

DRAFT

**OREGON MODELING STEERING COMMITTEE
FISCAL YEAR 2009-2010 ANNUAL REPORT**

This report summarizes the activities completed in fiscal year (FY) 2009-10 (July 1, 2009-June 30, 2010) to accomplish the mission of the Oregon Modeling Steering Committee (OMSC). It summarizes progress on the five-year Strategic Implementation Plan completed in June 2002. OMSC annual reports, its strategic plan, annual reports, work programs and quarterly minutes are available on the ODOT website at <http://www.odot.state.or.us/tddtpau/modeling.html>.

MISSION STATEMENT

It is the mission of the Oregon Modeling Steering Committee to:

- Improve the state-of-the-practice and promote state-of-the-art land use and transportation modeling in the state of Oregon.
- Serve as a consensus forum and support group to coordinate the land use-transportation modeling efforts of federal, state, regional and local agencies.

The following goals guide the OMSC in meeting its mission:

Goal 1: Support to Decision-makers – Provide technical information and analyses to support informed decision-making.

Goal 2: Communication and Coordination – Provide a forum for exchange of ideas and to encourage use of and share current and future technology

Goal 3: Technical Excellence – Support research, development and application of models at the local, regional and statewide level, to improve and expand capabilities, integration and use of transportation models statewide.

Goal 4: Education and Training – Proactively promote and educate modelers on the capabilities of transportation modeling as an analytical tool to support decision-making, through coursework, training, symposiums and case studies. Inform policy-makers of analysis as an objective technical support for decision-making.

Goal 5: Peer Coordination and Support – Serve as a technical and professional support group to members, agencies, local governments, consultants and others to further transportation modeling knowledge and expertise, and to maximize resources.

MEMBERSHIP

The OMSC is composed of policy and technical representatives of the following organizations. FY2009-10 members of the OMSC included:

- OR Department of Administrative Services-Office of Economic Analysis (OEA) – Tom Potiowsky
- OR Department of Energy (ODOE) - Bill Drumheller/Rick Wallace
- OR Department of Environmental Quality (ODEQ) - Dave Nordberg
- OR Department of Land Use and Conservation (DLCD) - Bob Cortright
- OR Department of Transportation (ODOT) - Brian Dunn/Bill Upton
- Portland Metro – Dick Walker/Dennis Yee
- Mid-Willamette Valley Council of Governments (MWVCOG) – Mike Jaffe/Ray Jackson
- Lane Council of Governments (LCOG) - Susan Payne
- Rogue Valley Council of Governments (RVCOG) - Vickie Guarino/Dan Moore
- Corvallis Area Metropolitan Planning Organization (CAMPO) – Ali Bonakdar
- Bend Area Metropolitan Planning Organization (BAMPO) – Tyler Deke
- Southwest Washington Regional Transportation Council (RTC) - Dean Lookingbill/Shinwon Kim
- Port of Portland (POP) – Scott Drumm/Derek Jaeger
- Federal Highway Administration (FHWA) – Satvinder Sandhu
- Oregon Transportation Research & Education Consortium (OTREC) – Jennifer Dill/John Gliebe

ORGANIZATION

The OMSC completes its work through standing and special topic (ad hoc) subcommittees and through broad discussions at quarterly meetings of the full committee (see graphic at end of report). The OMSC met four times in FY2009-2010 – July 15 and October 21, 2009 and January 20 and April 21, 2010.

The OMSC approved program goals for FY2010-2011 as targets for the OMSC and its subcommittees. Program goals for the OMSC and its subcommittees are included on the OMSC website at <http://www.odot.state.or.us/tddtpau/modeling.html>

Officers serve for a two-year period. Officers for FY2010-2012 are:

- OMSC Chair, Bill Upton/ODOT
- OMSC Vice-chair, Dave Nordberg/ODEQ
- Long-Range Strategy Standing Subcommittee Chair, Bill Upton/ODOT
- Professional Development Standing Subcommittee Chair, Ray Jackson/MWVCOG
- Applications Standing Subcommittee Chair, Brian Dunn/ODOT
- Modeling Program Coordination Standing Subcommittee Chair, Dick Walker/Metro

OMSC STANDING COMMITTEE ACCOMPLISHMENTS

The accomplishments of the four standing subcommittees are summarized here.

Long-range Strategy – *Bill Upton/ODOT, Chair, Dave Nordberg/ODEQ, Vice-chair*

Purpose: Responsible for annual work planning, strategic activities and OMSC membership.

Annual Report and Work Planning

- Prepared an annual report to document OMSC activities for FY2009-2010
- Developed program goals to guide OMSC and subcommittee activities for FY2010-2011.

Strategic Activities

- The OMSC Chair represents the OMSC on the OTREC Board of Advisors.
- The OMSC Chair meets regularly with OTREC staff to discuss joint opportunities for OTREC/PSU, ODOT and other OMSC members.
- Helped establish an Oregon Modeling Collaboration (OMC) at Portland State University and received a two-year \$217,000 grant from OTREC to initiate the program.

Membership

- There were no membership changes in FY2009-2010.

Professional Development – *Ray Jackson/MWVCOG, Chair*

Purpose: Address technical model development, education, training and quality control.

- The Oregon Modeling Users Group met on December 10, 2009 and June 10, 2010.
- Topics discussed at the OMUG meetings included:
 - Applications of the GreenSTEP model
 - Model enhancements, including transit data collection and analysis
 - Calculating vehicle miles travelled/Capita, with a focus on subareas.
 - Portland Travel Survey, Park-n-Ride Data Analysis
 - Oregon Freight Plan
 - Statewide Integrated Model-generation 2 (SWIM2) visualization tool
- Remote participation capabilities allowed more participation from interested parties in all parts of Oregon.

Applications - *Brian Dunn/ODOT, Chair*

Purpose: Address the environment and criteria under which models are applied, i.e., regulatory requirements and general application. Focal point for peer review and research.

Peer Review

- Conducted a formal peer review for the Albany Area model. This was the first peer review of the Oregon Small Urban Models (OSUM) model structure.
- Conducted peer reviews for the Corvallis-Albany-Lebanon model (CALM), and the Marion County regional model. Participants included members of the OMSC and consultants.
- Peer panelists received a presentation by John Gliebe on the status of the Dynamic Activity Simulator for Households (DASH) that he is developing at PSU, and by Joel Freedman on the SWIM2 Transport Module (PT).

Research

- The MPC held a special meeting to identify possible research topics.

Modeling Program Coordination Subcommittee, Dick Walker/Metro, Chair

Purpose: Provide a technical and interactive forum for discussion of model development and application issues for MPOs and ODOT.

- ODOT and MPOs regularly shared information on modeling projects and issues.
Topics discussed included:
 - Bills passed in the 2009 legislative session and how they will affect modeling and analysis, especially as they relate to climate change issues.
 - Update on development of SWIM2, being used for the Marion County regional model, the Oregon Rail Plan, and for other freight modeling.
 - Update on Metro projects, including the Metro Bike Model improvements and peer review of Metro modeling practices.
 - OMSC coordination and cooperation through Intergovernmental Agreements (IGAs) between ODOT and all Oregon MPOs.
 - Dynamic Traffic Assignment (DTA) research and case studies. Metro wants to use DTA, a procedure to visualize traffic flow on roadway segments with a more dynamic/temporal dimension, to address greenhouse gas emissions reductions required in HB 2186.
 - Best practices for Household-Income-Age (HIA) calculation, a key ingredient in trip generation and mode choice in modeling work.
 - Emergency Ride Home data and updates on the Oregon Household Activity Survey.
 - Review of sketch planning modeling tools being used by Metro and LCOG.
- Held a special meeting to look at common needs for modeling and analysis research for tools, data, land use allocation models and other topics. The intent was to identify research projects that can be accomplished together, as opposed to individual needs of OMSC members. This list of research projects will be available to the Oregon Modeling Collaborative.
- Conducted a survey of greenhouse gas emissions modeling/analysis needs of OMSC members.
- Held a special meeting to talk about the Oregon modeling program, how to make it more agile, and visions of where it should go in its next generations.

AD HOC SUBCOMMITTEE ACCOMPLISHMENTS

Ad Hoc subcommittees are chaired by an OMSC member but usually include broader membership than the OMSC. They are formed to address specific and complex issues, where personnel or expertise beyond the OMSC is desirable. Ad Hoc Subcommittees in FY2009-2010 included:

Oregon Household Activity Survey (OHAS) Subcommittee – Bill Upton/ODOT, Dick Walker/Metro, Co-Chairs

Purpose: Provide oversight for development and implementation of the Oregon statewide survey.

- Held meetings with the consultant team to provide overall direction to the OHAS and to review staff and consultant recommendations and information.
- Survey status as of June 30, 2010:
 - RTC, LCOG and all ODOT regions except Region 1 completed surveys.
 - MWVCOG initiated its survey.
 - Portland Metro and ODOT Region 1 will begin a survey in spring 2011, with additional surveys in fall 2011.
 - Bend and RVCOG will conduct surveys in 2011.
 - Corvallis is not participating in OHAS but ODOT collected almost 300 surveys for the Corvallis area as part of its Region 2 survey.
- OMSC is working with PSU to establish a data storage, maintenance and access program.

Oregon Modeling Users Group (OMUG) Subcommittee – Ray Jackson/MWVCOG, Chair

Purpose: Facilitate and encourage broad discussion and ideas on development and implementation of Oregon models throughout the Oregon modeling community.

- See summary under Professional Development Subcommittee.

Climate Change Subcommittee (CCS) – Bill Upton/ODOT, Dave Nordberg/ODEQ, Co-chairs

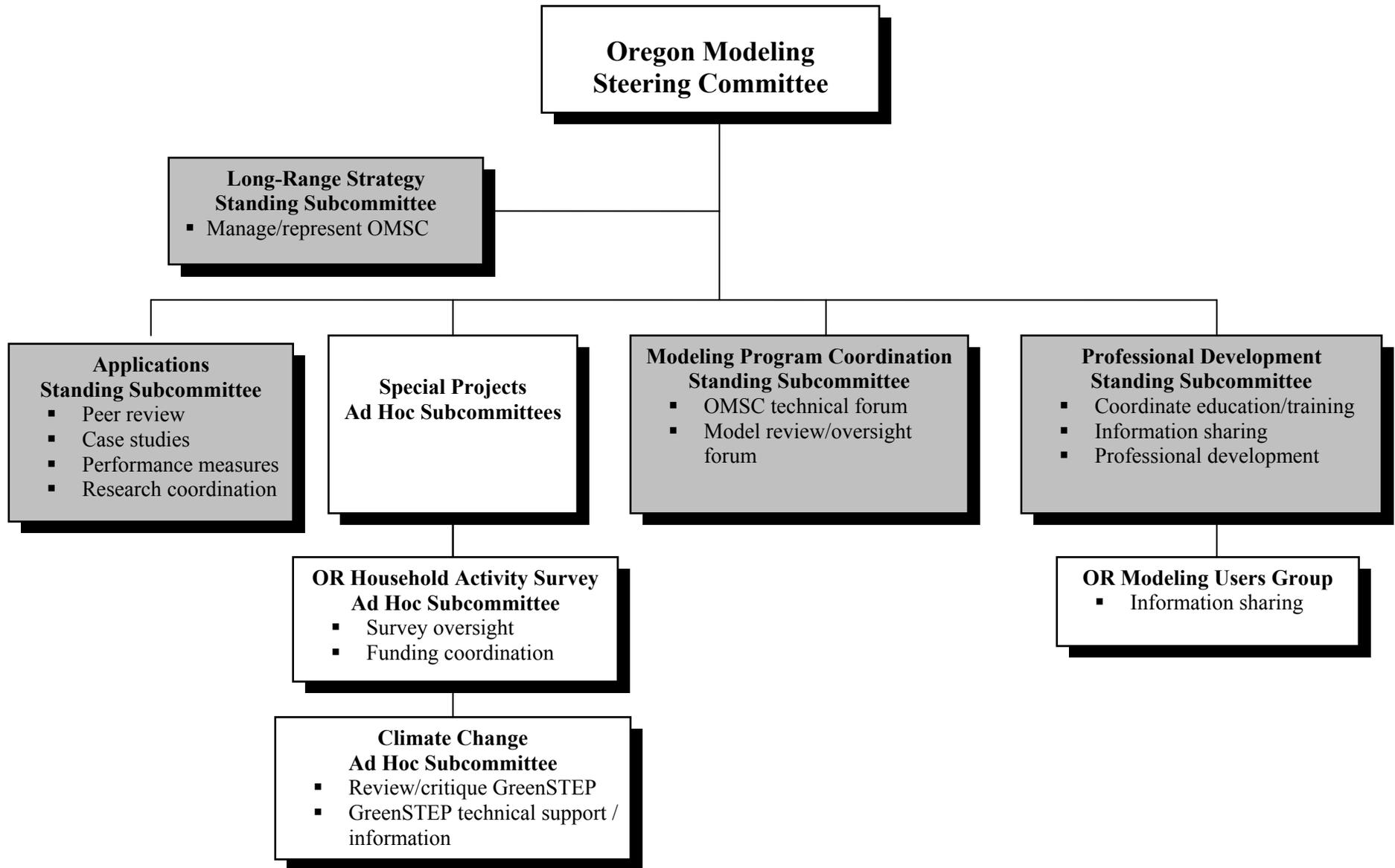
Purpose: Coordinate and provide technical guidance and oversight for model development and applications, and communicate results of analysis of greenhouse gas emissions (GHG) and climate change. In the short-term, provide independent review of modeling tools, review results and presentations, and generally advise the Global Warming Commission and its Transportation & Land Use Committee (T&LUC) on the development and use of these tools and analyses to achieve immediate objectives. In the long-term, coordinate technical efforts for model development, consistency of application among different models and areas of the state, input assumptions, and other actions necessary to integrate GHG into the Oregon modeling program.

- A broad-based subcommittee of agency staff and consultants, with experience and expertise in climate change analysis, provided ODOT staff with peer review, information and recommendations to support the GreenSTEP model development and application.
- Held a final meeting for the short-term subcommittee to review GreenSTEP applications and the documentation report. This subcommittee will transition to address directives from the 2009 and 2010 legislative sessions.

OTHER ACTIVITIES

- Quarterly meetings provide an opportunity to build relationships and informally discuss issues of mutual interest.

- ODOT staff provided an overview of the 2009 legislative session and the 2010 special session, including House and Senate bills relating to analysis and reduction of greenhouse gas emissions, and least cost planning. OMSC members provided regular updates on efforts to address legislative directives.
- Becky Knudson, project manager, provided regular updates on OHAS activities.
- Received regular updates on the Metro Research Center Strategic Plan.
- Satvinder Sandhu provided an overview of organization and staff changes at FHWA.
- Brian Gregor provided regular updates on the deliberations of the Legislative Task Force on House Bill 2186 and on ODOT modeling and analysis of greenhouse gas emissions policy issues.
- Mike Hogle, Metro Research Director, talked about how Metro is responding to House Bills relative to greenhouse gas emissions from the 2009 legislative session.
- OMSC members brainstormed on communication challenges for technical and policy people to work together effectively.
- Round-table discussions kept members abreast of ongoing OMSC member activities.
- OMSC members shared information on upcoming conferences



FY2009-10 Organization Chart for the Oregon Modeling Steering Committee