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Metro | *Agenda*

Meeting: Metro Technical Advisory Committee

Date: Wednesday, December 1st, 2010

Time: 10 a.m. – 12:00 p.m.

Place: **Metro Regional Center, Room 370A/B**

Time	Agenda Item	Action Requested	Presenter(s)
10 a.m.	**CALL TO ORDER AND INTRODUCTIONS**		**John Williams**
30 min.	**1. Climate Smart Scenarios** *Objective: Inform MTAC about the scenario planning process and receive input on information needs and opportunities for collaboration and partnerships.*	Information/ Discussion	**Kim Ellis**
30 min.	**2. State of Centers II** *Objective: Update MTAC on the proposed release of the State of Centers II and solicit comments on additional new measurements.*	Information	**Brian Harper**
40 min.	**3. Community Investment Toolkit: Eco-efficient Employment** *Objective: Provide an overview of the content of the Eco-efficient Employment toolkit, share distribution and engagement plans for publication.*	Information	**Miranda Bateschell**
Noon	**ADJOURN**		

MTAC meets on the 1st & 3rd Wednesday of the month. The next meeting is scheduled for January 5, 2011.

For agenda and schedule information, contact Alexandra Roberts-Bullock at 503-797-1839, or by email: Alexandra.Roberts-Bullock@oregonmetro.gov. Metro's TDD Number: 503-797-1804

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

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Metro | *Memo*

Date: December 1, 2010

To: MTAC and interested parties

From: Kim Ellis, Principal Transportation Planner

Re: Climate Smart Communities Scenarios

PURPOSE

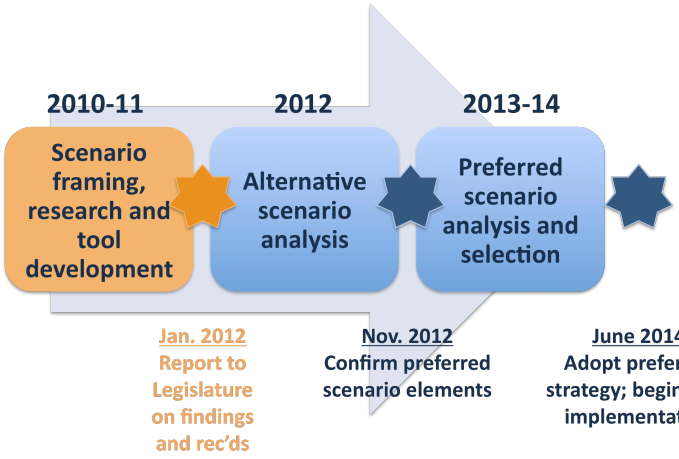
The purpose of this agenda item is to share information about the Climate Smart Communities Scenarios Project and receive input on information needs and opportunities for collaboration and partnerships through this process.

BACKGROUND

In 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 Climate Smart Communities Scenarios project responds to this mandate.

The first 6 to 8 months of the project will identify the most promising and effective land use and transportation policy options that were presented at the April 2010 climate change retreat. Staff will conduct a literature review and synthesize the latest empirical research relevant to this work in a series of policy briefs and case studies. Land use and transportation strategies (e.g. locating jobs and services closer to homes and expanding bus and high capacity transit) as well as operational and management strategies (e.g. traffic signal timing, parking pricing and other user-based fees) will be evaluated through regional-level scenarios to understand what is required to meet greenhouse gas emissions reduction targets. The Land Conservation and Development Commission (LCDC) is expected to adopt targets for the Metro region in May 2011; draft targets will be released by March 1, 2011. Findings and recommendations from the scenario planning will be reported to the Legislature in January 2012, and guide future phases of the project, as shown in Figure 1.

Figure 1. Climate Smart Communities Scenarios Process



BUILDING ON PAST INNOVATION AND SUCCESSES

This region successfully conducted scenario planning in the 1990's, which led to adoption of the 2040 Growth Concept. The 2040 Growth Concept establishes a vision and set of policies that national studies have shown will reduce greenhouse gas emissions. While this effort will have similarities to the 2040 Growth Concept scenario planning process, this scenario planning effort will be outcomes-based and focused on meeting an ambitious and specific performance target.

Many interconnected factors affect light vehicle greenhouse gas emissions. This project will build on and advance existing 2040 implementation efforts, local aspirations and consider bold land use and transportation policy options not before tested in the region. The data, tools and methods developed through this project will inform future policy discussions on how the region should move forward to meet the state's greenhouse gas emissions reduction targets for cars and light trucks. This work also provides an opportunity to advance the region's ability to analyze the effect of different combinations of land use and transportation strategies relative to the GHG emission reduction targets and the region's desired outcomes.

The project will use existing advisory committees and result in MPAC, JPACT and Council adoption of a "preferred land use and transportation" strategy and implementation of changes to policies, investments, tools and actions at the regional and local levels to realize the adopted strategy.

RELATIONSHIP TO STATE CLIMATE ACTIVITIES

The process and results of the Metro-area scenario planning effort will inform the work being conducted by the Oregon Department of Transportation (ODOT) and the Department of Land Conservation and Development (DLCD) in response to Senate Bill 1059.[1] Approved by the 2010 Legislature, Senate Bill 1059 provides further direction to greenhouse gas scenario planning in the Metro region and in other metropolitan areas of the state. It also calls for development of a statewide transportation GHG emission reduction strategy, guidelines for scenario planning, and toolkit of emission reductions actions. A summary of the state activities is attached for reference.

NEXT STEPS

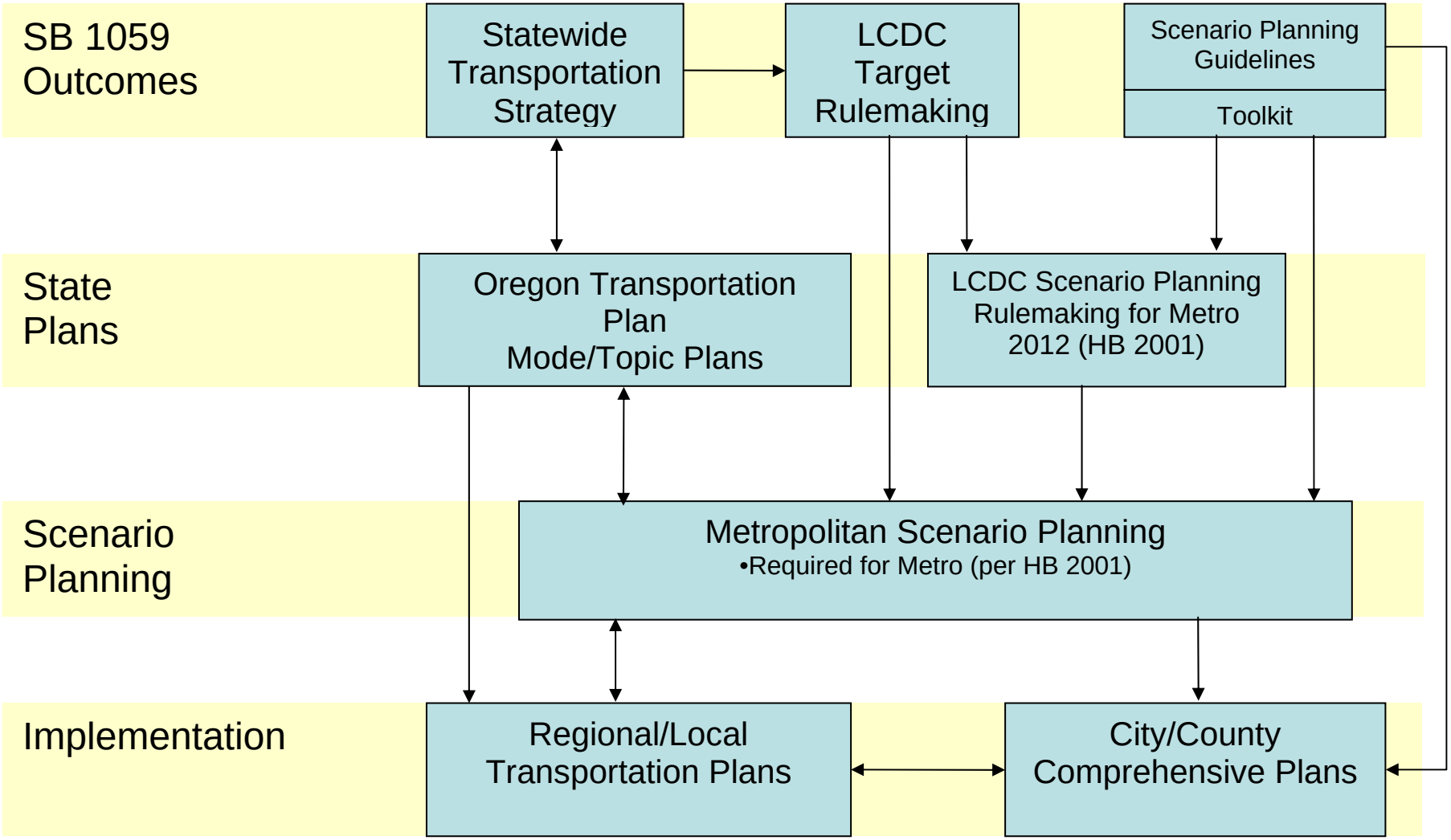
Addressing the climate change challenge will take collaboration and partnerships in the public and private sectors, requiring meaningful policy and investment discussions and decisions by elected leaders, stakeholders and the public. Work is underway to identify the toolbox of policy levers to be considered, and develop analytic tools and methods to support the scenario planning work to be conducted next spring and summer. Staff is also in the process of developing a communication and engagement strategy that will be coordinated with the state's climate activities, other Metro climate activities and implementation of Community Investment Strategy. The toolbox and methods will be brought forward for discussion and input in early 2011.

/Attachment

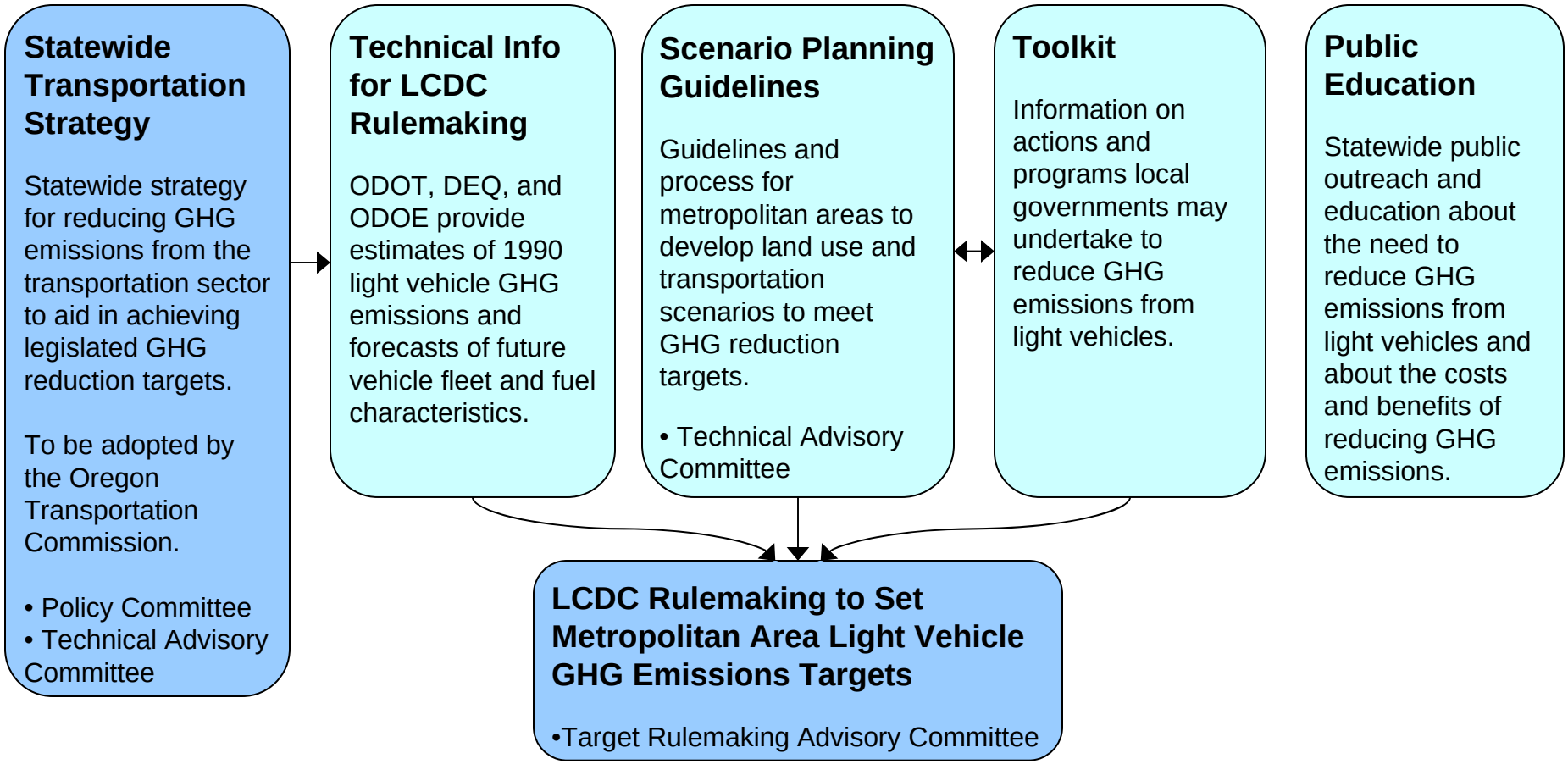
- Oregon Transportation GHG Emission Reduction Planning *(September 13, 2010)*

[1] For more information, go to http://www.oregon.gov/ODOT/TD/TP/SB1059.shtml

Integrated Transportation Planning Reflecting GHG Considerations



OREGON TRANSPORTATION GHG EMISSION REDUCTION PLANNING



Scenario Planning Financial Report

Joint ODOT, DLCD, local governments report to 76th Legislative Assembly on financing scenario planning

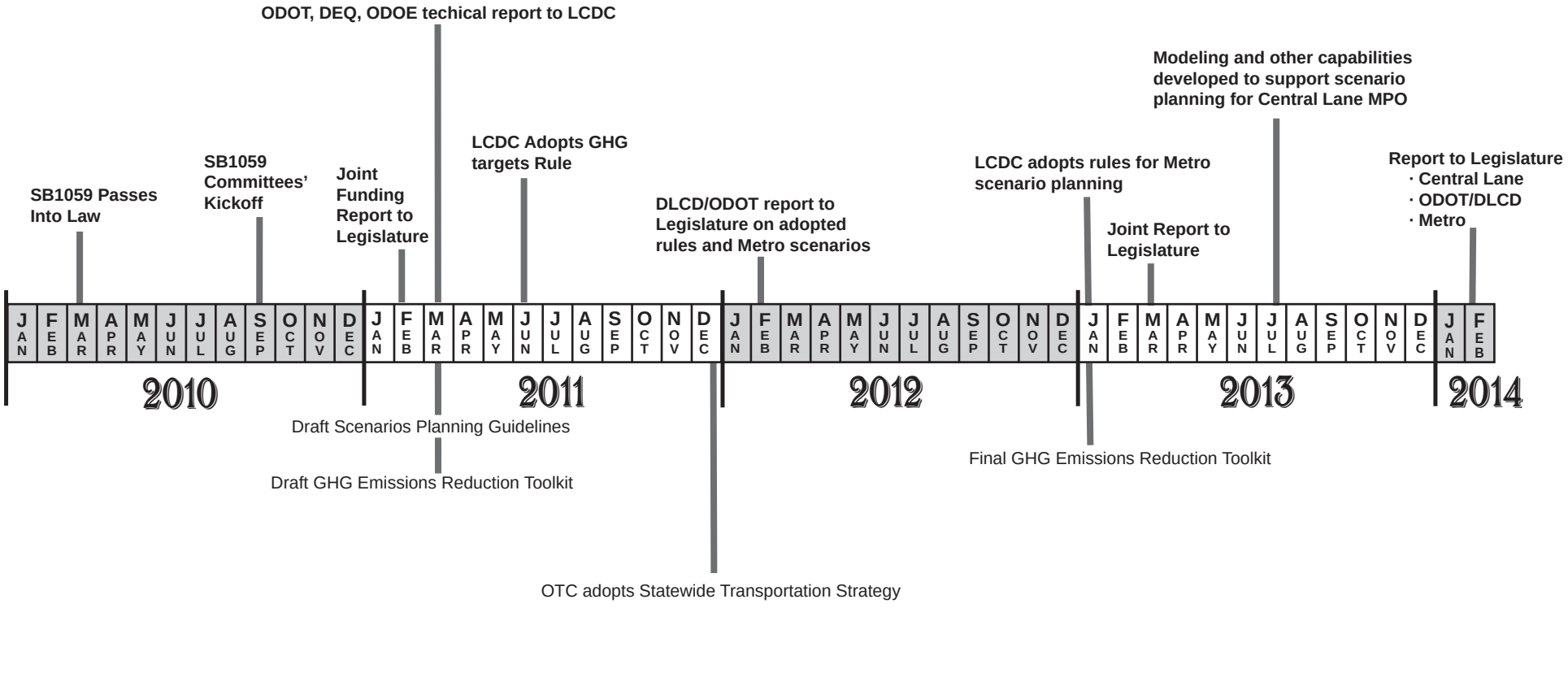
Progress and Recommendations Report

Joint ODOT & DLCD report to 77th Legislative Assembly regarding SB 1059 progress.

Oregon Department of Transportation

www.oregon.gov/ODOT/TD/TP/SB1059.shtml

Oregon Transportation GHG Emission Reduction Planning



Acronyms:

LCDC	Land Conservation and Development Commission	ODOE	Oregon Department of Energy	GHG	Greenhouse Gas
ODOT	Oregon Department of Transportation	MPO	Metropolitan Planning Organization	Metro	Portland Area Regional Government
OTC	Oregon Transportation Commission	DLCD	Department of Land Conservation Development	DEQ	Department of Environmental Quality

Oregon SB 1059 Statewide Transportation Strategy To Reduce Greenhouse Gas Emissions in the Transportation Sector

(Draft)

Rationale

- Section 2 of SB 1059 requires the Oregon Transportation Commission to "adopt a statewide transportation strategy on greenhouse gas emissions to aid in achieving the greenhouse gas emissions reduction goals set forth in ORS 468A.205".
- A statewide strategy is needed to identify the general course needed to achieve the state's greenhouse gas emission reduction goals.
- A statewide strategy is also needed to provide the context for developing metropolitan area targets for reducing greenhouse gas emissions from light vehicles (also required by SB 1059).
- The strategy will provide a factual basis to inform the development of future policies and laws aimed at reducing greenhouse gas emissions from the transportation sector.

Description

- The Statewide Transportation Strategy will include a long-range vision (to 2050) for substantially reducing GHG emissions from the transportation sector to aid in achieving the GHG emission reduction goals set forth in ORS 468A.205.
- The strategy will describe the general characteristics of transportation systems, vehicle and fuel technologies and land use patterns (to the extent that land use patterns significantly affect transportation sector greenhouse gas emissions) anticipated to be necessary to achieve the reductions in transportation sector greenhouse gas emissions.
- The strategy will make recommendations regarding new policies or significant changes to existing policies that are anticipated to be necessary to carry out the vision.
- The strategy is not a deterministic plan, rather it plots out a general course for achieving goals based on current knowledge, analysis, and reflection. It is one step in an iterative management process that also includes the monitoring of transportation and land use system changes that affect greenhouse gas emissions, the evaluation of the relative success of policies and actions put into place to reduce emissions, and the improvement of methods and tools for evaluating prospective actions to reduce emissions.

Scope

- The strategy will address greenhouse gas emissions from the travel of Oregonians and movement of freight to support Oregon's economy by all modes of transportation.
- The strategy will identify approaches to achieve the state's greenhouse gas emission reduction goals, including measures that reduce emissions per mile and measures that reduce vehicle miles traveled.
- The strategy will consider the effects of characteristics of vehicle technologies, vehicle energy sources, travel demand and factors affecting travel demand, and transportation system operation on greenhouse gas emissions from the transportation sector.
- The strategy will consider the effects of actions that are being taken or that might be taken at the federal level, state level, and local level, as well as by the private sector.
- In evaluating prospective actions to reduce transportation sector greenhouse gas emissions, the strategy will also consider economic, social, environmental, and energy consequences.
- The strategy will consider uncertainties about future conditions and the efficacy of potential actions and the risks posed by the uncertainties and the potential consequences if more or less favorable outcomes occur.

Member	Affiliation
Gail Achterman	Oregon Transportation Commission
Craig Campbell	AAA of Oregon/Idaho
Mark Capell	Bend City Council
Kelly Clifton	Portland State University
Carlotta Collette	Metro Council
Angus Duncan	Oregon Global Warming Commission
Diana Enright	Oregon Department of Energy
Chris Hagerbaumer	Oregon Environmental Council
Marla Harrison	Port of Portland
Onno Husing	Oregon Coastal Zone Management Association
John Ledger	Associated Oregon Industries
Steve McClure	Union County
John Oberst	City of Monmouth
Bob Russell	Oregon Trucking Associations
John VanLandingham	Land Conservation and Development Commission
John Vial	Jackson County
Ken Williamson	Environmental Quality Commission

Member	Affiliation
Ali Bonakdar	Corvallis Area Metropolitan Planning Organization
Greg Byrne	City of Albany
Bob Cortright	Department of Land Conservation and Development
Bill Drumheller	Oregon Department of Energy
Brian Dunn	Oregon Department of Transportation
Brett Estes	City of Astoria
Nick Fortey	Federal Highway Administration
Andy Ginsburg	Oregon Department of Environmental Quality
Brian Gregor	Oregon Department of Transportation
Vicki Guarino	Rogue Valley Council of Governments
Eric Hesse	TriMet
Mike Hoglund	Metro
Mike Jaffe	Mid-Willamette Valley Council of Governments
Margi Lifsey	Oregon Department of Transportation
Tamra Mabbott	Umatilla County
Andrea Riner	Lane Council of Governments
Cynthia Thompson	South Metro Area Regional Transit
Karen Schilling	Multnomah County
Dr. Jerry Zelada	Bicycle and Pedestrian Advisory Committee

Target Rulemaking to Reduce Greenhouse Gas Emissions

October 2010

Background

Together, SB 1059 and HB 2001 require that LCDC adopt rules setting GHG 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.[1] LCDC has convened a Target Rulemaking Advisory Committee (TRAC) to assist in developing targets.

Description

Rules will set targets for reducing emissions from light vehicle travel[2] in each of the state's six metropolitan areas through the year 2035 and must be adopted by June 1, 2011.

By March 1, 2011, ODOT, DEQ and Department of Energy are required to provide technical estimates and recommendations to LCDC to inform target rulemaking, including:

- Estimate of 1990 light vehicle vehicle miles travelled (VMT) for each metropolitan area (ODOT)
- Estimate of 2035 light vehicle fleet for each metropolitan area (ODOT)
- Estimate of 1990 GHG emissions from light vehicles for each metropolitan area (DEQ/DOE)
- Estimate of average GHG of light vehicle fleet in 2035 for each metropolitan area (DEQ/DOE)
- Estimate of percentage reduction in light vehicle emissions to the year 2035 needed to achieve 2050 GHG goals (DEQ/DOE)
- Calculation of estimated VMT for each metropolitan area needed to meet 2035 goal (DEQ/DOE)
- Modeling tools or methods to adjust VMT targets to account for congestion reduction measures

GHG target rulemaking will also be informed by draft recommendations from ODOT and OTC regarding a statewide strategy for reducing GHG emissions that considers state and national policies and conditions, and by work by ODOT and DLCD to prepare scenario planning guidelines and a toolkit of best practices for reducing GHG emissions from transportation.

Key Issues and Considerations

Establishing targets required by SB 1059 involves consideration of several important policy issues:

1. Estimating a statewide GHG reduction goal for the year 2035 that enables meeting the year 2050 goal of a 75% reduction. Target setting requires estimating a statewide GHG reduction goal for the year 2035. A midpoint goal would be a 42.5% reduction from 1990 levels, but technological or other factors may suggest that the goal should be somewhat lower or higher.
2. Estimating transportation sector's share of statewide GHG emissions goals.
3. Estimating what share of transportation sector GHG reductions should be met by light vehicles versus other sources of transportation emissions (i.e. heavy vehicles (trucks) or air travel).
4. Estimating what portion of light vehicle travel emission reductions should be accomplished in metropolitan areas versus other areas of the state.
5. Equitably allocating reductions for metropolitan areas considering differences in population growth rates. (Some areas, notably Bend, have grown rapidly since 1990, so that a target based on 1990 emissions would be much more aggressive for Bend than other areas.)

[1] HB 2001 requires that Portland Metro area undertake scenario planning to meet targets adopted by LCDC. HB 2001 requires the Central Lane MPO – which includes Eugene and Springfield - to conduct scenario planning, but does not require it to meet LCDC targets. Neither SB 1059 nor HB 2001 require other metropolitan areas to conduct scenario planning or meet LCDC targets.

[2] Light vehicles are motor vehicles with a gross vehicle weight rating of 10,000 pounds or less and include automobiles, motorcycles, pickup trucks, SUVs and vans, and excludes large commercial trucks.

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

Metropolitan Area Scenario Planning for GHG Emissions Reduction

Metropolitan area scenario planning for GHG emissions reduction is a strategic planning process to establish a transportation and land use vision, goals and approaches for reducing greenhouse gas emissions from light vehicles. Scenario planning has a broad (comprehensive) scope and incorporates the recognition of uncertainty and the consideration of risks if outcomes are more or less favorable than anticipated. A scenario plan describes a general course for achieving the goal of reducing greenhouse gas emissions, rather than a specific set of actions that will be undertaken.

At a minimum, the scope of scenario planning must address the following:

- The planning horizon date for the initial scenario plans is 2035. LCDC will be adopting rules establishing the planning horizon dates for subsequent periodic reviews and updates of scenario plans.
- Scenarios will address land use patterns and transportation systems in metropolitan areas. At least two scenarios will be developed and evaluated.
- Scenarios must be based on the accommodation of planned population and employment growth.
- Scenarios must reduce greenhouse gas emissions of light vehicles (weighing less than 10,000 pounds) to meet targets adopted by LCDC.
- Scenario plans will be adopted through a cooperative process of the local governments within a metropolitan area.

The outcomes of scenario planning for GHG emission reduction will be:

- A vision for how the transportation system and land use patterns would be organized so as to achieve the goal for reducing greenhouse gas emissions from light vehicles.
- A schematic (conceptual) map that represents the geographic relationships of elements of the vision.
- Scenario plan goals and objectives that are described in terms that are useful for judging subsequent land use and transportation plan amendment actions. (For example, more than 40% of households will be located within 1/2 mile of a high frequency transit route.)
- Potential future changes in circumstances to be aware of that could affect the likelihood that the vision can be achieved. Likewise, potential opportunities which if seized upon would increase the likelihood that the vision can be achieved.
- Identification of key local planning policies that are most needed to be adopted in order to establish the course for achieving the adopted scenario.

Oregon Scenario Planning Guidelines

Background
SB 1059 requires that ODOT and DLCD prepare guidelines to assist metropolitan areas in conducting scenario planning to meet GHG emission reduction targets.

Description
The scenario planning guidelines will provide recommendations and instructions explaining how local governments in the state's six metropolitan areas should conduct scenario planning to meet GHG reduction targets. The guidelines will help define:

- Processes for scenario planning (e.g. who is involved, and key steps), which will include a process for cooperative selection of a preferred scenario.
- Guidance for preparing scenarios (i.e. number and type of scenarios to be developed, and scope of actions and programs to be considered).
- Assumptions to be used in evaluating alternatives, which will include assumptions about baseline conditions that reflect the statewide transportation strategy.
- Methods for evaluating GHG reductions, and other costs and benefits.
- Steps for integrating scenario planning with other land use and transportation planning work (including regional transportation system planning and comprehensive planning).
- Processes for public participation in developing and evaluating alternatives.
- Coordination with cities that are near but outside the metropolitan area.

In addition, SB 1059 directs that the guidelines must:

- Take into account the full range of actions local governments may take concerning land use and transportation planning.
- Provide for coordination between state agencies and local governments.
- Encourage local innovation to reduce GHG emissions.
- Provide examples of alternative land use and transportation scenarios.

Guidelines Process
A scenario planning technical advisory committee – made up of local governments and other stakeholders – and a consultant will assist ODOT and DLCD in developing the guidelines. The agencies will also provide the public an opportunity to review and comment on the guidelines.

Guidelines will be developed in coordination with and reflect other SB 1059 work, including:

- Baseline assumptions by ODOT, DEQ, ODOE about future vehicles, fuels, and vehicular travel.
- OTC Statewide Transportation Strategy to reduce GHG emissions from the transportation sector.
- Toolkit of best practices for actions and measures to reduce transportation GHG emissions.

Draft guidelines should be completed by April 2011, to help inform target rulemaking, with final guidelines completed by the end of 2011.

Key Issues and Considerations
The guidelines must address several major issues:

- Define scenario planning (i.e. level of detail of scenario plans).
- Identify who is responsible for conducting scenario planning and the process for cooperative selection of a preferred alternative.
- Define how scenario plans relate to and should be integrated with other required land use and transportation plans.

Member	Affiliation
Alex Bettinardi	Oregon Department of Transportation
Jon Chandler	Oregon Home Builders Association
Bob Cortright	Department of Land Conservation and Development
Lisa Gardner	City of Eugene
Judith Gray	City of Tigard
Craig Honeyman	League of Oregon Cities
Mike Jaffe	Mid-Willamette Valley Council of Governments
Tom Kloster	Metro
Nick Lelack	Deschutes County
MaryKyle McCurdy	1000 Friends of Oregon
Sarah Miller	Business Oregon
Greg Mott	City of Springfield
Bianca Petrou	City of Medford
Andrea Riner	Lane Council of Governments (Central Lane MPO)
Art Schlack	Association of Oregon Counties
Becky Steckler	American Planning Association Oregon Chapter
Rodney Stewart	Oregon Department of Transportation
Jessica Tump	TriMet
Greg Winterowd	Winterbrook Planning
Vickie Hardin Woods	City of Salem

Oregon Transportation GHG Emission Reduction Toolkit

Rationale

The toolkit called for in Senate Bill 1059 (SB1059), Section 4 is a database with query capabilities that provides a comprehensive listing of actions and programs that the local governments within Oregon's metropolitan areas can implement on the local and regional level to reduce transportation-related greenhouse gas (GHG) emissions from light vehicle transportation.

Description

The database will consist of descriptions of GHG reducing tools, important characteristics, and interactions. Based on existing literature the database will provide the following:

- Full descriptions of each action and program.
- Effectiveness of each action or program at reducing GHG emissions (range of GHG reduction percentages).
- Cost-effectiveness of each action or program.
- Time required to implement each action or program.
- Time required for each action or program to become effective.
- Degree to which certain strategies require authority to implement beyond the authority available at the local government level.
- Information about the types of actions or programs that compliment each other and can yield synergistic or enhanced effects, for which the range of values can be reliably estimated within the allotted time of this project.

The toolkit will include a procedures manual for implementing actions and programs from the database. The procedures manual will take the form of a set of best practices for implementation. These best practices will establish procedures and methods for implementing actions and programs.

The toolkit will also include documentation of modeling tools (existing and enhanced) that local governments can use to determine the GHG emissions outcomes to be expected when actions or programs are applied under specific local conditions.

Finally, the toolkit will include a set of educational tools that regional and local governments may use to inform the public about the actions and programs needed for GHG reduction and the need for targeted GHG reduction.

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Metro | *Memo*

Date: Wednesday, December 1, 2010

To: MTAC

From: Brian Harper, Long Range Planning

Re: State of the Centers update

In January 2009 Metro released the State of the Centers Report, a document meant to stimulate conversation between regional partners regarding the current status of centers. The State of the Centers report focused on highlighting specific metrics in centers, and introduced the concept of the Activity Spectrum. The purpose of the Activity Spectrum was to highlight the relationship between desired activity and total number of people that live/work in centers. Identified within the spectrum were six different typologies, which were meant to represent a wide range of center-types, each with a unique geography and set of amenities. The typologies would allow local jurisdictions to compare areas of success and attempt to determine what mix of investments and urban form might best match their local center and give them an idea of what urban amenities might be expected in a center of similar size and function.

Metro is seeking to update MTAC on the release date of the second State of the Centers, and discuss new measurements for future tracking. The purpose of updating to the State of the Centers is to continue the process of sharing information with the public, local government staff, and policy makers about the link between active and successful Centers and the tools necessary to make them possible. Initial response to the first State of the Centers report was favorable, with many jurisdictions commenting on the usefulness of the data presented. What was also heard were comments about other measures that local jurisdictions would find useful to track over time.

This update to the State of the Centers builds from the work previously presented to the region to describe the relationship between multiple categories, including land use mix, socioeconomic data, level of business activity and the number of residents within each center. To that end, Metro will update data from previous categories in the original State of the Centers report. These include:

People/acre-a combination of people who live and work on a per acre basis. This measure will be broken down further by its individual categories: residents/acre and employees/acre
Dwelling units/acre
Jobs/Housing Ratio
Total business/acre
Median Age
Median Household Size
Median Household Income

Breakdown of ULI business in the center-Using ESRI Business Analyst data, Metro can show total number of ULI (Urban Living Infrastructure) businesses in a center. ULI businesses are defined as the types of retail and service amenities that supports urban lifestyles and preferences.

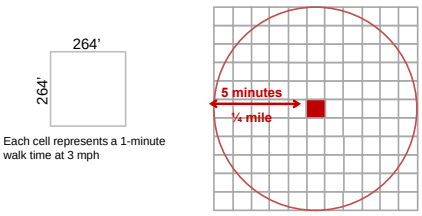
Using feedback received from local jurisdictions and regional partners, Metro staff identified a list of additional measures for future consideration that would address concepts such as urban form, walkability, and bike/transit access. Through extensive research, staff was able to identify measurements for these categories from existing data sets. These include:

- **Block Size**- Classification of blocks by size.
- **Sidewalk Coverage**-Density of sidewalk infrastructure within ¼ mile
- **Bicycle Facility Coverage**-Access to bicycle infrastructure, measured as density of facilities within ¼ mile. Facilities are weighted in importance based on the Regional BikeThere! Map.
- **Parks Accessibility**-Distance to Parks and natural areas based on a pedestrian network. (Rather than "crow flies" distance).
- **Transit Frequency**-Transit frequency within a 1/4 mile.

To accurately measure these new categories, Metro staff has developed a new methodology for measuring change over time using the 2040 Context Mapping Tool. This innovative GIS based analysis tool measures specific aspects of the built and natural environment to help illustrate the character of a place. This tool was developed as a way to engage policy makers, community groups, and other regional partners to better understand how to achieve their aspirations using objective measures to evaluate elements that can often be controlled with policy. The tool can be used to measure existing conditions, perform diagnostics on a given area and used to track change over time.

Specifically, the Context Tool is a walk accessibility model where a one minute walk time is the spatial resolution of the data. (see figure below):

The Walk Method



In this application each grid cell knows the distance from, and density of, the individual land use, transportation, and environmental variable being measured. The specific measures proposed for this update are considered important to the success of our Region 2040 Centers. The results of the analysis are presented as a "heat map" indicating areas of greater concentration for each variable, relative to the individual grid cell. The individual layers can then be compressed into a single

composite score to view success across a broad spectrum of measurements. The composite score shows relative conditions in a center, related to the specific list of measures. Another application of the 2040 Context Tool lies in its ability to view individual measurements through the same heat map method. This allows local jurisdictions to focus efforts, such as capital projects or policy changes, to the applicable measure that may be deficient in a center.

With the recent recommendation of the Metro Chief Operating Officer that Metro and the Region explore an integrated Community Investment Strategy, understanding where and how we monitor success over time is more important than ever. The SOC will allow Metro and local governments to understand local conditions and decide what investments and policy choices will prove to be the most successful in the implementation of 2040. Metro plans to continue publication of the State of the Centers at dates to be determined in the future.

Materials following this page were distributed at the meeting.

Climate Smart Communities Scenarios

Strategies for a sustainable, prosperous and equitable future

Kim Ellis, project manager

Metro Technical Advisory Committee Briefing

December 1, 2010

Oregon Sustainable Transportation Initiative

STATEWIDE TRANSPORTATION STRATEGY

Statewide strategy for reducing GHG emissions from the transportation sector to aid in achieving legislated GHG reduction targets.

To be adopted by the Oregon Transportation Commission.

- ***Policy Committee***
- ***Technical Advisory Committee***

STATE AGENCY TECHNICAL REPORT

ODOT, DEQ, and ODOE provide estimates of 1990 light vehicle GHG emissions and forecasts of future vehicle fleet and fuel characteristics.

SCENARIO PLANNING GUIDELINES

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

- ***Technical Advisory Committee***

TOOLKIT

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

PUBLIC EDUCATION

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

LCDC Rulemaking to Set Metropolitan Area Light Vehicle GHG Emissions Targets

- ***Target Rulemaking Advisory Committee (TRAC)***

<u>Scenario Planning Financial Report</u>
Joint ODOT, DLCD, local governments report to 2011 Legislature on financing scenario planning

<u>Progress and Recommendations Report</u>
Joint ODOT & DLCD report to 2012 Legislature regarding SB 1059 progress.

http://www.oregon.gov/ODOT/TD/TP/SB1059.shtml

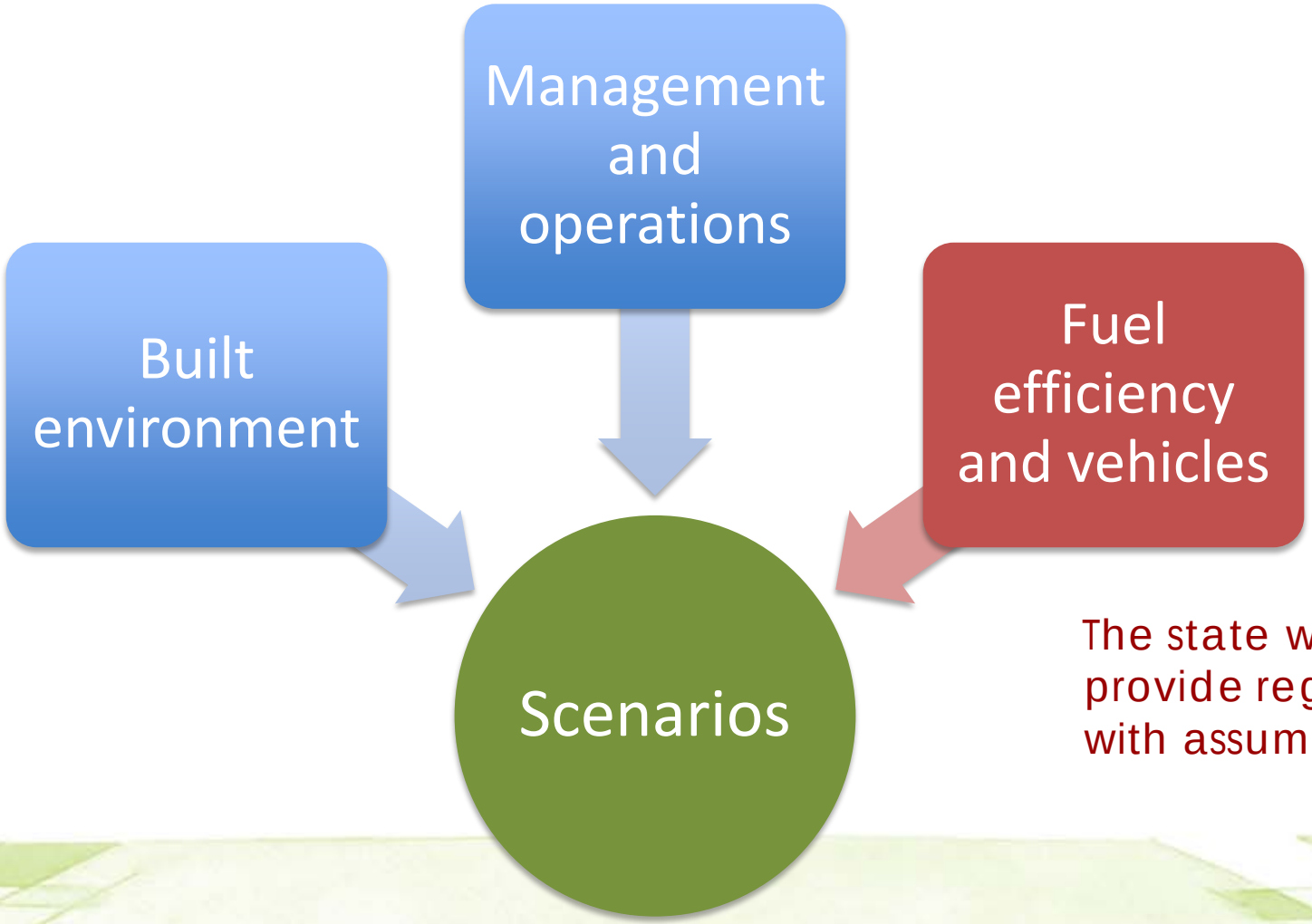
Oregon Department of Transportation

Making a Great Place

- Defines six outcomes the region is working to achieve
- Reinforces 2040 activity centers and multi-modal mobility corridors
- Fine-tunes policies to advance implementation; more needed

Scenario toolbox

Scenarios = integrated packages of policies



The state will provide region with assumptions

Toolbox – Built Environment

Current tools

- Mixed-use, transit-supportive development in centers and corridors
- Trail, bike and pedestrian networks
- Expanded transit frequency and coverage
- Complete streets network
- Urban growth boundary
- Market incentives

New tools

- Transit-oriented employment centers and job clusters
- Expanded intercity transit and high-speed passenger rail
- Expanded incentives

Toolbox – Management & Operations

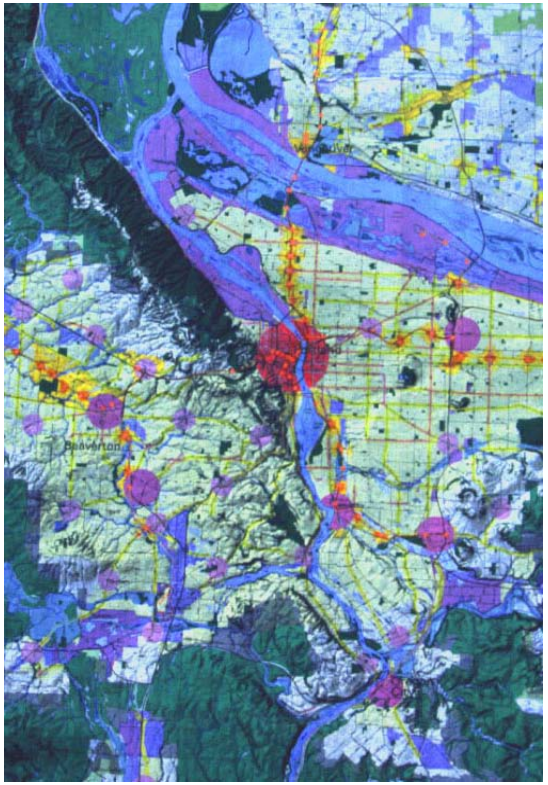
Current tools

- Traffic signal timing
- Incident management
- High occupancy vehicle lanes
- Transportation management associations
- Carpool/vanpool programs
- Drive Less/Save More program
- Employer-based programs
- Individualized marketing
- Parking min./max.

New tools

- Variable speed limits
- Eco-driving education
- Expanded parking management and pricing
- Tolling/congestion pricing
- Speed limit restrictions/reductions
- Carbon pricing
- Pay-as-you-drive insurance

Scenario building – Round 1



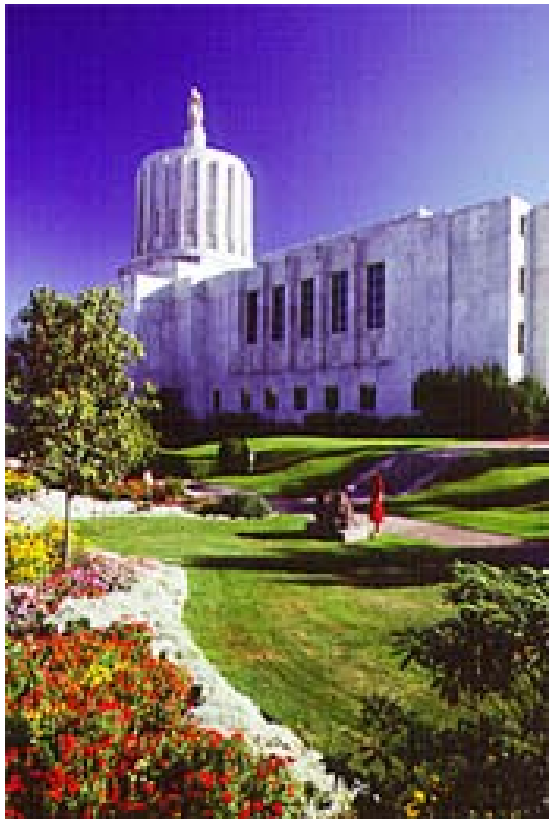
- Testing phase
- Broad application of toolbox at regional level
- Base scenario = 2040 under current tools and trends
- 3 “apples” and “oranges” scenarios that build on base

Alternative scenarios will be designed to meet state GHG targets

Assessing the benefits and impacts

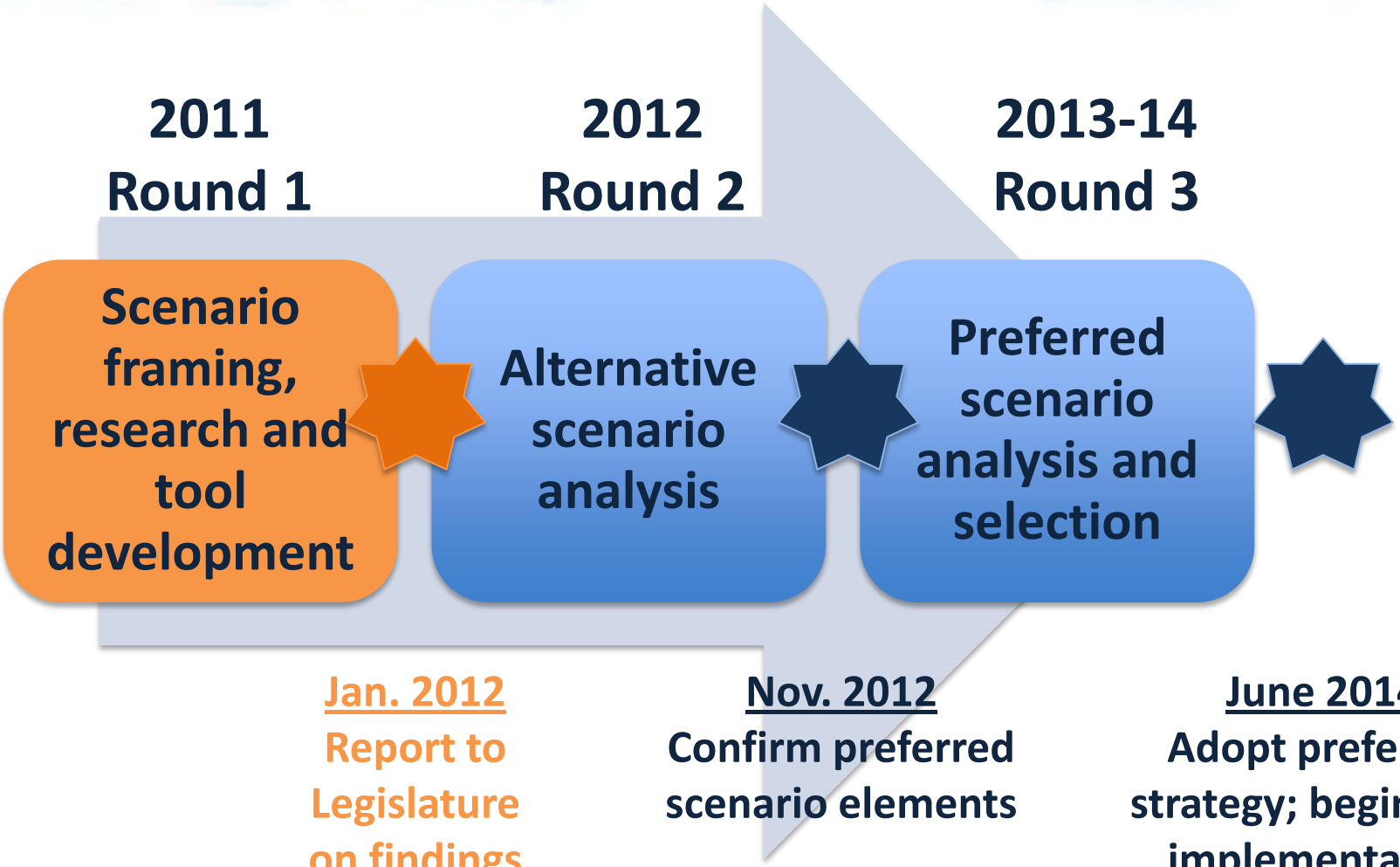
- Greenhouse gas emissions
- Travel behavior
  - Walking, biking and transit
  - Vehicle miles traveled
  - Freight reliability
- Jobs and households
- Economy
- Public health and equity
- Household cost and affordability

Reporting to the Legislature



- Scenarios report due in Jan. 2012
- Report describes results and recommendations
- Basis for further scenario refinement and analysis in 2012 and 2013

Scenario planning process



Upcoming discussions

- **Jan. - March 2011 – Regular meetings**
  - Tools and co-benefits
  - Evaluation framework
  - State strategy and GHG targets for Metro region
- **April 1, 2011 - Joint MPAC/JPACT meeting**
  - "Test" scenarios with real-time evaluation
  - Preliminary direction on scenarios to test
- **April - May 2011 - Regular meetings**
  - Final direction on scenarios to test

Resources

- **Metro**

  www.oregonmetro.gov/climatechange

- **Oregon Sustainable Transportation Initiative**

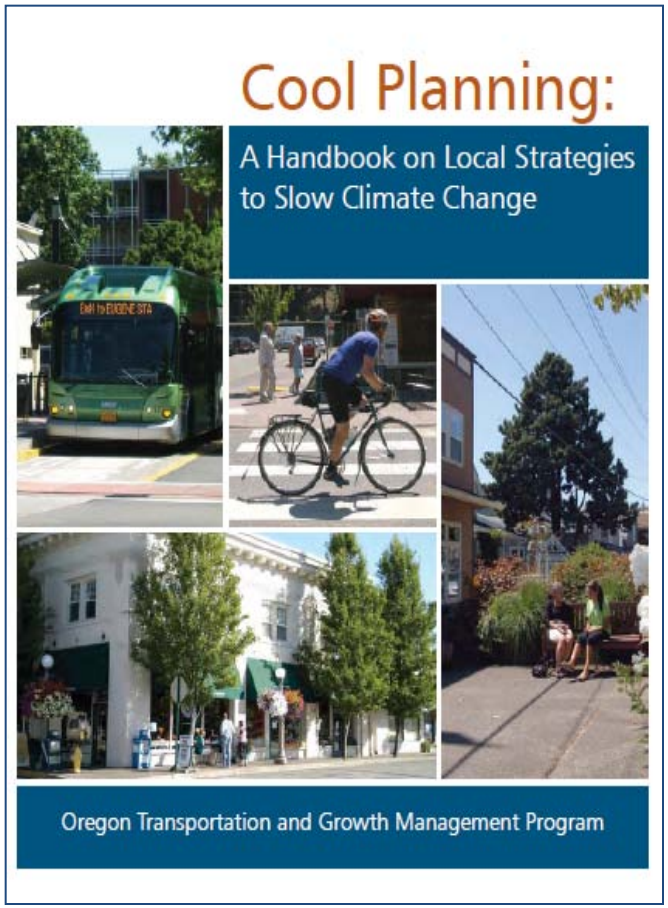
  www.oregon.gov/ODOT/TD/TP/SB1059.shtml

- **Oregon Global Warming Commission**

  www.keeporegoncool.org

- **TGM Carbon Footprint**

  www.oregon.gov/LCD/TGM/carbonfootprint/index.shtml



Discussion

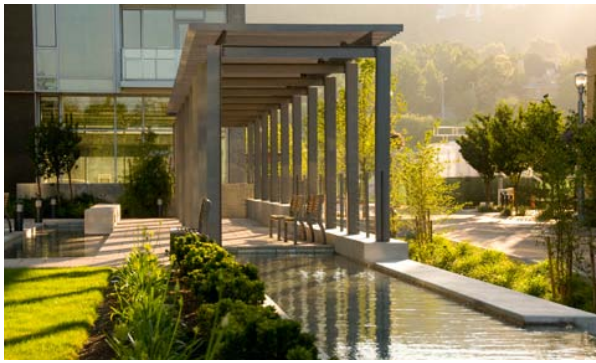
- Additional information or background needed?
- Opportunities for collaboration and partnerships?

COMMUNITY
INVESTMENT
TOOLKIT
VOLUME 3

Eco-efficient Employment

COMMUNITY INVESTMENT TOOLS

Metro



Community Investment Toolkit

- 3 Volumes
  - Financial Incentives
  - Innovative Design and Development Codes
  - Eco-efficient Employment
- On-the-ground success stories
- Implementation tips
- Resources

Metro

Eco-efficient Employment

…*businesses realizing* **economic** *and* **ecological** *benefits by utilizing operations that* **produce more with less** *– less water, less energy, less capital, less land, less waste.*

Photos courtesy of Gerding Edlen

Employment

…*all types of businesses and locations…*

- Institutional, manufacturing, industrial uses
- Mixed-use projects along transit corridors
- Small sites in urban areas to large employment sites

Photos courtesy of Gerding Edlen and Partners in Project Green

Vol. 3: Eco-efficient Employment

Advisory Committee:

Beverly Bookin, The Bookin Group
Lynne Boussi, PDC
Jillian Detweiler, Trimet
Jennifer Donnelly, DLCD
Scott Drumm, Port of Portland
Alma Flores, City of Portland
Jonathan Harker, City of Vancouver
Eric Holmes, City of Vancouver
Steve Kountz, City of Portland
Shannon Lopez, City of Gresham
Renate Mengleberg, Clackamas County
Patrick Ribellia, City of Hillsboro
Doug Rux, City of Tualatin
Kelly Sills, Clark County
Alwin Turiel, City of Hillsboro
Michael Williams, Business Oregon
Janet Young, City of Gresham

Vol. 3: Eco-efficient Employment

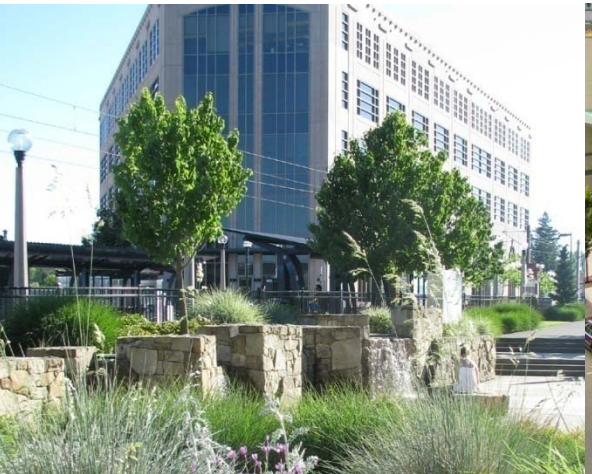
- Regional employment trends
  - Desire to “go green” / energy costs
  - Expanding office and institutional uses in neighborhoods
  - Locating in areas with transit, infrastructure and residents
  - Momentum for maintaining site footprint/efficient building on site
- Land use tools v. economic development

Photos courtesy of Gary Christensen, Partners in Project Green and Sequential Biofuels

Vol. 3: Eco-efficient Employment

- CH 1: High-performance infrastructure
  - SECTION ONE: Systems Approach
  - SECTION TWO: High-performance mechanisms
- CH 2: 21st century design
  - SECTION ONE: Innovative Design & Development Codes
  - SECTION TWO: Innovative Planning & Development
- CH 3: Redevelopment and reuse

Photos courtesy of City of Beaverton, Gerding Edlen and Port of Portland



LEED-ND

- Smart location and linkage
- Neighborhood pattern and design
- Green infrastructure and buildings
- Innovation and design process

Photos courtesy of Dockside Green and The JBG Companies

LEED-ND

TWINBROOK STATION

- 26-acre park-n-ride redevelopment
- 2.2M s.f. mixed-use TOD
- 325K s.f. Class-A COM
- 50% green cover

DOCKSIDE GREEN

- 15-acre mixed-use employment project
- Brownfield redevelopment
- 21st century design
- Design-build competition

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Photos courtesy of Dockside Green and The JBG Companies

Partners in Project Green

- Technical assistance
- Green building retrofits
- District energy feasibility analysis
- Municipal policy alignment
- Parking lot retrofits
- Green Job Corps
- Performance measures

Photos courtesy of Partners in Project Green

The Maplewood Project

- Integrated design process
- Resource mapping
- Public-private partnerships
- Recommendations:
  - Biomass cogeneration
  - Multi-modal connectivity
  - Stormwater recycling
  - Material exchanges

Images courtesy of The Maplewood Project, City of Beaverton and City of Devens, MA

Seattle Green Factor

- Menu-based landscape requirements
- Flexible to site and development
- Increased ecological function of landscaping
- More efficient site design

Illustration courtesy of The Berger Partnership

Seattle Green Factor

Green Factor Composite Model

This composite model graphically describes the elements of Green Factor and how they might relate spatially to a building and landscape in a conceptual project. Note: This model is designed to show as many Green Factor credits as possible, its actual score would greatly exceed required minimums.

A1 - Landscaped Area <24" Soil Depth
A2 - Landscaped Area >24" Soil Depth
A3 - Rain Garden
B1 - Groundcovers <2' Height
B2 - Plants >2' Height
B3 - Small Tree
B5 - Medium Tree
B6 - Large Tree
B7 - Large Existing Tree
C1 - Green Roof 2-4" Growth Medium
C2 - Green Roof >4" Growth Medium
D - Green Wall
E - Water Feature
F1 - Permeable Paving 6-24" Subgrade
F2 - Permeable Paving >24" Subgrade
G - Structural Soil Systems
H1 - Drought Tolerant/Natives
H2 - Rainwater Cistern
H3 - Public Visibility
H4 - Food Cultivation

Illustration courtesy of The Berger Partnership

Union 70

- Manufacturing → Industrial
- 160 acres, 2.2M s.f. vacant plant
- Hold-on-sale agreement
- $400K in brownfield assessment
- Expedited city review and permitting
- Connected urban street grid
- Removal of 80+ acres surface parking
- Primarily bulk warehouse tenants
- 1.4M s.f. rehabbed multi-tenant, multi-story spaces

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Illustrations courtesy of Clark Properties

Kent Station

- Old glue factory to mixed-use employment along light rail
- City investments:
  - Finance gap for structured parking
  - Temporary ownership for environmental assessment and developer agreement
  - Infrastructure improvements
- 20 acres; 500+ jobs

Metro

Illustrations courtesy of LMN Architects

Kent Station

Illustrations courtesy of LMN Architects

Metro

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www.oregonmetro.gov/communityinvestment/

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