm events. In addition, updates to infrastructure by local utilities, state and local governments should consider projections for future population growth, including the likely influx of climate refugees. Storm water management should incorporate catchment from gutters, green rooftop designs, increased green space, and separate storm water and wastewater systems with new pipe systems and upgrades. For cities experiencing low flow impacts, grey water reuse and stronger water conservation policies should be deployed. In addition, water pricing may need to be considered in order to deal with shortages and provide capital investment for system upgrades. To diversify sources, providers can integrate groundwater as a supplemental supply source and conjunctive water management such as Aquifer Storage and Recovery (ASR).

Identify critical infrastructure in floodplains and relocation needs. Floodplain management plans need to consider the projected impacts of a changing climate, while agencies producing maps (such as FEMA) need to update maps for likely floodplain areas.

Improve and safeguard transportation infrastructure. ODOT should explore new paving technologies for transportation infrastructure that reduce the impacts of increased temperatures. Communities will need to plan for mixed-use zones, such as employment clusters and mass transit located near condensed residential areas, as well as integrated land use, transportation, and development codes. Cities will require improved mass public transit, such as with high-speed rail. New transportation infrastructure development will need to consider future floodplain conditions and rerouting of major roads to prevent flood damage. Some airports will also need to consider relocation of runways under future projections for flooding, particularly at the Portland International Airport.

Improve energy efficiency, promote renewables, and protect building infrastructure: Energy efficiency education and outreach programs must grow to reduce the strain on hydropower systems and the potential for black/brownouts. City energy codes need vigorous enforcement while encouraging more LEED certifications. Government buildings should act as an example by improving the energy efficiency of their buildings and purchasing renewables (wind, solar, etc) for the energy used.

Identify back-up communication sources. City and county emergency service providers, in collaboration with communications companies, should identify alterative sources of communication during times of emergency events

Update land use codes to prevent flood and fire damage to infrastructure. Planning strategies should consider potential impacts to communities by incorporating future flood, fire and population projections. Participants recommended that the Department of Land Conservation and Development as well as local and regional governments consider: increasing the density of cities prior to expanding the urban growth boundary to prevent further risk if the UGB is expanded to fire- or floodprone areas; employing disincentives for development in flood or fire prone areas; requiring individuals to reduce risk (such as flow-through design, or fire-suppression sprinkler systems) when development is allowed in flood or fire prone areas; and revising development policies to minimize impacts in sensitive areas, especially along floodplains and riparian areas.

Promote compact housing and protect the urban growth boundary. Limiting future growth and promoting compact housing reduces the strain on emergency services, assists in neighborhood cohesion during major events, and reduces dependency on transportation infrastructure. However, higher density living may require a cultural shift, as many western communities are not accustomed to compact living: some regions of the Willamette have faced pushback from residents regarding infill development.

Built Systems			
Recommendation	**Who**	**Co-Benefits**	**Mitigation Benefits**
Update and improve water and sewer infrastructure	Local government, utility providers	Prevents contamination of drinking water and ecosystems	Yes, if improves efficiency, lowers energy use
Identify critical infrastructure in floodplains and relocation needs.	State and local jurisdictions	Reduces risk to human health	
Improve and safeguard transportation infrastructure	Amtrak, ODOT, Portland International Airport, and the Federal Railroad Administration	Improves reliability of food delivery and economic stability	
Improve energy efficiency of buildings	Business owners, government, community organizations	Reduces utility costs, improves air and water quality, improves worker productivity, provides urban habitat	Yes
Identify back-up communication sources	Government (local and state), communication service providers	Improves reliability of emergency services during events	
Update land use codes to prevent damage to infrastructure	Department of Land Conservation and Development, local jurisdictions	Protects natural systems, improves water quality	
Promote compact housing and protect the urban growth boundary	Local jurisdictions	Strengthens local businesses, protects agricultural and timber land, reduces strain on emergency services, protects ecosystems, may reduce urban habitat	Yes

Likely Impacts to Economic Systems

Vulnerability of small businesses: Compared to larger businesses, small businesses may face greater challenges in recovering from climate change events such as a flood or fire. Their limited supply and demand chain may be at risk from interruptions to transportation, resources, and infrastructure.

Changes in food prices and agricultural crops. Agriculture and food processing will likely incur higher expenses for managing drought, extreme precipitation events, higher temperatures, and increases in disease outbreaks. Food being imported from other regions may be sold at higher prices due to increases in management costs, while imported food may be at risk to transportation disruptions or disease. Locally grown food may be impacted by an increase in the frequency of extreme weather events, such as heat, flood, or cold. On the other hand, opportunities may emerge in the Willamette for crops tolerant of warmer climates.

Changes in grape variety and yield. Climate change will impact the region's wine production because of narrow varietal bands of temperature tolerance, and climate being one of the most significant factors in determining quality and style of wine. An increase in temperature may alter the types of wine grapes grown, quality of grapes, and profitability of the region.

Shifts in timber species and productivity. Climate change may alter the species of commercially viable trees that are able to grow in the region. Trees such as coastal and Douglas firs yield larger profits than other species. Projections show that climate change will favor the warmer species such as ponderosa pine and hardwoods.

Shifts in tourism and recreation. Climate change may impact recreational activities including wine tours, hot air ballooning, river rafting, camping, agri-tourism, among others. Reduced snowpack will impact the skiing industry; however, longer summers may allow for more summer recreational activities such as camping, water sports, and fishing (likely for different fish species).

Interruptions to freight transportation. Freight transportation is vulnerable to flooding and landslides: some roads are in floodplains and at the same time are old and deteriorating. Rail is also essential to the movement of freight. Rail lines in the Lower Willamette are vulnerable to icing during winter storms, high temperatures, and flooding; disruptions in service due to these weather events lead to economic losses.

Increasing insurance rates. Insurance rates may rise as risks for floods and wildfires increase. Homes and businesses located in flood and fire prone areas may be impacted.

Impacts to health care:

Access: Current healthcare infrastructure in the Lower is robust, but climate change may reduce access and availability to healthcare. Emergency management services may be stressed with increased populations, reducing the ability of the healthcare system to efficiently respond.

Insurance: As extreme events exacerbate the spread of disease, diminish air quality, and reduce the health resiliency of the population, health insurers and public programs such as Medicare and Medicaid will likely see increases in claims.

Cost: A number of risks associated with climate change are expected to increase the cost of healthcare in Oregon, including costs related to new diseases, increased respiratory ailments, increased incidence of water- and food-borne diseases, and decline in nutrition and sanitation.

Unintended consequences: While healthcare costs accumulate under changing climate conditions, secondary costs will also affect the Lower Willamette including reductions in workforce productivity, particularly for vulnerable individuals and outdoor workers.

Recommendations for Resilient Economic Systems

Diversify and promote risk management. Economic diversification (functionality, size and scale) will support the economy to recover more easily from a disaster. Regional economic development agencies, Chambers of Commerce, or State economic development agencies can promote climate risk assessment, monitoring, and preparation for all businesses to improve their resilience.

Research and invest in climate tolerant crops. Growers may want to consider diversifying the crops they are growing, reassessing planting and harvesting seasons, and changing the scale of their harvesting. OSU–Extension and the State Department of Agriculture should invest in research on crops tolerant to higher temperatures and

drought. Growers and producers of food, nursery, grass seed, and wine grapes that are considering new crops should take into account climate change projections for warmer temperatures.

Shift industrial forest management practices. Timber practices should focus on planting a diverse mix of species, increasing buffers to prevent disease and fire, and limiting clearcuts to prevent erosion and landsides.

Plan for shifts in transportation of freight. City, state and regional planners should identify roads most vulnerable to landslides, flooding, and fire, and have a preparedness plan available of the safest and most cost-effective alternate routes for freight travel.

Meet insurance requirements. Insurance prices will continue to rise as risks increase due to climate change events such floods and fires. Laws and building codes must be modified in order to discourage building on floodplains or in close proximity to the wildland-urban interface.

Prepare health care

Education: Increasing opportunities and incentives for individuals to join the primary care field will help prepare for an influx in population and associated health needs. Because the Lower Willamette already has a number of professional health institutions, there is an opportunity to build on existing institutions and programs. In particular, building the preventative care workforce now can reduce the economic strain on health care and insurance in the long run.

Comparative risk assessments and health impact assessments: Insurers, governments and local health providers should incorporate climate change preparedness into their long-term planning and needs assessments.

Preventative healthcare: Policymakers, educational institutions, and health providers should emphasize preventative healthcare strategies to manage future healthcare cost and access.

Economic Systems			
Recommendation	**Who**	**Co-Benefits**	**Mitigation Benefits**
Diversify and promote risk management	Regional economic development agencies, Chambers of Commerce, State economic development agencies, individual businesses	Strengthens local economy, increase job opportunities	
Research and invest in climate tolerant crops	OSU–Extension and the State Department of Agriculture, growers	Promotes diversity of species, may reduce impact on soils and water needs, maintains nutritional value of food	Possibly, if less water and fertilizer needed
Shift industrial forest management practices	ODF, Weyerhaeuser and other timber companies	May reduce development in some areas, may promote diversity of tree species, improve air quality	Yes
Plan for shifts in transportation of freight	City, state and regional planners, ODOT	Reduced impact on infrastructure, maintains local economy during events, ensures food and supply delivery	
Meet insurance requirements	Emergency managers, local jurisdictions, insurance agencies, homeowners, businesses	Reduce impact on floodplains	
Prepare health care for change	Insurance agencies, cities, counties, educational institutions, health providers, individuals		Possibly through prevention strategies.

Likely Impacts to Human Systems

Amplified risks to vulnerable populations. Projected increases in storm intensity, flooding, and wildfire, may render residents with limited access to healthcare, transportation, and property insurance more vulnerable to disasters. Severe summer heat and changes in precipitation may leave those without access to air conditioning, limited food and water availability, and with inadequate access to healthcare vulnerable to disease.

Overwhelmed emergency response systems capacity. Projected increases in the frequency and intensity of extreme weather events, outbreaks of vector-borne disease, and extreme heat is likely to place greater stress on existing emergency response systems.

Inadequate individual response capacity. Individual and community emergency response capacity may not be adequate as emergency events increase in number and intensity. According to workshop participants, many residents in the region are not aware of emergency protocols or the availability of emergency resources.

Food and water scarcity: The projected frequency and severity of emergency events along with expected changes in global food supply leave the Lower Willamette vulnerable to food and water scarcity. Emergency food systems, particularly in rural areas, are already widely utilized under non-emergency situations, and the need for emergency food is increasing.

Stressed social services: The absence of care and support within communities may strain local and state social services as populations deal with the effects of climate change. Large and growing elderly and low-income populations in the region will further stress social services.

Public safety concerns: Hotter summers and increasingly extreme events may amplify local crime rates.

Outdated education: A lack of quick adaptability in education systems suggests that curricula may not be responsive to new climate change concepts and job requirements.

Public health concerns:

Reduced air quality: Increased air pollutants (mold, ozone, pollen, haze, etc), in combination with the higher likelihood of forest fires, threaten the respiratory health of the population.

Reduced water quality: Projections for increased flooding and an increased number of extreme heat events threaten drinking water quality.

Increased mental health concerns: The stress of extreme climate events on a population can exacerbate already stressful lifestyles, especially with displacement and/or the loss of a home.

Disease outbreaks:

- Vector Borne Disease: There are mixed projections about the spread of disease under climate change. Some studies and local experts suggest that areas that have been able to control diseases in the past will have a high likelihood of continuing to do so. Some local experts expect an increased threat of insects that carry disease in the area, such as mosquito-borne diseases like malaria, filariasis, dengue fever, yellow fever, and West Nile virus.
- Water Borne Disease: Disease outbreaks can occur when bacteria, viruses, and protozoa contaminate water. During the summer months, outbreaks of toxic blue-green algae can result in public health threats.
- Food Borne Disease: With both warmer temperatures and increased precipitation, food borne disease outbreaks may become more common. While the Lower Willamette may be impacted less by climate change compared to other regions of the United States, preparedness strategies are important to determine the potential for outbreaks as well as prepare for potential diseases that may arrive in imported food.

Increased heat events: Several consecutive days of temperatures of 90° F or higher, and unusually warm nighttime lows in the 60s and low 70s, can lead to heat illness for populations without access to air conditioning, well insulated homes, or cooling centers.

Reduced access to healthcare: Climate refugees are expected to increase in the Pacific Northwest including the Lower Willamette. With increased population levels, resources and trained healthcare providers will be stretched, as will hospital space, pharmaceuticals, and medicine.

Cumulative impacts: While emergency responders and healthcare providers are able to tend to the needs of the community currently, there is significant concern among some local experts that the increased need for healthcare under climate change conditions will stress public health systems beyond their capabilities.

Recommendations for Resilient Human Systems

Identify and build resiliency of vulnerable populations. State and local health departments and social service providers should assess the scope and needs of vulnerable populations. Mechanisms to promote self-resiliency, resource conservation, and efficiency measures may reduce the vulnerability of low-income, elderly, and geographically marginalized (i.e. rural) populations in the region.

Strengthen local social networks: To alleviate potential stress on the region's social services, local governments and NGO's should work to strengthen local social networks through events and organizations to encourage community members to meet their neighbors and fortify networks of support.

Improve community outreach systems: Public, private and non-profit outreach should ensure the delivery of diverse, culturally sensitive, and multi-lingual resources to the public to convey the public health and economic benefits of adaptation.

Increase capacity of emergency and social service response systems. Emergency management plans and resources should be evaluated for climate resiliency and updated to address the specific risks of climate change by local and regional governments as well as nongovernmental organizations. Updated plans should incorporate coordinated, regional management and involve contiguous jurisdictions to craft response strategies, recognizing that disasters do not adhere to jurisdictional boundaries.

Increase individual response capacity. Local governments and community-based organizations can work with individuals and social networks to build the preparedness capacity of individuals, therefore reducing the strain on emergency services.

Enhance local food security. To prevent food scarcity during emergency events and in the face of changing global food production, the Lower Willamette should develop more resilient local food systems. Localities, working with nongovernmental organizations, can adopt measures to increase local food production for all seasons, opportunities for food preservation, reduce dependence on food imports, and decentralize food sources.

Increase residential water conservation: To minimize water scarcity during emergencies, localities should adopt policies to promote water conservation. Education and incentive programs should be expanded to encourage water saving practices including leak repairs and the installation of high efficiency fixtures.

Decentralize home and community water storage. Localities should ensure access to adequate systems to disseminate emergency water storage information. Localities should reevaluate current regulation on greywater and rain catchment sources (see below). Information and installation assistance for on-site residential rainwater collection and storage systems should be provided by local water utilities and/or building departments. The Oregon Water Resources Department should consider these recommendations with state funding to local jurisdictions for implementation. However, caution should be taken as there are a number of public health and equity issues associated with decentralized systems.

Revise job codes and education certificates system: Oregon's system for updating job codes and certificates should be revised to more quickly adapt to address changing technologies and the skills required to meet the demands for green jobs. New jobs in installation and operation of distributed renewable technologies, energy and water efficiency installations, flood and fire management, and environmental restoration should be incorporated into state job codes and linked to public and private educational curricula, including high schools, community colleges and universities.

Build ecological and climate literacy into the education system: State and local education agencies should develop and incorporate standards for ecological and climate literacy, building from the standards developed by NOAA.

Preparing public health:

Action-oriented education: Local and state officials should educate the public about health impacts resulting from climate change to reduce fear and panic, while building self-sufficiency to reduce public dependence on health services.

Protect water quality: Local and state agencies should focus on water quality protection against events associated with climate change including more stringent pesticide standards will improve water quality and reduce chemical runoff, increased monitoring of water systems particularly at peak weather events, and a reassessment of water systems to ensure they can handle increased amounts of water to reduce the threat of contamination.

Expand mental health services: Local and state health agencies should incorporate mental health trauma needs into emergency response systems so that service providers recognize and treat symptoms early before they are exacerbated.

Air quality notification: Local and state agencies should ensure that communities, particularly vulnerable populations, are effectively notified of poor air quality events.

Disease outbreak monitoring: Local governments must prepare for increased vector-borne, water-borne and food-borne disease by increasing monitoring, testing and public alert systems.

Heat-wave alert systems and education for vulnerable populations: Establishing warning and alert systems within communities will aid in spreading knowledge of extreme heat days.

Promote preventative health: Educating individuals on preventative health will create a population more resilient to disease. Encouraging regular doctor visits, exercise, and healthy living is important for strengthening the health of the community. Prevention will reduce risks to vulnerable populations and lower the economic and capacity strain on the public health sector.

Human Systems			
Recommendation	**Who**	**Co-Benefits**	**Mitigation Benefits**
Identify and build resiliency of vulnerable populations	State and local health departments, community organizations, social service providers	Reduced energy demand, less building in flood prone areas	Yes
Strengthen local social networks	Cities, neighborhood associations, churches, community-based organizations, etc.	Decrease long term disaster recovery costs	
Improve community outreach systems	Local jurisdictions, community organizations		
Increase capacity of emergency and social service response systems	Local jurisdictions, Red Cross, Salvation Army, schools, private companies (e.g. grocery and hardware stores) and faith-based organizations	Reduce long term disaster costs, reduce flood damage to infrastructure	
Increase individual response capacity	Local jurisdictions, emergency and social service providers	Reduce strain on emergency services	
Enhance local food security	Local jurisdictions, famers markets and local food banks	Builds local economy, may provide habitat for pollinators	Possibly, if reduce food transportation emissions
Increase residential water conservation	Individuals, local jurisdictions, businesses, farmers	Protect natural water bodies, reduce impact on water infrastructure	Yes
Decentralize home and community water storage	Local jurisdiction, Oregon Water Resources Department, individuals, businesses, water providers, public health	Decrease strain on water infrastructure, may have health conflicts	Possibly, if reduce energy use for pumping and treating water
Revise job codes and education certificate system	State, high schools, community colleges and universities, businesses		
Build ecological and climate literacy into the education system	State and federal education departments	Builds support for resiliency initiatives	
Prepare public health	Public health providers, local jurisdictions, neighborhood associations, individuals	Increased activity (reduced obesity, chronic diseases), use of public transportation	Yes, for some preventative measures

Likely Impacts to Cultural Systems

Loss of traditional resources: Natural resources, namely salmon, represent the cultural, social, nutritional and economic cornerstone of native communities in the Pacific Northwest. Salmon populations are especially affected by changes in temperature, precipitation, and aquatic environments.

Deterioration or destruction of historical architecture: Historical structures, buildings, and districts "worthy of cultural preservation" attract significant tourism revenue, provide opportunities for community education, and preserve regional heritage. Fragile building material and structures without foundations and structural support are threatened by increasing extreme weather events.

Conflicts with climate refugees: The region may experience an influx of refugees displaced by global climate change impacts. This could exacerbate cultural tension stemming from competing values and identities, scarce water and other resources, which may further strain social services. Currently, no research exists on likely population growth in the Willamette associated with climate change. Climate refugees with the financial means to immigrate to the area may also have the means and skills to contribute positively to the Willamette Valley economy.

Environmental justice concerns: While low-income, rural, and native populations may contribute less to anthropocentric climate change, they are the least likely to have the resources to prepare for impacts. Greater awareness of environmental justice issues may become a prevailing source of cultural tension in the Lower Willamette as these impacts manifest more severely.

Recommendations for Resilient Cultural Systems

Protect key resources for tribal communities: Native communities may need to consider diversification of crops and livestock as well as changes in timing of harvest, hunting and gathering. This will support preparation for changes in temperature and precipitation patterns as well as loss of snowpack. Outreach on climate change impacts to tribal communities, particularly to livelihood resources and public health, can improve self-sufficiency and reduce strain on social and emergency services.

Encourage resource conservation and energy independence in tribal areas. Measures should be taken by tribal communities to encourage energy conservation in order to reduce dependency on unreliable hydropower systems. Technologies and programs to better inform the public about their consumption habits through energy monitors, water heater timers, and separate utility bills, may reduce the strain on resources. Cooperatives and resource sharing schemes may foster community connectivity while easing competition for resources. Policies involving scarce resources should encourage conservation movements with incentives, rather than restrictions and penalties. Policymakers can utilize these tools to take advantage of changing social values, while curbing governability issues and cultural tension.

Prepare for increased human population. Water, land use, and transportation planners should consider shifts in population and demographics. Population growth research and modeling by universities as well as state and local agencies should be expanded to consider potential climate change impacts. Planning commissions may need to re-examine urban growth boundaries and lot-size requirements in accord with increased population projections (see section above on land use planning).

Proactively address current cultural tensions and prepare for new cultures: Communities should address and mediate current cultural tension before climate change-related stressors and demographic changes exacerbate problems. In addition, equity and environmental justice issues must be addressed now with outreach and empowerment programs. Outreach programs should be tailored to marginalized and vulnerable populations, in multiple languages and through multiple streams of communication.

Cultural Systems			
Recommendation	**Who**	**Co-Benefits**	**Mitigation Benefits**
Protect key resources for tribal communities	Tribal communities, ODF, ODFW, USFS, USFWS	Improve nutritional health	Yes, if sequestration through planting or restoration
Encourage resource conservation and energy independence in tribal areas	Tribal communities, DOE, renewable energy providers	Reduce strain on utility infrastructure, improve air quality	Yes
Prepare for increased human population	Planners, universities	Reduces strain on infrastructure, builds local economy, reduces development in natural areas, reduces impact on health	Yes, if increase public/alternative transportation and density/walkability in planning
Proactively address current cultural tensions and prepare for new cultures	Local jurisdictions, community organizations		

MPAC Worksheet

Agenda Item Title: Making the Case for Climate Action: Leadership and innovation will be required to meet state climate goals

Presenter: Angus Duncan, Oregon Global Warming Commission Chair

Contact for this worksheet/presentation: Kim Ellis (797-1617)

Council Liaison Sponsor: n/a

Purpose of this item (check no more than 2):

Information	__X__
Update	_____
Discussion	__X__
Action	_____

MPAC Target Meeting Date: _____February 23, 2011_____

Amount of time needed for:

Presentation	_5__
Discussion	_15__

Purpose/Objective:
The purpose of this item is to prepare MPAC for an April 1 climate change retreat with the Joint Policy Advisory Committee on Transportation (JPACT) and other elected officials and business and community leaders.

Angus Duncan will present a recently released report describing recommended actions for all sectors, including energy, industry, materials, agriculture, forestry and land use and transportation.

Action Requested/Outcome:
- Learn about the Oregon Global Warming Commission 2020 Roadmap land use and transportation recommendations.
- Identify opportunities and challenges for our region's climate smart communities scenarios effort.

Background and context:
In 2010 the Oregon Global Warming Commission began a "Roadmap to 2020" Project that will offer recommendations for how Oregon can meet its 2020 greenhouse gas reduction goal ("10% below 1990 levels"), get a head start toward its 2050 goal ("at least 75% below 1990 levels"), and build a prosperous, clean-energy-based 21st century state economy.

The initial work of describing scenarios, sifting through possible recommendations and evaluating them, was done by six technical subcommittees drawn from business, academia, non-governmental organizations, local government and state agency staff. Subcommittee draft recommendations were presented to the Commission on October 8, 2010.

On October 28, the Commission unanimously adopted the Interim "Roadmap to 2020" Report. Commission recommendations are addressed to the next Governor, the Legislature, our Congressional delegation, local governments, businesses and Oregonians generally. The Commission expects to invite

broad public review of all recommendations in 2011, and take comments into consideration in a 2011 revision of the Roadmap.

What has changed since MPAC last considered this issue/item?
This is a new informational item.

What packet material do you plan to include?
- Excerpt from the Interim Roadmap to 2020 Report as adopted by the Oregon Global Warming Commission on October 28, 2010.
- Presentation on Roadmap 2020 recommendations

For more background information and to download the full report go to: http://www.keeporegoncool.org/

What is the schedule for future consideration of item?
This item is not currently scheduled for future discussion or consideration.

The Oregon Global Warming Commission

Interim Roadmap to 2020

Roadmap Elements as Adopted by the Oregon Global Warming Commission on October 28, 2010

The Interim Roadmap As Adopted Will Be Incorporated into the Commission's 2011 *Report to the Legislature*.

October 29, 2010

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The "Roadmap to 2020" Process

In 2010 the Oregon Global Warming Commission is undertaking a "*Roadmap to 2020*" Project that will offer recommendations for how Oregon can meet its 2020 greenhouse gas reduction goal ("10% below 1990 levels"), get a head start toward its 2050 goal ("at least 75% below 1990 levels"), and build a prosperous, clean-energy-based 21st century state economy.

Commission recommendations will be addressed to the next Governor, the Legislature, our Congressional delegation, local governments, businesses and Oregonians generally.

The initial work of describing scenarios, sifting through possible recommendations and evaluating them, has been done by six technical committees drawn from business, academia, non-governmental organizations, local government and state agency staff.

Technical committee draft recommendations were presented to the Commission on October 8. The Commission adopted the roadmap as an interim document on October 28. This is the compilation of all of the Roadmap elements adopted by the Commission at that meeting, including the resolution adopting the Interim Roadmap (see next page).

These Interim Roadmap elements will be incorporated into the Commission's upcoming Report to the Legislature due in early 2011.

The Commission will invite broad public review of all recommendations in early 2011 through a public process, and take comments into consideration in a 2011 revision of the Roadmap.

By the end of 2011 the Commission is planning to finalize all aspects of the Roadmap.

Please visit the Commission's web site at http://www.keeporegoncool.org for more information on the Roadmap process and the Commission.

Resolution Adopting the Interim Roadmap

Resolution of the Oregon Global Warming Commission

Resolution Number: 2010-3-014
Origin: Angus Duncan, Commission Chair

Adoption of an Interim "Roadmap to 2020" Report

Whereas, the Oregon Global Warming Commission adopted Resolution # 2010-1-013 earlier this year which called for the development of a "Roadmap to 2020" to recommend actions and strategies that may be used by the legislative and executive branches of succeeding State governments, in partnership with Oregon communities, institutions, businesses and citizens, to achieve the State's 2020 emissions reduction goal, and,

Whereas six technical committees, composed of technical experts and stakeholders, were convened in the summer of 2010 to develop draft Roadmap recommendations for Commission consideration, and,

Whereas each of the technical committees (energy/utilities, industrial, forestry, agricultural, materials/waste management, transportation/land use) submitted a report with a list of potential actions to meet the 2020 reduction goals and a long-term vision of how the sector might operate if it were to be in a position to meet the 2050 reduction goal, and,

Whereas each technical committee specifically identified a small number of key recommended actions to be implemented to help meet the state's 2020 reduction goal, and,

Whereas additional "integrating actions" which are not sector-specific but have implications for most recommendations, emerged in the committee process and have been brought forward at this meeting of the Oregon Global Warming Commission for inclusion into the "Roadmap to 2020", and,

Whereas the Oregon Global Warming Commission has discussed and, where appropriate, modified the "Roadmap to 2020" report elements at this meeting of the Commission.

Now therefore be it resolved:

The Oregon Global Warming Commission adopts the "Roadmap to 2020" report elements as modified at this meeting of the Commission to form an *Interim Roadmap to 2020* report. The report is labeled "interim" to acknowledge the desire of the Commission to further refine the "Roadmap to 2020" over time by, (1) conducting a public comment process in early 2011 on the Roadmap elements, (2) improving the quantitative basis for the Roadmap with more in-depth analysis, and (3) revisiting the balance of actions among sectors as additional quantitative analysis is done and with the benefit of viewing the Roadmap holistically, in contrast to the sector-specific manner in which it was created. It is the desire of the Commission to revise the Roadmap and create a new version, with the interim label removed, by the end of 2011.

Integrating Commission "Roadmap to 2020" Recommendations

(not sector-specific)

I. Greenhouse Gas Reduction Goal for 2030

The Oregon Global Warming Commission shall recommend to the Legislature a 2030 Oregon GHG reduction goal; thereafter and from time to time, but not less often than every ten years, the Commission shall revisit and recommend as needed ten- and twenty-year emissions reduction goals, and monitor progress toward their achievement.

The Oregon Legislature adopted greenhouse gas reduction goals for 2010, 2020 and 2050, following the recommendation of the Governor's Advisory Group on Global Warming in 2004. This gave the State near-term, intermediate and ending targets. With 2010 behind us, the 2020 goal becomes the near-term goal and the need for a new intermediate goal arises. This need is reinforced by the need to coordinate with other planning entities and initiatives which are already looking past 2020 (e.g., ODOT setting a State transportation GHG goal for 2035; NW Planning Council 20 year power plans; utility Integrated Resource Plans, etc.).

II. Greenhouse Gas Inventories

The Oregon Global Warming Commission, in collaboration with State agencies, local governments and others, should develop greenhouse gas accounting methodologies and results (a) by source, (b) by use/user, (c) by cost and timing of reduction choices, and (d) by county or other state geopolitical division. The Commission should use this accounting framework to allocate and sequence carbon reduction targets by cost, sector and geography, to enable Oregonians to better understand how emissions reduction goals can best be achieved, and what may be their share of the overall responsibility.

Oregon's current greenhouse gas inventory approach is largely "top-down," calculating emissions by sector, often from fuel use data or estimations. Electric utility emissions are an exception, relying on reporting from facilities generating electricity allocated to Oregon loads ("consumption-based"). A greenhouse gas emissions reporting system is being established by DEQ at legislative direction; and DEQ staff is working with stakeholders on modeling for a consistently consumption-based model. Finally, there is a need for data that can be disaggregated (a) geographically, to allow local governments to understand their emissions profiles by sector so they can design responses, and (b) by cost-effectiveness and timing, so Oregon can describe and pursue a least cost path to its emissions goals. The Commission should be interacting with all parties to ensure that data are consistent and usable by policymakers and managers.

III. Advocating for a national carbon cap or other equally effective national carbon reduction measure.

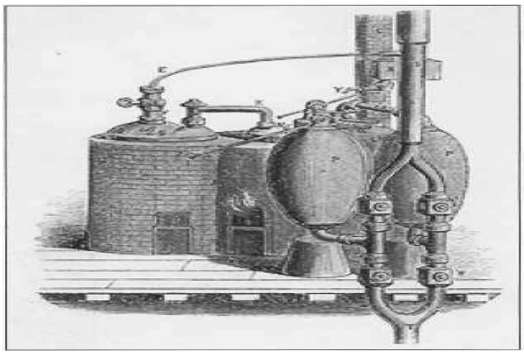
The Oregon Global Warming Commission reaffirms its support and advocacy for a national carbon cap or other means to regulate and reduce greenhouse gas emissions economy-wide, as previously asserted in Resolution 2009-1-009, and will communicate with the President and with Oregon's Congressional Delegation to this effect.

The Commission is already on the record in support of this kind of national action (". . . the Commission reaffirms its support for a fair and effective national solution to achieving greenhouse gas reduction goals comparable to Oregon's, one that employs marketplace tools such as a cap and trade mechanism, as ultimately preferable to regional or state-based initiatives."). The issue arose in several of the Roadmap Technical Subcommittees, but as it transcended the writ of any one subcommittee, members asked that it be considered by the Commission as a whole. As intra-state initiatives move ahead, they are handicapped by the absence of national policy that sets clear direction on greenhouse gas reduction goals and timing, that encourages private sector initiatives and innovations, and that protects the economic competitiveness of states, communities and businesses that are already reducing emissions.

IV. Energy and Infrastructure Research Funding Priority

The Oregon Global Warming Commission and the State of Oregon should advocate with Oregon's Congressional Delegation and the President to assign the highest priority for federal research funding to energy and infrastructure opportunities that hold greatest promise for delivering near-term greenhouse gas reductions.

While much can be done to reduce emissions with existing technologies and applications, it is clear that achieving reductions comparable to Oregon's "greater than 75% below 1990 levels" will require significant technological advances in fuels, power plants, vehicles, appliances, lighting and other efficiency and fuel-switching options. Challenges such as carbon sequestration and assessing climate modification options remain beyond our reach as potentially needed tools. Yet federal funding for energy research is barely $5 billion annually (up from $3B in the last Administration, down from an inflation-adjusted $7.7B in 1979; and far below the budgets for health research [$30B] and defense [$80B]). Half or less of that budget goes to renewables and efficiency. Meanwhile, major reinvestment in transportation, power transmission, water and other infrastructure is needed to leverage technologies into widespread use. The Commission would be asserting that there should be no higher priority assigned to government research dollars than in finding ways to reduce emissions and preparing for the effects of climate change that cannot be avoided, and leveraging private sector investments toward the same outcomes.

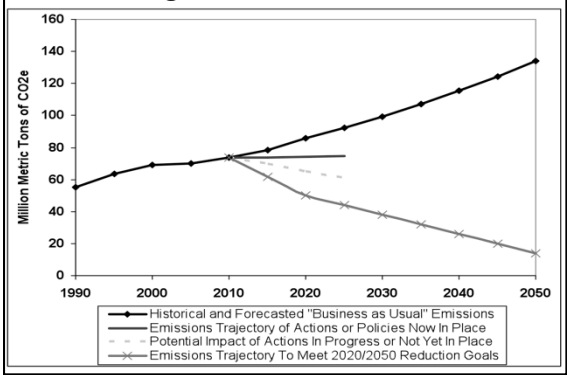


Savery Steam Engine – 1698

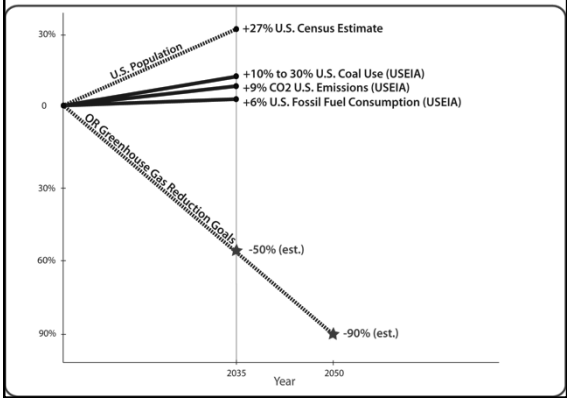
HB 3543 – 2007 Legislature Sets Goals

1. By 2010 Oregon shall have arrested the increase in greenhouse gas emissions and shall begin real reductions.
2. By 2020, Oregon's greenhouse gas emissions shall not exceed a level 10% below 1990 levels.
3. By 2050, Oregon's greenhouse gas emissions shall not exceed a level at least 75% below 1990 levels.

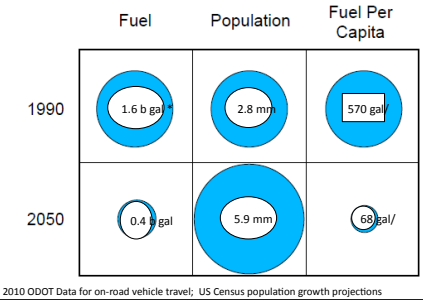
Oregon GHG Goals/Trends



Oregon / U.S. Trends 2005-2035

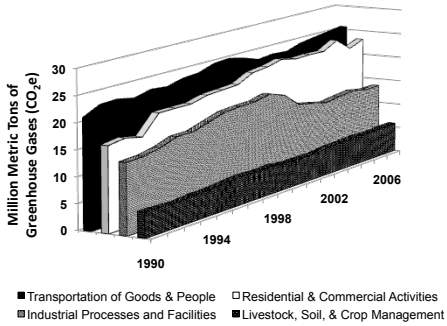


What does a 75% reduction in GHG emissions mean in terms of (vehicle) fossil fuel consumption?

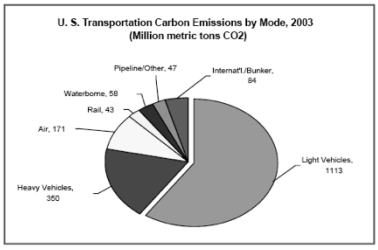


* 2010 ODOT Data for on-road vehicle travel; US Census population growth projections

Greenhouse Gases by Sector over Time



Highway Vehicles Account for 82% of Transportation CO2 Emissions – and 23% of all U.S. CO2 **



37% of all OR GHG

AASHTO FTA

Roadmap to 2020 Recommendations by Sector

- Commission "Integrating" Recommendations
- Energy/Utilities
- Industrial Emissions
- Materials/Waste Management
- Agriculture
- Forestry
- Transportation/Land Use

Roadmap to 2020 "themes"

- Embed carbon in the planning process
- Price carbon
- Leverage the inherent efficiencies of cities
- Leverage the inherent efficiencies of buildings
- Shift transportation loads to gas and electricity
- Ramp down coal; ramp up renewables + efficiency; insert intelligent technology

Roadmap to 2020 – Themes

Embed carbon in the planning process

- Carbon "least cost planning" *across* emissions sectors (at least: utilities + transportation and land use)
- Carbon planning within sectors
  - ODOT/MPO planning (HB 2001, SB 1059)
  - "one utility" Integrated Resource Planning
- Carbon in Comprehensive Land Use Plans
- "Consumption-based" GHG Inventory

Roadmap to 2020 – Themes

Price carbon

- Transportation "utility" revenue model
  - VMT charge + Vehicle Efficiency registration fee to reflect carbon budget consumption
  - Congestion pricing
  - Parking pricing
- Key property tax to "bldg efficiency/resident"
- Carbon tax (or carbon cap)

Roadmap to 2020 – Themes

Shift Transportation Fuels

- Fleet turnover to electric and gas at double the national rate
- Deploy public, private recharging infrastructure
- Integrate plug-in EV's with Smart Grid to add vehicle flexibility, grid energy storage

Roadmap to 2020 – Themes

Leverage Efficiency of Cities

- Maintain present UGB's for largest OR cities
- "complete community/20 minute neighborhood" urban designs
- Grow transportation mode choices
- Carbon-efficient infrastructure (e.g., congestion relief; freight node siting/interconnections)
- Prioritize roadway uses (e.g., HOV/freight/transit)
- Demand management

Roadmap to 2020 – Themes

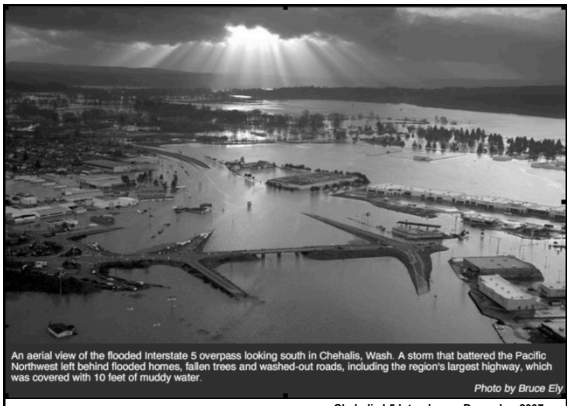
Leverage Efficiency of Buildings

- High performance "near-net-zero-emissions" designs for new buildings
- Retrofit building energy code applied to existing buildings at point-of-purchase
- Smart Grids that integrate Smart Buildings/ Systems/Appliances/Vehicles
- Fuel-blind space/water heating (gas v. electric)
- Commercial building HVAC scheduled re-commissioning

Roadmap to 2020 – Themes

Ramp Down Coal

- "Substantial reductions" in coal generation by 2020, and continuous reductions thereafter; replace with efficiency + renewables + gas
- Develop transmission and variable resource (wind, solar) integrating capabilities
- Integrate supply side generation with demand-side efficiency and load management resources



An aerial view of the flooded Interstate 5 overpass looking south in Chehalis, Wash. A storm that battered the Pacific Northwest left behind flooded homes, fallen trees and washed-out roads, including the region's largest highway, which was covered with 10 feet of muddy water.

Photo by Bruce Ely

Chehalis I-5 Interchange December 2007

Oregon Adapting to Changing Climate

Very Likely	• Hotter; more extreme heat events • Reduced snowpack, shifting precipitation, runoff, water availability • Wildfire • Increased ocean temperature, acidity
Likely	• Increased coastal erosion • Redistribution of plant/animal species/habitat; wildlife at risk • Increased disease, invasive species
More Likely than not	• Wetland loss • Increased flooding frequency/magnitude • Increased landslide frequency

KeepOregonCool

Oregon Global Warming Commission

www.KeepOregonCool.org

MPAC Worksheet

Agenda Item Title: Setting greenhouse gas emissions reduction targets for cars and light trucks in the Portland region

Presenter: Richard Whitman, DLCD Director

Contact for this worksheet/presentation: Kim Ellis (797-1617)

Council Liaison Sponsor: n/a

Purpose of this item (check no more than 2):

Information	__X__
Update	_____
Discussion	__X__
Action	_____

MPAC Target Meeting Date: _____February 23, 2011_____

Amount of time needed for:

Presentation	_10__
Discussion	_20__

Purpose/Objective:
The purpose of this item is to prepare MPAC for an April 1 climate change retreat with the Joint Policy Advisory Committee on Transportation (JPACT) and other elected officials and business and community leaders.

Richard Whitman, the Director of Department of Land Conservation and Development (DLCD), will brief MPAC on the timeline and process for establishing metropolitan-level greenhouse gas (GHG) emissions reduction targets for light vehicle travel in Oregon's metropolitan areas, including the Portland region. Similar meetings are scheduled in the Oregon's five other metropolitan areas - Salem/Keizer, Medford, Bend, Eugene/Springfield and Corvallis. This is an opportunity for MPAC members to ask questions and share concerns on the process.

Action Requested/Outcome:
- Learn about the research and process used to establish GHG emissions reduction targets for light vehicle travel in Oregon's metropolitan areas, including the Portland region.
- Share concerns and issues that should be addressed through the state rulemaking process.

Background and context:
Senate Bill 1059 (2010) and House Bill 2001 (2009) direct Oregon's Land Conservation and Development Commission (LCDC) to adopt rules by June 1, 2011 that set targets for metropolitan areas to plan for reductions in greenhouse gas (GHG) emissions from light vehicles (cars and light trucks).

The draft Metropolitan Greenhouse Gas Reduction Targets rule (with Metro region targets) will be released on April 1, 2011. LCDC will hold a public hearing on April 21, and is expected to adopt the rule and GHG emissions reduction targets on May 19, 2011, following a second public hearing.

Both bills anticipate that local governments in metropolitan areas will engage in land use and transportation scenario planning to evaluate and select a preferred scenario for achieving the adopted

targets. HB 2001, which applies primarily to the Portland Metropolitan area, requires development and adoption of scenario plans. SB 1059, which applies to the state's other five metropolitan areas (Salem-Keizer, Eugene-Springfield, Rogue Valley, Bend and Corvallis), anticipates but does not require preparation of scenario plans at this time.

In addition to target rulemaking by LCDC, SB 1059 directs DLCD and the Oregon Department of Transportation (ODOT) to work together with local governments in metropolitan areas to produce several other products to support scenario planning and GHG reduction efforts. These include:

- Preparation by ODOT, Department of Environmental Quality (DEQ) and the Department of Energy (DOE) of estimates of future vehicle and fuel technology to inform the target setting rulemaking. (This is also required by HB 2001.)
- Development by ODOT and the Oregon Transportation Commission (OTC) of a statewide transportation strategy for GHG reduction. The OTC appointed an advisory committee to assist in this effort. Given the close relationship between the target rulemaking and the state strategy, several people are serving on both advisory committees.
- Preparation by ODOT and DLCD of guidance for scenario planning, including scenario planning guidelines and a toolkit of recommended practices and evaluation techniques for GHG reduction.
- A scenario planning funding report, completed in January 2011, which estimates the amount of funding that local governments in metropolitan areas will need to conduct scenario planning.
- A public education effort to inform the public about the need to reduce GHG emissions and the costs and benefits of reducing GHG emissions.

Metro's Climate Smart Communities Scenarios effort responds to the legislative mandates and will inform and be informed by each of the state-level activities.

What has changed since MPAC last considered this issue/item?
This is a new informational item.

What packet material do you plan to include?
- Oregon Sustainable Transportation Initiative Key Activities and Decision Matrix (dated 12/10/10)
- LCDC Target Rulemaking Advisory Committee membership list
- DLCD memo: Target Rulemaking Issues and Draft Outline for Metropolitan Greenhouse Gas Target Rule (dated January 13, 2011)
- SB 1059 Target Rulemaking Summary of Issues (dated February 3, 2011)

For more information on the LCDC rulemaking effort go to:
http://www.oregon.gov/LCD/target_rulemaking_advisory_committee.shtml

For more information on the Oregon Sustainable Transportation Initiative go to:
http://www.oregon.gov/ODOT/TD/TP/OSTI.shtml

What is the schedule for future consideration of item?
This item is not currently scheduled for future discussion or consideration.

Oregon Sustainable Transportation Initiative (SB 1059)
Key Activities and Decision Matrix
Through January 2012

Deliverable / Activity	Committees				Decision Maker	Estimated Completion
	STS TAC	STS PC	SP TAC	TRAC		
Statewide Transportation Strategy						
• Phase 1: Research and analysis of GHG emissions reduction from light vehicles	Review	Recommend	Brief	Brief		Mar-11
• Phase 2: Research and analysis of GHG emissions reduction from all vehicles. Adopt a Statewide Transportation Strategy to reduce GHG emissions from the entire transportation sector.	Recommend to PC	Recommend to OTC	SP TAC is done by Dec-11	TRAC is done by July-11	OTC	Jan-12
Agency Technical Report						Mar-11
• Estimate 1990 baseline VMT and GHG emissions in each metropolitan area	Review	Brief	Brief	Brief	ODOT ODOE/DEQ	Mar-11
• Estimate average GHG emissions of vehicle fleet in 2035					ODOE/DEQ	
• Estimate vehicle fleet turnover rate through 2035					ODOT	
• Recommend percentage reduction GHG & VMT reductions for 2035 for each metropolitan area needed to meet state 2050 GHG reduction goals					ODOE/DEQ	
Scenario Planning Guidelines						
• Draft Report on Scenario Planning Guidelines	Brief	Brief	Recommend	Brief	DLCD/ODOT	Apr-11
Toolkit						
• Draft GHG Reduction Toolkit (Data Base)	All committee members will be invited to meetings.				ODOT/DLCD	Apr-11
Public Education and Outreach						
• Plan Approach		Brief	Brief	Brief	ODOT/DLCD	2011 →
Target Rulemaking						
• 2035 GHG targets for each metropolitan area	Brief	Brief	Brief	Recommend	LCDC	Jun-11
Financing Report						
• Financing Report	All committees will receive the final report.				ODOT/DLCD	Jan-11

Committees:

- Statewide Transportation Strategy Technical Advisory Committee (STS TAC)
- Statewide Transportation Strategy Policy Committee (STS PC)
- Scenario Planning Technical Advisory Committee (SP TAC)
- Target Rulemaking Advisory Committee (TRAC)

December 10, 2010

Committee Responsibilities:

- Brief: Committee members are informed about the progress of the task.
- Review: Committee assists agency staff in developing the task analysis and is responsible for providing input and comments.
- Recommend: Policy and advisory committees are briefed on the work of the technical committees and staff. The committees will provide direction or comment as needed, and are responsible for making recommendations to the appropriate bodies.

Deliverables:

Statewide Transportation Strategy – The vision will describe the general characteristics of transportation systems, vehicle and fuel technologies and land use patterns likely to be necessary to achieve the reductions in the transportation sector greenhouse gas emissions. The strategy will recommend new policies or changes to existing policies which are necessary to carry out the vision. The 2050 vision is not a deterministic plan rather it plots out a general course of action. It is one step in an iterative process that also includes the monitoring of transportation and land use systems. There are two phases, with the first phase primarily in support of the technical report due to LCDC in March 2011. The second phase, development of the strategy is anticipated to be completed by January 2012.

Agency Technical Report – ODOT, DEQ, and ODOE will prepare estimates for 1990 light vehicle GHG emissions and forecast future 2035 vehicle fleet and fuel characteristics. This report provides the foundation for modeling of different policy scenarios. The report is due March 2011.

Scenario Planning Guidelines – The guidelines will provide a step by step guide for local governments' use in metropolitan area scenario planning. The guidelines will include goals and objectives and an image of how the transportation system and land use patterns would be organized so as to achieve the goal of reducing greenhouse gas emissions from light vehicles. It is anticipated that the first draft of this work will be completed by April 2011 and the final version by December 2011.

Toolkit - The toolkit is a database listing actions and programs local governments can implement to reduce transportation-related greenhouse gas emissions from light vehicles. It is anticipated the first draft of this work will be completed by April 2011 and the final version by March 2012.

Public Education and Outreach – SB 1059 identifies public education as a key component of the state's effort to address climate change. The legislation calls for educating the public about the need to reduce greenhouse gas emissions from motor vehicles with a gross vehicle weight rating of 10,000 pounds or less; and about the costs and benefits of reducing greenhouse gas emissions. Agency staff will develop the framework for a statewide public awareness program and work with local governments in metropolitan planning areas to support local communication and outreach efforts.

Target Rulemaking - LCDC is required to adopt rules setting greenhouse gas emission reduction targets for each of Oregon's metropolitan areas. The targets are to be used to guide land use and transportation scenario planning in metropolitan areas.

Financing Report – SB 1059 directed ODOT and DLCD to prepare a report to the 76th legislative assembly that outlines the cost to local metropolitan planning areas to conduct scenario planning.

Member	Affiliation
Gail Achterman	Oregon Transportation Commission
Terry Beyer	Oregon House of Representatives, District 12
Craig Campbell	AAA of Oregon/Idaho
Mark Capell	Bend City Council
Dan Clem	Salem City Council
Kelly Clifton	Portland State University
Carlotta Collette	Metro Council
Al Densmore	Medford City Council
Angus Duncan	Oregon Global Warming Commission
John Fregonese	Fregonese Associates
Don Greene	LCDC Citizen Involvement Advisory Committee
Tony Hyde	Columbia County Board of Commissioners
Mary Kyle McCurdy	1000 Friends of Oregon
Linda Modrell	Benton County Board of Commissioners
John Oberst	Mayor, City of Monmouth
Andrea Riner	Lane Council of Governments
Martha Schrader	Oregon Senate, District 20
Tom Schwetz	Lane Transit District
John VanLandingham	Land Conservation and Development Commission
Rick Williams	Lloyd Transportation Management Association
Ken Williamson	Environmental Quality Commission
Alan Zelenka	Eugene City Council

Oregon
John A. Kitzhaber, M.D., Governor

Department of Land Conservation and Development
635 Capitol Street NE, Suite 150
Salem, Oregon 97301-2540
Phone: (503) 373-0050
Fax: (503) 378-5518
www.oregon.gov/LCD

January 13, 2011

TO: Target Rulemaking Advisory Committee (TRAC)

FROM: Robert Cortright, DLCD Staff

SUBJECT: **Target Rulemaking Issues and Draft Outline for Metropolitan Greenhouse Gas Target Rule**

This memo outlines issues identified by the TRAC to be addressed or considered in target rulemaking. Following the issue section is a draft outline for a Metropolitan Greenhouse Gas (GHG) Target Rule to carry out the requirements of Senate Bill 1059 and House Bill 2001.

Target Rulemaking Issues

TRAC has identified or discussed the following issues to be addressed or considered in either the target rulemaking or in recommendations to LCDC. Staff proposes that these issues would be: (1) considered as the rule is drafted; (2) addressed in proposed rule language; and/or (3) addressed in TRAC recommendations to LCDC.

Staff is looking to the TRAC for the following actions:

- Review and discuss list of rulemaking issues
- Identify whether there are additional issues to be added
- Provide guidance on fine tuning the description of the issues

According to comments from the TRAC, target rulemaking should consider and/or address these issues:

a. Be clear that the purpose of targets and scenario planning is to inform a broad, statewide policy discussion about the role changes to land use and transportation, in metropolitan areas, can play in meeting state goals to reduce GHG emissions.

b. The differences in population growth among metropolitan areas so that the responsibility for achieving GHG reductions is equitably allocated.

c. The differences in the ability of individual metropolitan areas to achieve GHG reductions considering existing development patterns, transportation systems, and other factors.

d. The need to provide local governments with flexibility on the methods for achieving GHG reductions.

e. A provision for LCDC to review and revise targets to reflect new information and the results of other efforts and actions to reduce GHG emissions.

f. Acknowledge actions that local governments have already taken to accomplish GHG reductions.

g. How to account for the amount of thru travel and regional travel (i.e. travel that begins or ends outside a metropolitan area) that occurs in each metropolitan area.

h. Establishing methods and a baseline for measuring GHG emissions which enables local governments to readily compare existing plans and conditions (i.e. for 2010) with alternative scenarios as they conduct scenario planning.

i. Provisions for local governments to consider the effect of congestion and congestion reduction measures in meeting GHG reduction targets.

Draft Rule Outline

Staff has developed an outline of a draft rule that responds to the statutory requirements and provides a framework for addressing the rulemaking issues which the TRAC has identified to date. The outline highlights major sections of the proposed rule and describes the details in each section of the rule. In developing the outline, staff made the following assumptions about the scope and structure of targets and target rulemaking:

- The rule would implement the target requirements of both House Bill 2001 and Senate Bill 1059. The rule would include separate provisions for the Portland metropolitan area and the other metropolitan areas. *This recognizes that the statutory basis for targets and the effect of adopted targets is different for the Portland metropolitan area than for the other five metropolitan areas in the state.*

- The rule would be limited to setting targets and describing how targets are to be measured. It would not set requirements for land use and transportation scenario planning.

- The rule would be structured to allow for individual targets for each metropolitan area. *GreenSTEP and the Agency Technical Report are expected to recommend percentage reductions for each metropolitan area.*

- Targets will be expressed as a per capita percentage reduction in GHG emissions from light vehicle travel in the year 2035. *Expressing targets in the form of a per capita percentage reduction is easier to measure. This measure also allows for a meaningful comparison between metropolitan areas, and is a way to meet the statutory requirement to consider differences in population growth rates when setting targets*

- Targets would be expressed in the form of reductions from 2010 emission levels. *Staff believes this is advisable because more complete data is available for 2010 than for 1990. Use of 2010 data will also make it easier for metropolitan areas to compare scenarios with current plans and conditions. Targets would be set at a level that is expected to meet the statutory requirement of a reduction compared to 1990 emissions.*

- The rule would include a requirement for LCDC to evaluate targets and consider changes to the targets based on new information. *Targets will be based on best information*

available at this time. A variety of efforts are underway at state and national levels to reduce GHG emissions, and new information about expected reductions from these efforts, and the results of scenario planning, should be considered and used to re-evaluate the targets.

Draft Outline for a Metropolitan Greenhouse Gas Target Rule

Purpose
Explains that the rule establishes targets for reducing GHG emissions from light vehicle travel in metropolitan areas as required by Senate Bill 1059 and House Bill 2001.

Definitions
Defines key terms. *For example: metropolitan area, light vehicle travel within a metropolitan area, and GHG reduction target.*

GHG reduction target for the Portland metropolitan area
Identifies a GHG reduction target to guide Metro and local governments in the Portland metropolitan area as they conduct scenario planning as required by House Bill 2001. The GHG reduction target would be a percentage reduction in GHG emissions from light vehicle travel per capita in year 2035 from estimated year 2010 emission levels.

GHG reduction targets for other metropolitan areas
Identifies GHG reduction targets for Salem-Keizer, Eugene-Springfield, Bend, Rogue Valley, and Corvallis metropolitan areas as required by SB 1059, Section 5.

Targets - Specify a target for each metropolitan area expressed as a percentage reduction in GHG emissions from light vehicle travel per capita in the year 2035 from year 2010 emission levels.

Effect of targets - Make it clear that this rule does not require local governments to conduct scenario planning or to meet targets.

Method for estimating GHG emissions
Describes process for calculating GHG emissions for 2010 baseline and 2035.
Method for adjusting GHG targets to account for congestion and congestion relief.

Review and evaluation of GHG reduction targets
Requires LCDC to conduct a review of targets and to amend targets as appropriate to reflect new information and the results of other Senate Bill 1059 work.

Supporting Materials

- TRAC Report and Recommendation to LCDC
- Agency Technical Report
- Senate Bill 1059 and House Bill 2001
- MPOGHG Task Force Report

SB 1059 Target Rulemaking Summary of Issues

and proposal about where and how each issue will be addressed

TRAC Issue	Addressed in Rule	Addressed in Report	Comments
Clarity about role of targets. Be clear that the purpose of targets and scenario planning outside Portland Metro area is to inform a broad statewide policy discussion about the role of changes to land use and transportation in metropolitan areas to meet state goals to reduce GHG emissions.	✓	✓	Target rule will be clear that scenario planning to meet targets is not required at this time (except for Portland Metro).
Recognize regional differences in population growth. Acknowledge the differences in the rate of population growth among metropolitan areas since 1990 so that the responsibility for GHG reduction is equitably allocated.	✓	✓	Targets are likely to be expressed as *per capita* reductions. GreenSTEP and Agencies Technical Report will calculate expected reductions in each metropolitan area.
Acknowledge the differences in abilities across the metropolitan areas. Consider the differences in the ability and circumstances of metropolitan areas to achieve GHG reductions.	✓		Targets will be set for each metropolitan area. ATR should indicate potential differences in expected reductions among metropolitan areas.
Flexibility in GHG reduction methods. Provide for as much flexibility, for local government, as possible in the methods they choose to achieve light vehicle GHG reductions.	✓		Primarily addressed through Scenario Planning Guidelines.
Review of targets. Provide for a LCDC review of targets to consider new information and results of other efforts and actions to reduce GHG emissions.	✓		Rule will include a provision for LCDC to review targets and list factors to be considered.
Consideration of existing efforts. Acknowledge actions that local governments have already taken (since 1990) to reduce GHG emissions.	✓		Targets will be based on reductions from 1990 emission levels.
Accounting for through/regional travel. Consider amount of through and regional travel in each metropolitan area in setting reduction targets.		✓	Agencies Technical Report should include information on the relative amount of through and regional traffic in each metropolitan area.
Measurable baseline for reductions. Establish clear methods and baseline which will allow local governments to calculate how existing plans and proposed scenarios compare in meeting GHG targets.	✓		Target rule will likely set baseline year of 2005 or 2010 to allow comparison with existing plans.
Congestion reduction adjustment. Provide a method for local governments to consider effects of congestion and congestion reduction measures on GHG emissions.	✓		Statute requires ODOT, DEQ and ODOE to recommend a method for adjusting reduction targets to reflect.
Funding for scenario planning. Identify and provide sufficient resources for local governments to conduct scenario planning.			Addressed in Scenario Planning Financing Report.
Coordinate other state required plan updates. Need to describe how scenario planning will be integrated with other state and federal requirements for updates to land use and transportation plans.		✓	To be addressed in more detail in Scenario Planning Guidelines.

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Metro | *Memo*

Date: January 28, 2011
To: Metro Council, MPAC
From: Michael Jordan, Chief Operating Officer
Subject: 2010 annual report on amendments to the Employment and Industrial Areas Map

Background

Title 4 (Industrial and Other Employment Areas) of the Urban Growth Management Functional Plan seeks to improve the region's economy by protecting a supply of sites for employment by limiting the types and scale of non-industrial uses in Regionally Significant Industrial Areas, Industrial Areas, and Employment Areas. Those areas are depicted on the Employment and Industrial Areas Map. Title 4 also sets forth several avenues for amending the map, either through a Metro Council ordinance or through an executive order, depending on the circumstances.

Title 4 also requires that, by January 31 of each year, Metro's Chief Operating Officer submit a written report to the Council and MPAC on the cumulative effects on employment land in the region of amendments to the Employment and Industrial Areas Map during the preceding year. This memo constitutes the report for 2010.

Summary of Title 4 map amendments in 2010

As summarized in Table 1, amendments to the Employment and Industrial Areas Map were made in four locations during 2010. Three of the four amendments were made by the Metro Council in the form of ordinances. One map amendment (Kruse Way) was made by executive order, according to the requirements of Title 4 (section 3.07.450 D).

Table 1: Amendments made to the Employment and Industrial Areas Map in 2010

Location	Acres	Original designation	New designation
Kruse Way (Lake Oswego) (Executive Order No 10-052)	26.0	Industrial	Employment
Conway / ESCO sites (NW Portland) (Ordinance No. 10-1246)	36.5	Industrial	Neighborhood
	16.9	Industrial	Employment
Beavercreek Rd. concept plan area (Oregon City) (Ordinance No. 10-1244B)	459.0	Industrial	Neighborhood
Washington Square Regional Center (Tigard) (Ordinance No. 10-1244B)	39.0	Industrial	Employment

Reasons for these map amendments included:

Kruse Way: pre-existing, high value office buildings did not conform to an Industrial designation

Conway / ESCO sites: long-term changes in economic conditions warranted new designations for these already-developed areas

Beavercreek Rd: the completed concept plan led to a more refined determination of uses that are appropriate and needed in the area

Washington Square: pre-existing zoning classifications did not correspond to Title 4 designations

Cumulative effects of Title 4 map amendments
Staff believes that the new Title 4 map designations reflect current or anticipated market conditions. Consequently, these map amendments do not represent an erosion of the region's supply of sites for employment uses.

- These map amendments do not compromise the region's ability to accommodate employment growth.[1]
    - None of these areas were counted as large-lot industrial capacity in the 2009 urban growth report (a niche need for which a capacity gap was identified).
    - In most cases, the Title 4 map amendment will actually allow higher density employment uses to occur.
    - Three of the four map amendment areas were already developed.
- These map changes did not affect Regionally Significant Industrial Areas, those locations that are most crucial to the region's traded-sector economy.

Newly-adopted policies to improve performance of employment areas
In 2010, the Metro Council adopted two significant changes to the Urban Growth Management Functional Plan, which are expected to improve the performance of employment areas:

Title 11
Changes to Title 11 (Planning for New Urban Areas) will require completion of concept plans before areas are added to the Urban Growth Boundary. Having concept plans available will help to inform the Council as it assigns 2040 design type designations to any future urban growth boundary expansion areas. This is expected to reduce the need for future Title 4 map amendments in new urban areas (as was the case in the Beavercreek Rd. concept plan area).

Title 4
The Council amended Title 4 to further protect Regionally Significant Industrial Areas (RSIA) by prohibiting the siting of schools, places of assembly larger than 20,000 square feet or parks intended to serve people other than those working or residing in the RSIA.

Chief Operating Officer recommendations for 2011
No Title 4 policy changes are recommended at this time. Staff does, however, anticipate bringing additional Title 4 map amendments to the Council for consideration in 2011. Those to-be-proposed

[1] Please refer to the 2009 urban growth report and the 2010 Capacity Ordinance (Ordinance No. 10-1244B) for additional information about the region's capacity for accommodating forecast employment growth through the year 2030.

amendments are intended to correct mapping errors and to recognize pre-existing uses and zoning designations that do not conform to Title 4. In the interest of efficient use of the Council's time, proposed amendments will be bundled together in one ordinance. Staff anticipates bringing that ordinance to Council in the spring / early summer of 2011.

Any changes to the Employment and Industrial Areas Map will also necessitate amendments to the 2040 Growth Concept Map. In late 2011, staff intends to bring to Council a consolidated proposal for amending the 2040 Growth Concept Map. That consolidated 2040 Growth Concept Map amendment proposal would depict:

- Any amendments made by the Council or Chief Operating Officer to the Employment and Industrial Areas Map
- Any newly-adopted center boundaries (boundaries formally adopted by cities or counties)
- Acknowledged urban and rural reserves

Finally, it is useful to remember that Title 4 implementation is only one aspect of the region's efforts to stimulate economic activity and job creation. All of Metro's efforts at making a great place are ultimately aimed at fostering the conditions that will encourage private investment in centers, corridors, main streets, station areas, and employment areas.