OREGON MODELING STEERING COMMITTEE
Fall 1999-Fall 2000 ANNUAL REPORT
NOVEMBER 29, 2000 QUARTERLY MEETING

The Oregon Modeling Steering Committee (OMSC) is composed of technical and policy representatives of the following organizations:

- Metro
- Mid-Willamette Valley Council of Governments (MWVCOG)
- Lane Council of Governments (LCOG)
- Rogue Valley Council of Governments (RVCOG)
- Oregon Department of Administrative Services (DAS)
- Oregon Department of Economic and Community Development (OECDD)
- Oregon Department of Environmental Quality (ODEQ)
- Oregon Department of Housing and Community Development (OHCDD)
- Oregon Department of Land Use and Conservation (DLCD)
- Oregon Department of Transportation (ODOT)
- Federal Highway Administration (FHWA)

The OMSC completes its work through standing and special topic subcommittees and through broad discussions at quarterly meetings of the full Committee. Standing subcommittees include: technical advocacy, communications, peer review, and education/training. This annual report summarizes the activities and accomplishments completed over the last year to accomplish the mission of the OMSC.

MISSION STATEMENT

It is the mission of the Oregon Modeling Steering Committee to coordinate the transportation modeling efforts of state, regional and local agencies, and to serve as a consensus forum and support group with the goal of improving the state-of-the-practice and promoting state-of-the-art transportation modeling in the state of Oregon. The Committee cooperates with the Transportation Modeling Users Group. Integration of land use and transportation is a major focus of the Committee.

This mission is accomplished through five primary efforts: technical advocacy; technical support for decision-making; education and training; peer coordination and support; and communication.

OMSC ACCOMPLISHMENTS

For this annual report period, the OMSC met four times - in November 1999, February, May, and August 2000. Following are the accomplishments of each of the Standing Subcommittees over the year.

Technical Advocacy - *Bill Upton/ODOT and Dick Walker/Metro, Co-chairs*

- Metro combined survey data from LCOG, MWVCOG and the Portland region to develop a more robust auto ownership model than possible when only regional data is used as part of the transferable model structures.
- Building on the success of the auto ownership model, Metro, LCOG, MWVCOG, RVCOG and ODOT cooperatively developed a Joint Model Estimation to build consistent urban area models that use the breadth of data available throughout the Valley. This is still in process and the scope of work may be expanded.
- ODOT is analyzing rural data sets to develop Joint Model Estimations for rural applications. This process will be applied broadly to replace individual city models in rural areas, and to provide an effective and more efficient method of modeling for smaller jurisdictions.
- ODOT and Metro have been exploring a more technical method for analyzing urban form and it's impact on transportation. This work and the joint model estimation efforts are being explored as opportunities to test urban form variables and a TGM grant will be sought in FY01 to complete this work.
- Meetings and conference calls have been held between Metro, the Port of Portland and the Generation II consultant team to coordinate an update of the commodity flow control totals (tons, mode, domestic vs. international, etc.) with the Gen II work plan to provide information that supports the needs for each study. The commodity flow control totals are budgeted to be updated in FY01.
- Metro and ODOT conducted a speed study to collect data to determine relationships between volume, capacity and speed and compare with speed delay. Findings from both the GPS Corridor Study and the Intersection Delay Study will be combined to develop delay functions that reflect the observed operating conditions.
- Six grant applications were submitted for research projects under the federal Transportation and Community and System Preservation (TCSP) program, and six applications were submitted to ODOT for consideration under the State Planning and Research (SPR) program, with a total of 9 different proposals submitted. The Salem MPO also submitted three applications for SPR funding**.**
- The first Oregon Modeling Improvement Program (OMIP) five-year strategic plan was prepared by ODOT to guide future development of its modeling program. As the plan evolved, it was clear that all OMSC participating agencies were integral to the success of the Oregon modeling program. The plan was therefore expanded to identify areas where OMSC members and the OMSC as an entity had roles and responsibilities in modeling in Oregon. An update to this strategic plan is in process.
- All OMSC members were interviewed to identify current modeling activities; staff and funding resources available and needed; future needs and opportunities. This information was used to update the OMIP strategic plan.
- OMSC sponsored a meeting of the RVCOG, LCOG, MWVCOG, Metro and ODOT to coordinate the statewide modeling element of the 2001-02 Unified Planning Work Programs.
- OMSC served as a resource and coordinating forum for development and implementation of the Generation I of the statewide model.

Peer Coordination - ***Bud Reiff/LCOG, Chair***

- The subcommittee coordinated peer review of the model for the Salem-Keizer Alternative Transportation Study (SKATS).
- A "road show" by the US Census Bureau staff was held on November 18, 1999 in anticipation of the 2000 Census program.
- Peer review of the RVCOG model was coordinated by the subcommittee.

Education/Training - ***Dick Walker/Metro and Bill Upton/ODOT, Co-chairs***

- ODOT hosted INRO training and interim and advanced courses on Demand Modeling and Modeling for Non-Modelers.
- MVCOG conducted training on Modeling for Non-Modelers
- Oregon sponsored the 2nd Oregon Modeling Symposium on July 18-20, 2000 in Portland. The program included several national and international experts and was attended by 140 people from 7 countries and 21 states.
- ODOT is coordinating training for transportation and land use integration in mid-November, including a two-day session on the theory of integration, a one-day class on TRANUS, and one day on UrbanSim.

Communications, ***Nick Fortey/FHWA and Mike Jaffee/MVWCOG, Co-chairs***

- Formal presentations on the Oregon Model Improvement Program (OMIP) were made to both policy and technical staff of FHWA, Federal Transit Administration (FTA), and Environmental Protection Agency (EPA) in Washington DC in March 2000. The Oregon delegation included ODOT, Metro and the Port of Portland and the presentation focused on what Oregon is doing that is different than other parts of the country, and peer cooperation.
- A detailed notebook was prepared summarizing the OMIP for distribution at the Washington DC meeting.
- Presentations on preliminary results of the Oregon model were given to the Statewide Model Applications Project (SMAP) Subcommittee of the OMSC, the Governor's Community Solutions Team (CST), and the OMSC. This served as an information and education effort as well as the opportunity to practice for the Washington DC presentations.
- Oversight and comment on the presentations of the statewide model results were provided by the OMSC. OMSC members of CST agencies previewed the material to be a resource to their respective Directors and to brief them on the model and its capabilities.
- A communications plan was prepared describing tasks and products for three tasks: describing the use and application of transportation modeling tools; describing and marketing the technical skills of Committee members; and information sharing
- A brochure was prepared to describe the OMIP and the OMSC and letterhead listing all OMSC member agencies was developed.
- FHWA provided $16,000 to assemble information on what ODOT has done on modeling to put this information in a form that can be used by others. FHWA will distribute this information through the federal Transportation Model Improvement Program (TMIP) and will include an outreach to EPA and others that may be interested. This is still in process

- FHWA provided funding to videotape the 2nd Oregon Symposium presentations.
- Discussions were started on the next presentation to Washington DC policy makers and technical staff on Generation II of the statewide model.

Several special topic subcommittees were also formed to address specific projects or issues.

Statewide Model Application Project (SMAP) - *Bill Upton/ODOT, Dick Walker/Metro co- chairs*

This subcommittee brought together Willamette Valley MPOs, ODOT, and project sponsors to apply the statewide model to three projects:

- I-5 Corridor Study - Provided modeling runs at all intersections and coordination for information sharing.
- I-5 Trade Corridor Study - Provided a forum for information, will be more involved in modeling activities in Phase II to look at alignment between the Metro and the statewide model.
- Willamette Valley Forum (WVF)/Alternative Transportation Futures Project (ATF) – Completed model runs for five land use/transportation scenarios – major transit investment; major highway investment; mileage tax for Willamette Valley travel; more stringent urban growth boundary (UGB) and a "historical trend" reference case. The results of these were evaluated and two hybrid alternatives were developed for consideration at the November WVF meeting. A separate report summarizing the results of the SMAP process will be prepared at the conclusion of the project.

Alternative Land Use Plan Performance Measures - *Bud Reiff, Chair*

The purpose of this subcommittee was to discuss Vehicle Miles Traveled (VMT) requirements of the Transportation Planning Rule (TPR) and to find a more scientific measure to quantify VMT reduction for mixed-use development (other than a 10 percent model reduction as suggested by DLCD.

Issues that are being discussed include:

- DLCD is proposing that local jurisdictions claim a 10 percent reduction for transit-oriented development (TODs) as a credit to encourage this type of development. This does not necessarily ensure an air quality credit of 10 percent. The question was asked, if a variety of different standards are put in place instead of the current TPR requirement, will there be problems in air quality modeling in the future because of different land use assumptions? Will MPOs be put in the position of using different models to meet TPR requirements and for air quality conformity determinations?
- This forum provides an opportunity for COGs to discuss alternatives with input from various state agency perspectives.
- Discussion is beginning on forming a longitudinal panel study to determine the impact of telecommunications on transportation and land use.
- Age of data is a limitation in use of models to address these issues.
- Most decision-making on infrastructure development occurs at the local jurisdiction level and there is not consistent application of standards and regulations.

- A study is being conducted to evaluate existing research to address assumptions of the TPR and to look at alternatives to the VMT rule.
- A goal is to eliminate the need for post processing: what are the things that need to be in the model to be most responsive? What else can be added to make the model better?

Calibration/Validation Documentation - *Nick Fortey/FHWA and Dave Nordberg/DEQ, Co-chairs*

As emphasis increases on management and operation of the transportation system, more focus on environmental justice and other impacts of transportation projects will occur nationwide. If there is a legal challenge regarding air quality conformity, it will be at the MPO level. FHWA is seeing increased emphasis on Clean Air Act conformity analysis and documentation for Conformity Determinations is important if a lawsuit occurs. The OMSC is working toward developing a standard process for model calibration and validation, and is exploring funding to pursue this effort.

ON-GOING ISSUES/DISCUSSIONS

US Census and Other Surveys - Discussion on changes to US Census survey procedures and frequency, and general discussion on sources of information.

Statewide and MPO Model Interface - Addressing the areas of interaction of the statewide model and MPO models to identify what agencies/jurisdictions participate and how they participate in the modeling process.

Use of Statewide Model in Local Planning Process - DLCD has requested assistance from OHCSD to define statewide planning Goal 10-Housing and OECDD is defining Goal 9-Economic Development for periodic review evaluation. There is an opportunity to define linkages between the statewide model and how cities and counties can use the model for periodic review. Defining how the model will be used for periodic review should be a goal of the program. Other agencies are required to do plans for federal funding and other purposes and there is no direct connection to the statewide model. Land use planning is done at the local level so if the statewide model is going to be useful for land use planning, the model should be accessible at the local level. This is an important element for policy makers.

Population and Employment Forecasting - The statewide model is designed to do statewide forecasting including forecasting for transportation investment. How this can be used for comprehensive planning and how it coordinates with the Office of Economic Analysis (OEA) needs to be defined. Where major transportation investments occur affect where population and employment locates and this information should be considered when population and employment forecasting is done. How to work together as local and state agencies to use the statewide model most effectively needs to be defined.