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

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Metro | *Agenda*

Meeting: Metro Technical Advisory Committee

Date: Wednesday, May 4th, 2011

Time: 10 a.m. – 12:00 p.m.

Place: **Metro Regional Center, Council Chambers**

Time	Agenda Item	Action Requested	Presenter(s)	Materials
10:00 a.m.	**CALL TO ORDER AND INTRODUCTIONS**		Robin McArthur, Chair	
10:10 a.m.	**1. Climate Leadership Summit Recap** *Objective: Provide summary of input received at MPAC/JPACT summit*	Discussion	Dylan Rivera	None
10:25 a.m.	**2. Climate Smart Communities Scenarios Evaluation** *Objective: Get input on evaluation framework and strategies to be tested in regional scenarios*	Discussion	Kim Ellis	In packet
Noon	**ADJOURN**			

MTAC meets on the 1st & 3rd Wednesday of the month. The next meeting is scheduled for May 18th, 2011.

For agenda and schedule information, call Alexandra Roberts Eldridge at 503-797-1839, email: Alexandra.Eldridge@oregonmetro.gov. To check on closure or cancellations during inclement weather, please call 503-797-1700#.

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Metro | *Memo*

Date: April 21, 2011

To: TPAC, MTAC and interested parties

From: Robin McArthur, Planning and Development Director

Re: Formation of TPAC/MTAC Scenarios Technical Work Group

This memo recommends creation of a work group to expand land use and transportation collaboration and provide technical support to the Climate Smart Communities Scenarios process in 2011.

Background

The first phase of the region's mandated scenario analysis will occur during summer 2011 and focus on learning what combinations of land use and transportation strategies may be helpful in meeting the state carbon emissions reduction targets for cars, small trucks and SUVs in the Portland metropolitan region. Potential impacts and benefits will be weighed against the region's six desired outcomes. Findings and recommendations from the analysis will be reported to Metro's policy committees in fall 2011 before being finalized for submittal to the Legislature in January 2012.

In March, the Metro Technical Advisory Committee (MTAC) requested additional opportunities to collaborate with the Transportation Policy Alternatives Committee (TPAC) as the Climate Smart Communities Scenarios process moves forward.

Creation of TPAC/MTAC Scenarios Work Group

In response, I recommend this collaboration occur through monthly meetings of a technical work group composed of members from TPAC and MTAC. Proposed members are shown in Table 1.

Table 1. TPAC/MTAC Scenarios Work Group Members (proposed)

Name	Affiliation	Membership
Lainie Smith	ODOT	TPAC alternate and MTAC
Jennifer Donnelly	DLCD	MTAC
Alan Lehto	TriMet	TPAC
Elissa Gertler	Clackamas County	TPAC
Chuck Beasley	Multnomah County	MTAC
Andy Back	Washington County	TPAC alternate & MTAC alternate
Lynda David	Regional Transportation Council	TPAC
	City	
	City	
	City	
	City	
	City	
	City	
	TPAC citizen member	
	MTAC citizen/community group	

The work group would be led by Kim Ellis, Climate Smart Communities Scenarios project manager, and would begin meeting in May. The work group meetings would be held on Mondays, from 2 p.m. to 4 p.m. at Metro. Additional meetings would be scheduled as needed.

Scenarios Work Group Charge

The work group would be charged with helping develop the Phase 1 scenarios assumptions and evaluation criteria, consistent with policy direction from the Metro Council, the Joint Policy Advisory Committee on Transportation and the Metro Policy Advisory Committee. In addition, the work group would review the preliminary technical analysis and provide guidance and consensus-based recommendations to Metro staff that reflect the range of interests and consideration of the land use and transportation strategies evaluated. Members would review and comment on draft materials and assist Metro staff with other technical coordination activities related to the scenarios analysis.

Key work group tasks would include:

- Help develop the Phase 1 scenarios evaluation framework and criteria. *(May-June 2011)*
- Help develop and review technical assumptions to be evaluated in Phase 1 scenarios. *(May-June 2011)*
- Help develop and review preliminary findings and recommendations on the Phase 1 scenarios analysis. *(Summer/early Fall 2011)*
- Help develop and review report to the 2012 Legislature and recommendations for Phase 2 of the process. *(Fall 2011)*

Implications

- Briefings on the progress of the technical work will be made to TPAC and MTAC as needed to prepare for policy committee briefings. The details of the technical work will be discussed during work group meetings.
- The work group meetings will conclude in December 2011.

With TPAC and MTAC support, I will work with staff to finalize the charge of the work group and develop a schedule of meetings for distribution to TPAC and MTAC in May.

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Metro | *Memo*

Date: April 27, 2011

To: MTAC and interested parties

From: Kim Ellis, Principal Transportation Planner

Re: Updated Phase 1 Scenario Approach and Framework

BACKGROUND

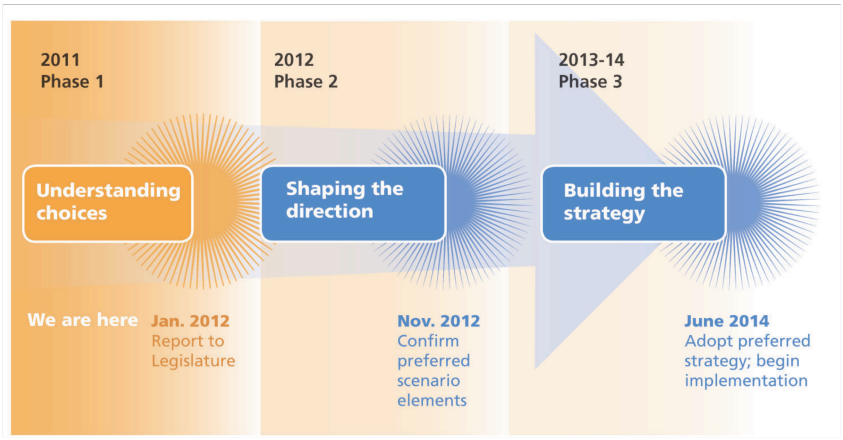
The Phase 1 Climate Smart Communities Scenarios analysis will occur during Summer 2011 and focus on learning what combinations of land use and transportation strategies are required to meet the state targets for reducing carbon emissions from light vehicles.

Staff presented the *Discussion Draft Phase 1 Scenario Approach and Framework* (dated February 23, 2011) to the Transportation Policy Alternatives Committee (TPAC) and the Metro Technical Advisory Committee (MTAC) on February 28 and March 2, respectively. The Joint Policy Advisory Committee on Transportation (JPACT) and Metro Policy Advisory Committee (MPAC) provided further input on March 3 and March 9, respectively.

The committees supported the overall approach, recognizing more information and discussion is needed to define the combinations of land use and transportation strategies to be tested this summer, and indicators to be used to evaluate the scenarios. Several committee members also expressed concern that House Bill 2001 only mandates consideration of carbon emissions from light vehicles. MTAC also recommended building in more opportunities for collaboration with TPAC throughout the scenario planning process.

The attached document reflects the comments and refinements identified to date, and provides direction to staff moving forward.

CLIMATE SMART COMMUNITIES SCENARIO PLANNING



ACTION REQUESTED

MTAC input on the overall framework, draft indicators and strategies to be tested is requested.

NEXT STEPS

Staff will work with a work group of MTAC and TPAC members to define assumptions for each strategy in May. This work will also include refining the set of indicators to be evaluated in Phase 1.

MTAC will be asked to make a recommendation to the Metro Policy Advisory Committee at the May 18 meeting.

/attachments: Draft Phase 1 Scenario Evaluation Framework *(April 21, 2011)*

April 21, 2011

DRAFT Phase 1 Scenario Evaluation Framework

This framework is proposed to guide the development and evaluation of the Phase 1 scenarios in 2011 and reflects input received to date from Metro's policy and technical advisory committees and the Metro Council. The primary objective of the Phase 1 scenarios analysis is to determine the carbon emissions reduction potential of different combinations of strategies and their ability to achieve state carbon emissions reduction targets for cars, small trucks and sport utility vehicles (SUVs).

GUIDING PRINCIPLES:

- **Focus on outcomes and co-benefits:** The strategies that are needed to reduce carbon emissions can help save individuals, local governments and the private sector money, grow local businesses and create jobs and build healthy, livable communities. The multiple benefits should be emphasized and central to the evaluation and communication of the results.
- **Build on existing efforts and aspirations:** Start with local plans and 2010 regional actions[1] that include strategies to realize the region's six desired outcomes.
- **Show cause and effect:** Provide sufficient clarity to discern cause and effect relationships between strategies tested and realization of regional outcomes.
- **Be bold, yet plausible**: Explore a range of futures that may be difficult to achieve but are possible.
- **Make relevant, understandable and tangible:** Organize information so decision-makers and stakeholders can understand the choices, consequences (intended and unintended) and tradeoffs.
- **Meet state climate goals:** Demonstrate what is required to meet state carbon emissions reduction targets for cars, small trucks and SUVs, recognizing reductions that from other emissions sources must also be addressed in a comprehensive manner.

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

WHAT WE HOPE TO ACCOMPLISH:

- Determine what combinations of land use and transportation strategies are required to meet the state carbon emissions reduction targets for light vehicles.
- Show potential impacts and benefits through a comprehensive array of measures that link back to the six desired outcomes.
- Demonstrate how well the strategies support local plans and the region's desired outcomes.
- Identify the potential challenges, opportunities and tradeoffs associated with different strategies and implications for the region and state.
- Report findings and make recommendations to the 2012 Legislature and future project phases.

OUTCOMES TO BE EVALUATED:

While the primary objective of the scenarios analysis is to understand the carbon emissions reduction potential of different combinations of strategies and their ability to achieve state targets for cars, small trucks and SUVs, the evaluation of the smaller set of scenarios will also consider:

- **Outcomes and co-benefits** – Benefits and impacts across environmental, economic, and equity goals from a business, individual/household and regional perspective will be evaluated to better understand the choices and tradeoffs.
- **Effectiveness** – Carbon emissions reduction potential will be evaluated.
- **Cost** – The costs and cost effectiveness (per ton of emissions reduced) will be evaluated.
- **Implementation opportunities and challenges** – The feasibility of implementing different strategies and the timeframe required will be assessed to inform next steps and recommendations for Phase 2 of the process.

Table 1. Indicators to Be Evaluated in Phase 1 (draft)

Business	Individuals and Households	Region
Vehicle and truck delay	Distance driven per day	Carbon emissions
Truck travel costs	Travel costs by income group	Air quality emissions
Healthcare costs	People living in areas with good mix of homes, jobs and services by income group	Energy consumption
OTHERS?	Physical activity	Water consumption
	Fuel consumption	Land consumption
	OTHERS?	Walking, biking and transit mode share
		Infrastructure costs (capital and operations)
		Investment revenues generated
		OTHERS?

Table 1 identifies the outcomes-based indicators that will be used to evaluate the Phase 1 scenarios. The indicators represent the range of outcomes that can be evaluated using the metropolitan-scale GreenSTEP[2] model. The indicators will continue to be refined in Phase 2 of the process as the evaluation effort transitions to the Envision Tomorrow[3] scenario planning tool, which will provide spatial analysis capabilities allowing for a more robust analysis of economic development, accessibility, public health and environmental justice indicators.

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[1] In 2010, the Metro Council adopted the Community Investment Strategy and Regional Transportation Plan, and designated urban and rural reserves. These actions provide the policy foundation for better integrating land use decisions with transportation investments to achieve the region's six desired outcomes and state climate goals.

[2] Greenhouse Gas State Transportation Emissions Planning (GreenSTEP) is a non-spatial model used to estimate transportation sector emissions with sensitivity to mixed-use, vehicle fleet mix, transportation cost, fuels and other factors which are used to calculate household VMT and corresponding greenhouse gas emissions. Inputs within the statewide model will be tailored where more current local/regional information is available to create a metropolitan GreenSTEP model for Phase 1.

[3] Envision Tomorrow is a spatial GIS-based scenario planning tool that estimates the effect of changes to land use and transportation using a combination of land use, environmental and transportation data and 2040-based land use typologies. The inputs will be tailored where more current local/regional information is available for more refined scenario analysis in Phase 2.

Table 2 provides a framework for testing a variety of regional-level strategies during the summer of 2011 with the goal of determining what combination of strategies are needed to reduce carbon emissions. **The table is for discussion and research purposes only, and does not represent a Metro Council, JPACT or MPAC endorsed policy proposal.**

- Each category includes a set of carbon reduction strategies that the metropolitan GreenSTEP model is able to test, including transportation, land use, fleet and technology strategies. The strategies are assumed to be implemented with consideration of environmental justice and equity concerns; there may be some strategies that by their very nature could pose challenges.
- A total of 36 scenarios will be created in Phase 1, reflecting different implementation levels for each strategy. Level 1 represents the Reference Case, reflecting current adopted plans and policies.

The top performing combinations of strategies will be evaluated in more detail, using the indicators listed in Table 2. Additional sensitivity analysis may be conducted after the initial set of scenarios are evaluated as time and resources allow.

Table 2. Climate Smart Communities Scenarios (DRAFT)

	2035 Implementation Levels			Strategies to be Tested (indicated in bold)
	Level 1 (Reference)	**Level 2**	**Level 3**	
COMMUNITY DESIGN	Current	Double	Triple	Households in **mixed-use areas and neighborhoods** [4] (percent)
	Current rate	½-current rate	No expansion	**Urban growth boundary** (expansion relative to population growth)
	Current	Triple		**Bicycle and pedestrian travel** (mode share)
	2035 RTP Financially Constrained (FC) System			**Road capacity** (lane mile growth relative to population growth)
	2035 RTP FC	Double	Triple	**Bus and rail transit service hours** (percent)
PRICING [5]	Current	Triple	100%	Workers paying **parkin**g fees (percent)
	Current			Non-work trips parking parking fees (percent)
	Current	*TBD*	*TBD*	Average daily **parking fee** for work and non-work trips
	Current	*TBD*		**Pay-as-you drive insurance**
	Current	*TBD*		**Fuel and emissions fees** [6]
	Current	*TBD*		**Vehicle travel fees** [7]
MARKETING & INCENTIVES	Current	*TBD*		Households participating in **individualized marking programs** (percent)
	Current	*TBD*		Workers participating in **employer-based demand management programs**[8] (percent)
	Current	*TBD*		Households participating in **carsharing** (percent)
	Current	*TBD*		Households participating in **ecodriving** (percent)
MANAGE-MENT	*Level 1/2 from State Agency Technical Report*			System management strategies such as traffic signal timing, **incident management** (percent of delay addressed)
FLEET	*To be held constant at Level 3 as defined in State Agency Technical Report and assumed in the Metropolitan GHG Reduction Targets Rule*			**Auto/truck vehicle proportions** and **fleet turnover rate**/ages, as defined in *State Agency Technical Report and assumed in the Metropolitan GHG Reduction Targets Rule*
TECHNOLOGY	*To be held constant at Level 3 as defined in State Agency Technical Report and assumed in the Metropolitan GHG Reduction Targets Rule*			**Fuel economy**, **carbon intensity of fuels**, as defined in *State Agency Technical Report and assumed in the Metropolitan GHG Reduction Targets Rule*
	Level 3 from State Agency Technical Report	*Level 4 from State Agency Report*		**Electric vehicles and plug-in hybrids market shares**

The results of the analysis will be summarized and brought forward for discussion by the region's decision-makers and community and business leaders in Fall 2011. The regional discussion will shape the findings and recommendations forwarded to the 2012 Legislature and the next phase of the process.

[4] Existing zoning and forecasted population and employment held constant across all scenarios.
[5] Reflected as the cost per mile to drive. Fuel price will held constant across all scenarios, reflecting market trends.
[6] Carbon fee, gas tax, or other instruments could be used.
[7] Vehicle miles traveled fee or other instruments could be used.
[8] Examples include transit fare reduction, carpool matching and other carpool programs, and compressed work week.

Climate Smart Communities Scenarios Project

PROJECT GOALS

- **Build on existing efforts and aspirations:** Start with local plans and 2010 regional actions to develop a preferred land use and transportation strategy that meets state climate goals and advances the 2040 Growth Concept, community aspirations and the region's six desired outcomes.
- **Engage and educate:** Actively engage and inform the region's decision-makers, public agencies and business and community leaders on land use and transportation strategies needed to achieve the state carbon emissions reduction target for cars, small trucks and sport utility vehicles in the Portland metropolitan region.
- **Collaborate:** Work together to build ownership and support for the preferred land use and transportation strategy and policies, investments, and actions that will be recommended by the region.
- **Focus on outcomes and co-benefits:** Consider the economic, equity, environmental and community benefits and impacts to demonstrate how strategies may affect realization of the region's six desired outcomes. These outcomes may be realized by the potential for strategies to save money for individuals, local governments and the private sector, grow local businesses, create jobs and build healthy, livable communities.

KEY TASKS

	Phase I **Understanding Choices** *Jan. – Dec. 2011*	Phase II **Shaping the Direction** *Jan. – Dec. 2012*	Phase III **Building the Strategy** *Jan. 2013 – Dec. 2014*

TECHNICAL WORK AND POLICY DEVELOPMENT	▪ Participate in development of Statewide Transportation Strategy and transportation-related carbon emissions reduction target for the region *(LCDC adoption by June 2011)*
	▪ Develop tools and enhance regional data, tools and methods
	▪ Define outcomes-based criteria and 2040 development typologies
	▪ Research local and regional climate strategies to be tested
	▪ Evaluate "broad-level" scenarios with GreenSTEP to learn "what it will take" to meet state target and understand the potential challenges, opportunities, tradeoffs and effectiveness of different strategies
	▪ Prepare the region's findings and recommendations for the 2012 Legislature and Phase II
		▪ Evaluate more tailored alternative scenarios with Envision Tomorrow applying the lessons learned from Phase I and incorporating strategies identified in local and regional planning efforts that are underway
		▪ Continue to develop and enhance regional data, tools and methods; refine evaluation criteria, as needed
		▪ Prepare the region's findings and recommendations for narrowing the range of alternatives, and prioritizing and phasing strategies to be included in the preferred scenario
		▪ Consider amending the 2035 RTP
			▪ Evaluate the preferred scenario with regional models
			▪ Prepare the region's findings and implementation recommendations
			▪ Recommend a preferred land use and transportation strategy and needed changes to regional and local plans to support implementation
			  ○ Regional Framework Plan and 2040 Growth Concept
			  ○ Regional Transportation Plan
			  ○ Regional Functional Plans
			  ○ Local transportation system plans, comprehensive plans and land use regulations

ENGAGEMENT	▪ Conduct focus groups, public opinion research and targeted stakeholder outreach on values, beliefs and climate strategies *(Winter 2011)* ▪ Convene region's elected officials and community leaders on policy choices and tradeoffs *(Spring and Fall 2011)* ▪ Conduct stakeholder outreach on preliminary findings *(Fall 2011)*	▪ Continue stakeholder outreach on findings and recommendations *(Winter 2012, Fall 2012)* ▪ Convene subarea scenario planning workshops *(Spring-Summer 2012)* ▪ Conduct focus groups on choices and tradeoffs *(Spring 2012)* ▪ Convene region's elected officials and community leaders to provide input on preferred scenario *(Fall 2012)*	▪ Conduct stakeholder outreach on findings and recommendations *(Spring 2013)* ▪ Convene region's elected officials and community leaders to provide input on preferred scenario *(Fall 2013)* ▪ Conduct stakeholder outreach and public review of preferred strategy as part of RTP update *(Spring 2014)*
MILESTONE	▪ Confirm scenario evaluation approach and policy assumptions to test *(MPAC, JPACT and Council by June 2011)* ▪ Approve findings and recommendations report for consideration by the 2012 Legislature and Phase II *(MPAC, JPACT and Council in Dec. 2011)*	▪ Report findings and make recommendations to the 2012 Legislature (*Jan. 2012*) ▪ Approve policy recommendations to direct development and evaluation of preferred scenario *(MPAC, JPACT and Council by Dec. 2012)*	▪ Release preferred land use and transportation strategy for public and stakeholder review *(March 2014)* ▪ Approve preferred land use and transportation strategy *(June 2014)* ▪ Approve updated regional plans and policies, and new local government implementation requirements *(; Dec. 2015)*
RELATED METRO ACTIONS	▪ Portland-Vancouver Greater Indicators, June 2011 ▪ Regional Flexible Fund Allocation, Dec. 2011 ▪ Draft. East Metro Connections Plan Investment Strategy, Dec. 2011 ▪ Urban Growth Boundary decision, Dec. 2011	▪ 2040 regional growth forecast, Jan. 2012 ▪ East Metro Connections Plan Investment Strategy, March 2012 ▪ Active Transportation Action Plan, June 2012 ▪ Regional Transportation Plan Update Work Plan, Dec. 2012 ▪ Draft SW Corridor Plan Investment Strategy, Dec. 2012	▪ SW Corridor Plan Investment Strategy, June 2013 ▪ Federal Regional Transportation Plan, June 2014 ▪ Urban Growth Report, Dec. 2014 ▪ *State Regional Transportation Plan, Dec. 2015* ▪ *Functional plans, Regional Framework Plan and 2040 Growth Concept amended, Dec. 2015*

April 11, 2011