

OREGON MODELING STEERING COMMITTEE FISCAL YEAR 2008-2009 ANNUAL REPORT

This report summarizes the activities completed in fiscal year (FY) 2008-09 (July 1, 2008-June 30, 2009) 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 technical and policy representatives of the following organizations. FY2008-09 members of the OMSC included:

- OR Department of Administrative Services-Office of Economic Analysis (OEA) – Tom Potiowsky/Dae Baek

- OR Department of Economic and Community Development (OECDD) – John Gorlorwulu
- OR Department of Environmental Quality (ODEQ) - Dave Nordberg
- OR Department of Housing and Community Development (OHCDD) – Members retired with no OMSC replacement.
- OR Department of Land Use and Conservation (DLCD) - Bob Cortright
- OR Department of Transportation (ODOT) - Brian Dunn/Bill Upton
- OR Governor's Economic Revitalization Team (GERT) - Gabrielle Schiffer
- Portland Metro – Dick Walker/Dennis Yee
- Mid-Willamette Valley Council of Governments (MWVCOG) – Mike Jaffe/Ray Jackson
- Lane Council of Governments (LCOG) - Bud Reiff/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
- Portland State University (PSU) – Robert Bertini/John Gliebe

Membership was updated in 2009 and the following changes were approved:

- The Oregon Transportation Research and Education Consortium (OTREC) replaced Portland State University since it represents a broader academic community. Members will continue to be Rob Bertini and John Gliebe.
- The Oregon Department of Energy (ODOE) was added as a new member bringing expertise on greenhouse gas (GHG) and climate change issues. Bill Drumheller and Rick Wallace are new OMSC members.
- The Governor’s Economic Revitalization Team was dropped from OMSC membership. Previous staff was active in the OMSC and looked at the OMSC as a way to promote transport modeling with agency directors, the Governor’s office, and ERT field teams. Staff has changed over the years and other mechanisms for cooperation are more appropriate.
- The Oregon Housing and Community Services Department was dropped from OMSC membership. The OHCS OMSC members retired and their modeling interests and expertise were not replaced.
- The Oregon Economic & Community Development Department was dropped from OMSC membership. OECDD functions for community development were shifted to OHCS and OECDD retained the business development function, which does not use transport modeling.

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 FY2008-2009 – July 16 and October 15, 2008 and January 21 and April 15, 2009.

The OMSC approved program goals for FY2008-2009 as targets for the OMSC and its subcommittees. Program goals for the 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 FY2008-2010 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, Bud Reiff/LCOG (2008-2009) and Brian Dunn/ODOT (2009-2010)
- 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

- An annual report was prepared to document OMSC activities for FY2008-2009
- Program goals were developed to guide OMSC and subcommittee activities for FY2009-2010.

Strategic Activities

- The OMSC Chair represents the OMSC on the Board of Advisors of the Oregon Transportation Research and Education Consortium (OTREC).
- Bill Upton meets regularly with OTREC staff to discuss joint opportunities for OTREC/PSU, ODOT and other OMSC members.
- A Steering Committee was formed to gather information and make recommendations on establishing a modeling center at PSU.
- A Climate Change Ad Hoc Subcommittee was established to coordinate and provide technical oversight for model development and applications, and to communicate results of analysis of greenhouse gas (GHG) emissions and climate change. This Subcommittee was formed to support the Governor's Global Warming Task Force

Transportation and Land Use Subcommittee, which requested assistance in modeling GHG to support legislative initiatives in the spring of 2009.

Membership

- A thorough review was conducted to update OMSC membership.
- MPO representatives leaving the OMSC include Matt Hermann/RVCOG and Bud Reiff/LCOG.

Professional Development –Ray Jackson/MWVCOG, Chair

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

- The Oregon Modeling Users Group met on December 4 and June 11.
- Topics discussed at the OMUG meetings included:
 - Overview of the Oregon Household Activity Survey (OHAS).
 - A review of the literature by a PSU professor on elasticities of what happens when gas prices increase with respect to transportation and land use changes.
 - An overview of updates to the Metro model, including different value of time for different modes, central city tourist and event surveys, and park-and-ride lot choice.
 - A technical overview of the GreenSTEP model.
- Opportunities to share information from the annual meeting of the Transportation Research Board and other conferences were explored.

Applications - Bud Reiff/LCOG (2008) and Brian Dunn/ODOT (2009), 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

- Formal peer reviews were conducted for the Bend Area and Rogue Valley MPO models. Participants included members of the OMSC and consultants.

Research

- LCOG coordinated with OTREC and the OMSC to propose a research project to explore practical software and procedures for multi-level modeling of regional travel demand and traffic simulation in urban corridors. This research proposal was submitted to the ODOT Research Unit for FY2008-2009 funding consideration.
- Metro and PSU are doing follow-up to the research conducted by Jennifer Dill/PSU on route choices by bicycle users, to see how Jennifer's research can be used to improve models for bicycle route and mode choice.
- The Subcommittee maintains a list of on-going and proposed research projects that can be consulted when projects are solicited by ODOT or OTREC or when new funding or in-kind staff resources become available.

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:
 - Regular technical updates on the progress of the second generation of the Statewide Integrated Model (SWIM).
 - Discussed the Oregon Progress Board Performance Measure (PM) relative to Vehicle Miles Traveled per capital in Oregon metropolitan areas for local non-commercial trips. This PM is intended to support the goal to *Move People and Goods Efficiently*.
 - Discussed how to model fuel price increases.
- Worked with the Oregon Household Activity Survey (OHAS) Subcommittee on development of the OHAS. The OHAS is a major effort for the MPC and the OMSC.
- Identified the top issues to be addressed in 2009, to identify overlaps and to look for opportunities for coordination and cooperation.

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 FY2008-2009 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.

- A 300 survey pilot study was conducted to provide information for the full survey.
- Agreement was reached on core survey questions and opportunity will be provided for five additional local questions to be included as part of the basic survey cost.
- Contracts with all survey participants continue to be negotiated, with ODOT as the general project manager and point of contact between the consultant team and participating agencies.
- Several meetings were held with the consultant team to provide overall direction to the OHAS and to review consultant recommendations and information.
- Phase I data collection was started in April 1 and was completed for non-MPO areas in ODOT Regions 3 and 4 and was started in Region 2. Phase 2 will begin in fall 2009 and will include completion of Region 2 non-MPO area data collection and the LCOG MPO area.

**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**

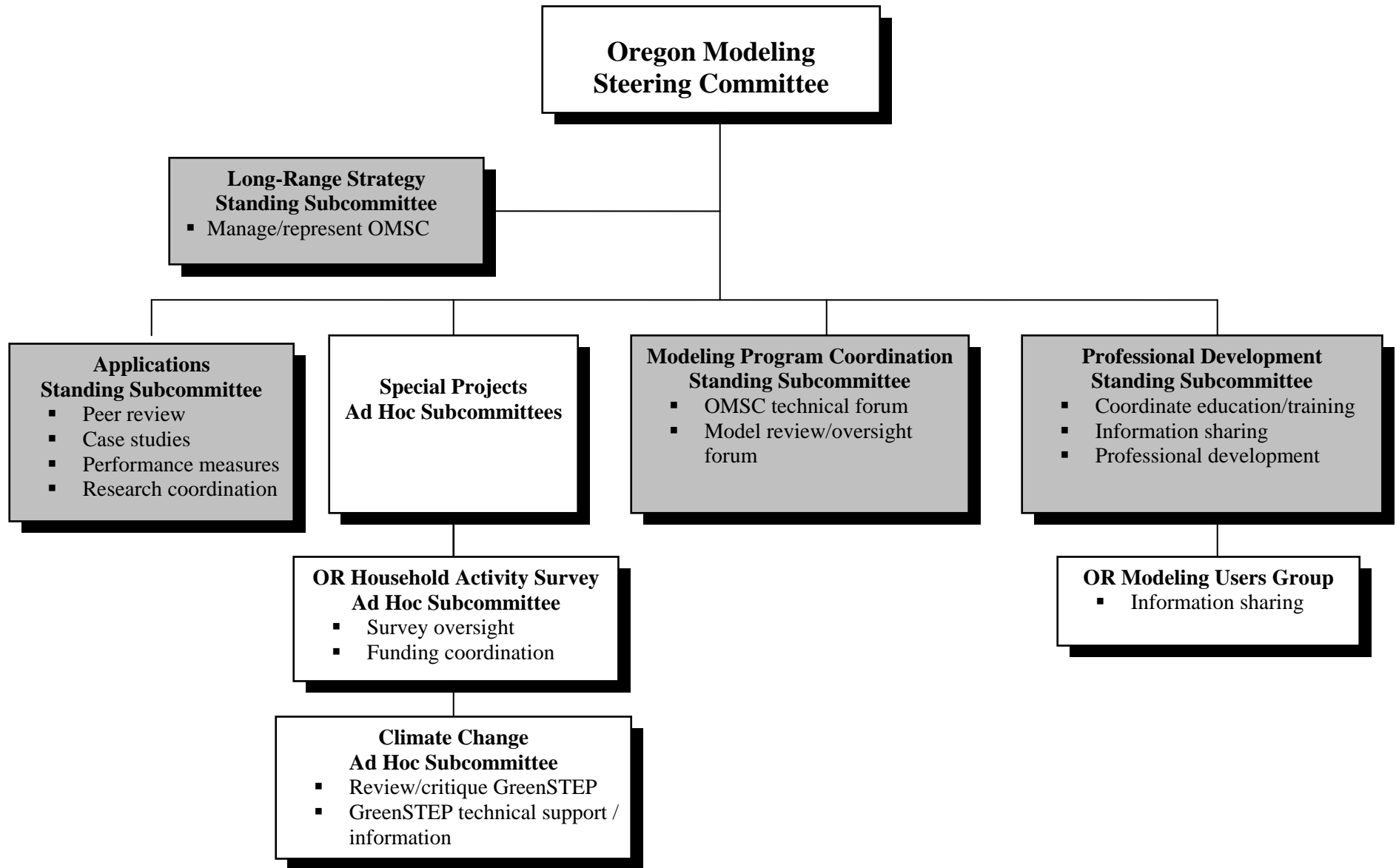
Purpose: Coordinate and provide technical guidance and oversight for model development and applications, and communicate results of analysis of greenhouse gas emissions (GHG) and climate change. In the short-term, provide independent review of modeling tools, review results and presentations, and generally 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 was formed to bring together agency staff and consultants with experience and expertise in climate change analysis.
- Three meetings were held to review T&LUC requirements and to review and critique the approach and development of the ODOT Greenhouse gas State Transportation Emissions Planning Model (GreenSTEP).
- CCS committee members provided information and recommendations to support the GreenSTEP model development and application.

OTHER ACTIVITIES

- ODOT provided regular updates on the status of the Statewide Integrated Model.
- The OMSC was updated on the activities of the OTREC. The three OTREC themes are integrated land use and transportation modeling, healthy communities, and advanced technology.
- John Kaufmann, Senior Policy Analyst in the Conservation Division of the OR Department of Energy, gave a presentation on *Peak Oil: Causes and Prospects*.
- The OMSC sponsored an afternoon session for local and state policy-makers and OMSC members to discuss modeling trends in Oregon and elsewhere. This included Oregon practice, innovations in Oregon and elsewhere, modeling concepts, and how Oregon should proceed with future modeling. A reception, sponsored by Portland State University, followed the OMSC meeting.
- Mike Hoglund, Director of the new Metro Research Center, talked about the Center and brainstormed on how it can work effectively with the OMSC.
- Bill Upton and Brian Dunn discussed the TPAU Strategic Planning effort and implementation strategies.
- Regular updates were provided by the Steering Committee formed to investigate and make recommendations on an Oregon Modeling Center at PSU

- PSU and the OMSC sponsored the 5th Oregon Symposium on Integrated Land Use-Transport Models.
- Brian Gregor/ODOT presented an overview of the Greenhouse gas State Transportation Emissions Planning Model (GreenSTEP), developed to support the Oregon Global Warming Commission in its charge to consider statewide scenarios to manage greenhouse gas emissions from the transportation sector.
- The OMSC hosted a forum to discuss a tolling and pricing white paper that was prepared for ODOT on demand projection sufficiency of the Oregon modeling program.
- The OMSC supported a Transportation Research Board research proposal submitted by Kittelson & Associates, with Metro, PSU and others to tie together several research elements, including tolling, reliability and capacity.
- The OMSC supported redesignation of OTREC in the upcoming authorization of the Federal surface transportation bill.
- Information was shared on the following conferences:
 - June 2-5 – USEPA 17th International Emissions Inventory Conference, Portland
 - June 19-20, 5th OR Symposium on Integrated Land Use-Transport Models, Portland
 - June 22-24, TRB Innovations in Transportation Modeling (ITM), Portland
 - September 17-19, Transport Planning for Small to Medium Cities, Portland
 - January 11–15, TRB 88th Annual Meeting, Washington, D.C.
 - April 30-May 1 - 10th Annual PTV Vision Users Group Meeting, Portland, OR
 - May 17-21 - TRB Transportation Planning Applications Conference, Houston, TX.
 - May 19 – Research Workshop on the 2nd Strategic Highway Research Program, Portland, OR.
- Quarterly meetings provide an opportunity to build relationships and informally discuss issues of mutual interest.



FY2008-09 Organization Chart for the Oregon Modeling Steering Committee