

**OREGON MODELING STEERING COMMITTEE**  
**ODOT Human Resource Center, Suite C**  
**2775 19th Street SE, Salem, OR**  
**Wednesday, June 15, 2005, 1:00 p.m.-4:00 p.m.**

**MINUTES**

**ATTENDANCE**

Dick Walker, Chair	Portland Metro
Dave Nordberg	OR Department of Environmental Quality
Richard Bjelland	OR Department of Housing & Community Services
Bill Upton	OR Department of Transportation
Jerri Bohard	OR Department of Transportation
Tyler Deke	Bend Area Metropolitan Planning Organization
Carl Switzer	Corvallis Area Metropolitan Planning Organization
Bud Reiff	Lane Council of Governments
Mike Jaffe	Mid-Willamette Valley Council of Governments
Craig Anderson	Rogue Valley Council of Governments
Scott Drumm	Port of Portland
Michal Wert	MW Consulting

**Guests**

Carolyn Gassaway	OR Department of Transportation
Becky Knudson	OR Department of Transportation
Brian Kidd	Port of Portland

**INTRODUCTIONS**

Dick Walker welcomed Tyler Deke as a new member of the OMSC. He asked for self-introductions for the benefit of new members.

**SUBCOMMITTEE REPORTS**

**Technical Services Subcommittee – Bill Upton, Chair**

Bill Upton stated that several OMSC members are moving to VISUM software. It will be important to coordinate training and that will be forthcoming. All the pieces of the Transitional Model are together and running through time. The modeling team is working hard to have it calibrated by July.

Bill noted that the Users Group was meeting regularly but, due to schedule conflicts, has dropped by the wayside. Is this a useful group for the OMSC and should it be regularly scheduled? Dick summarized the roles of the different committees: the OMSC meets

quarterly and has high level modeling discussions; the Modeling Program Coordination Subcommittee (MPC), consisting of ODOT and the MPOs, also meets quarterly to discuss details and to resolve modeling issues; and the Users Group is a broad group of users that meet to discuss modeling applications. Speakers are often invited to the Users Group meetings to talk about things of general interest and it is open to anyone who wants to attend. It is a good forum to discuss what is being done around the state, but it is hard to attend because staff is so busy. It was agreed that the Users Group is useful but that the MPC should define how often it should meet, where, and how it will be managed.

Bud Reiff stated that TPAU developed the Oregon Small Urban Models program (OSUM) some time ago. It is being implemented in R and is very user friendly. It is not as data intensive as the urban model Jem-in-R and is a good model to apply to smaller urban areas like Klamath Falls. LCOG has been using OSUM in Lane County, and LCOG and TPAU have identified some improvements that will be available soon. PTV America is helping to upgrade OSUM.

### **Performance Measures Subcommittee – Bud Reiff, Chair**

Bud stated that this research project is a joint effort by LCOG, TPAU and the ODOT Research Unit. The project ends June 30 and a report should be completed in July. Six performance measures are identified that can be applied in Jem-in-R. These are generally urban mobility measures comparable to the Texas Transportation Institute urban mobility report.

There are several results from this research:

- A transportation cost index was developed which is essentially an accessibility consumer price index. TPAU is testing this as a proof of concept in Medford and it is producing some interesting results.
- The auto dependence measure tried to define accessibility by non-auto mode. This measure may be better than what is currently in the Transportation Planning Rule (TPR).
- The freight delay cost measure cannot be implemented right now. This will require a freight model or some way to synthetically identify truck routes or demand on the network.
- The road network concentration index is an indicator of how much an area relies on just a few links. It looks at security and redundancy and is a measure of vulnerability - if one of these links is taken out of service, what are the effects? This is being tested in Eugene and Medford.

Bud stated that the focus of this project is on research. However, results could be used to make proposals for new measures for MPOs or the Oregon Transportation Commission (OTC), particularly for measuring alternatives to auto dependence. Jerri Bohard stated that the Steering Committee for the Oregon Transportation Plan (OTP) requested a presentation of the research results in August.

Jerri stated that the TPR is being revised and draft language is available for review. The revised draft removes the vehicle miles traveled (VMT) requirement and does not require alternative mobility standards. It does, however, make a case for developing performance measures. A TPR subcommittee will meet on July 19 and the OTC will take action in September or October. Jerri will send draft TPR language to Michal to forward to OMSC members.

Richard Bjelland stated that there is often a significant tradeoff for families for housing and transportation costs. Any measure of accessibility needs to add housing and transportation costs together when considering family decisions. As families are forced to move farther from a job to find affordable housing, transportation costs increase, often significantly.

Dave Nordberg stated that DEQ is interested in language directed at reducing reliance on the auto. Bud's research and the work being done by Metro to establish modal targets should both be used to inform any changes to the TPR. Dave will provide Michal with a copy of Metro's draft report on model targets for distribution to OMSC members.

Craig Anderson asked whether an MPO that has had its VMT alternative measures approved will be able to make changes to them. Jerri stated that this should not be an issue and that new requirements will likely apply at the next periodic review. She stated that this does not reduce the burden on jurisdictions but it makes the requirements more flexible.

Scott Drumm stated that a freight performance measure should relate to the costs of delay - recurring and non-recurring delay of freight due to congestion and incident rates. This could be tracked by different facility type because there may be different route restrictions throughout the network. An hourly operating cost could be applied to each facility type and this could be broken down by commodity type, additional inventory cost due to freight system reliability problems, cost of not having goods at a particular location at the right time, etc. A measure could include delay costs from route restrictions by comparing travel times as if trucks were allowed on all routes instead of just certain routes. This effort would need to be tested with a truck model.

Bud stated that Brian Gregor/ODOT is writing software to do calculations so that different utilities will be available. The intent is to create R code models for Jem-in-R. The report for this research project will have a lengthy section on work to be done.

### **Modeling Program Coordination (MPC) - Mike Jaffe, Chair**

Mike Jaffe stated that the MPC met on May 31 to talk about several issues. Tara Weidner/PB Consult presented information on how the Transitional Model is being developed and how local networks are being fit into the statewide network. How the statewide model and MPO models will work together in the short-term and the long-term and how they can keep pace with each other were discussed.

There was discussion on possible overlap of forecasts between the MPO and the Transitional Models. ODOT and the MPOs want to support each other but each has things they would like to accomplish and how the models will work together needs to be sorted out. It is expected that this is the first of several meetings to continue this coordination conversation.

The MPOs and ODOT talked about the move to VISUM software. Salem, Metro and ODOT have licenses and other MPOs are interested. The MPC shared current thinking about how the transition to the new software will occur.

Nick Fortey/FHWA talked about adding safety into the transportation planning process. This topic will be flagged for possible research projects in the fall.

Bud raised the issue of developing a common truck model. The MPC discussed making this a future work item, perhaps using the quick response method or bringing in consultants to talk about what has been done and the range of options. With the new VISUM platform, this is a good time to have this discussion.

## **ANNOUNCEMENTS**

### **TRB Planning Applications Conference Wrap-up**

Dick gave an update on the TRB Planning Applications Conference that was held in Portland from April 24-28. There were 335 paid registrations with 36 states and 7 other countries represented. Over \$20,000 was paid by conference sponsors and exhibitors. Responses from those attending were very positive. OMSC members were thanked for helping with tours and contacting potential exhibitors and sponsors.

Conference presentations and papers can be accessed through a new link on the conference website at [www.trb-portland-05.com](http://www.trb-portland-05.com). Additional papers are still being submitted and a DVD will be prepared to include all presentations, papers, and information from previous conferences. When completed, a DVD will be sent to all registrants.

This is the first time that an event planner was used for this TRB conference and it is recommended. Usually the sponsoring agency(s) assigns staff to do the planning and conference activities. Plans & Action were very efficient and effective since they do conferences all the time and they were able to get discounts for many items because of established relationships.

### **4<sup>th</sup> Oregon Symposium on Integrated Land Use and Transport Models**

Bill stated that the 4<sup>th</sup> Oregon Symposium will be held November 15-17, 2005. There is still discussion on whether this will be a 2- or 3-day symposium. It is intended to have the program finalized by early July, with registration beginning in August.

Dick noted that TLUMIP has been going on for several years. When it started, there were not many places in the United States doing modeling like it is being done in Oregon. Since then, other states are starting to develop transport/land use modeling capabilities.

Bill stated that the focus of the Symposium is the Oregon Transportation/Land Use Model Implementation Program (TLUMIP) and responsibility for setting up and conducting the Symposium belongs to PB Consult as part of their TLUMIP contract. There are no other states that are currently doing integrated transportation/land use modeling at the statewide level. Although the focus for the Symposium is TLUMIP, there will be presentations from some large cities and other countries where integrated modeling is advancing.

The draft program was circulated for information. OMSC members will be notified by email when the program is finalized and when online registration is available.

## **PROGRAM UPDATES**

### **Oregon Transportation Plan (OTP) Update**

Carolyn Gassaway and Becky Knudson gave an update on the status of the OTP Update. The OTP will span from 2005-2030. All Region and Transportation System Plans must be consistent with the statewide plan. Three policy committees provided information to a Steering Committee that has been meeting regularly to develop scenarios and policy analysis. The OTC will approve the plan for public review before adoption.

The statewide model is one of several tools used to develop information for the OTP update. Other tools include Oregon urban models, local urban models, HERS, and information from the Port of Portland, MPOs, and others.

Eight performance criteria were developed, with 1-7 performance measures for each criteria. Analysis of the following scenarios was reviewed with the Steering Committee at its last meeting:

- *Reference scenario* – the future as it is likely to be given expected funding and investments. This is the base case scenario.
- *Sensitivity scenarios* – see how external activities affect the reference scenario:
  - Relaxed land use - increase land supply 10 percent beyond historical
  - High fuel price – three patterns of increased fuel price - high-medium-low
- *Policy scenarios*:
  - Flat funding – 40 percent decline in purchasing power by 2030
  - Maximum operations – same funding as reference but 23 percent of revenues transferred from modernization to operations
  - Major improvements – add projects from RTPs and STIP and add lanes on I-5 and I-205
  - Pricing – toll lanes between Eugene and Portland on I-5 and I-205.

The biggest challenge was focusing on key findings and presenting a lot of technical information within a limited time frame. Several different types of graphs were tried to arrive at a good method of presentation. It took from 4-8 hours for a model run and the statewide model results were in R so it was easy to analyze results. A detailed report on the statewide modeling effort will be completed in July.

It was a challenge to blend other sources of information with the statewide model. Data was gathered from MPOs and maps were used whenever possible for ease of understanding. Information was presented in three ways: by scenario, by performance measure and by mode. This allowed the Steering Committee members to see results several times and in different formats.

Becky reviewed several key findings and questions raised by the Steering Committee members. Minutes of the last Steering Committee meeting and other OTP information is available at <http://www.oregon.gov/ODOT/TD/TP/ortransplanupdate.shtml>.

Dave asked which scenarios result in the best air quality. Becky stated that VMT was not considered and this is the measure that generally represents environmental impacts. The Steering Committee is primarily interested in congestion and delays.

Bud asked if the Gen1 modeling results will be tested when the Transitional Model is available for use. Carolyn stated that there is a possibility that the OTC will want to look at other scenarios and if the Transitional Model is available it may be used at that time.

Richard stated that the scenarios represent transportation spending limitations but right-of-way has increased much more over time than construction costs. Becky stated that the analysis does not include right-of-way costs but acknowledged that this could result in 50 percent reduced purchasing power. Jerri noted that the modeling and analysis tried to represent tendencies and not specifics.

Carolyn stated that the Steering Committee is interested in impacts on airports. A concern is that smaller airports like Pendleton and Klamath Falls might be impacted by higher fuel prices and this will impact accessibility. Rail is included in the analysis and if high fuel prices continue over time, there will be shift from highway to rail. If it is a short-term phenomenon, however, railroads will not make the investments.

Dick asked if the Steering Committee feels that this was the right amount of data needed for the discussion, or if questions were not answered because there was not enough information. Carolyn stated that more information on rural systems and transit information are needed.

Jerri stated that use of the words “policy analysis” was important instead of referring to “modeling”. By using the word “policy”, the Steering Committee had a better sense for level of detail. Carolyn stated that it was important to train staff and the Steering Committee on appropriate and realistic expectations for the modeling and analysis effort.

## **Continuous Survey Modeling for Oregon (COSMO)**

Becky stated that the prompted recall is the last group in the COSMO pilot study to be interviewed. The first two groups were given a choice of carrying a GPS unit or filling out a diary. By the time recruiting was started for the prompted recall, participants did not have a choice and several chose not to participate. There is no follow-up with participants for the pilot. The next step will be a full survey. Richard noted that it would be interesting to know why people chose one method of survey over another.

June 16 is the last travel day in the pilot survey. Retrieval will be done by the end of the month. Peer review will be completed and the OMSC Subcommittee should meet in August. The pilot will address the cost for three collection methods and compare outcomes, with an ultimate goal of defining a way to proceed with a full survey.

Dick summarized that the COSMO process will be to go through the data from the pilot study, use it to decide how to proceed with the full survey, line up funding sources, and begin the full statewide survey in FY2007 if everything falls in line.

## **PDX Terminal Users Survey**

Scott stated that the Port does many surveys covering many issues. He introduced Brian Kidd who manages the survey program for the Port of Portland. Brian presented information on how people move to and from the airport.

Brian stated that 1 in 1000 people will be interviewed when at the airport. Consumer satisfaction is a strategic objective at the airport today. Surveys help to identify areas needing improvement and it is important to focus on areas that need improvement and not those that are doing fine. Surveys help to measure perceptions of the overall airport experience.

What gets measured gets managed. The Port of Portland does constant airport site surveys but also does specific surveys for specific issues. For instance, when meeter/greeter areas were being upgraded, it was important to know what consumers really wanted. PDX is an international gateway and customer attraction is very competitive so it is important that the customer experience be positive. In its size category, PDX consistently finishes 3<sup>rd</sup> or 4<sup>th</sup> in the world for customer satisfaction.

Most surveys are done in person and are self-administered. The Port is looking at ways to get information on line. Most surveys are done with in-house staff. Response rates are high and are usually done on the departing end of the trip when people have time.

Ten percent of Portland passengers are accompanied into the terminal by a non-passenger. Up to 30 percent get picked up at the baggage claim. Most business travelers get dropped off and many park in the economy lot. Business travel is about 27 percent of total customer base. Friends and relatives is the highest user.

There is an effort to try to attract consumers from outside the airport, for meals, conference facilities, shopping, etc. PDX is an origin-destination airport and people spend time in the buildings. The Port is trying to make the airport more than a satisfactory experience and to make it a positive and memorable one.

The Port and Tri-Met continue to discuss the best service for the Airport MAX light rail line. Only eight airports in the U.S. have direct rail to the airport. Five-six percent of departing passengers use the MAX light rail. The peak roadway times are for 5:25 a.m. departures and 10:40 p.m. arrivals and employees are on the road between 4:00-4:30 a.m. when there is little traffic. Airport MAX does not run early enough to be used by employees or late arriving travelers. PDX makes money from people parking in the garage and parking lots but does not make money from MAX.

The Port would like to conduct a more defined origin-destination survey. Questions could include: Do people know where they are going in Portland? Where do people usually come from to the airport? People may not come to the airport from their home.

### **MISSION, GOALS & OBJECTIVES**

Dick stated that the current OMSC mission statement was adopted in 1998. It is timely to see if the mission, goals and objectives (MGO) are still pertinent. Michal summarized discussions held at the December 2004 and March 2005 OMSC meetings regarding the MGO. The OMSC Long-Range Strategy Subcommittee had lengthy discussions on the MGO and agreed that many of their issues are more appropriately addressed in the work program and not in the higher level MGO. The work program will be a topic for future discussion. The Long-Range Strategy Subcommittee recommended the MGO as circulated with the agenda.

Jerri suggested two changes:

- Objective 3.1 – change “all” modes to “a range of modes” since it unlikely that all modes can be addressed by the program.
- Objective 5.1 – remove “for OMSC members” since this should be a forum for anyone interested

Michal asked that any additional comments, suggestions, and changes to the MGO be emailed to her by June 30. If comments are not substantive, she will finalize the MGO to incorporate comments received and post them on the ODOT website.

### **Other Agenda Items**

Michal stated that the OMIP brochure will be updated before the Symposium in November. She will email a copy of the brochure for review by members and any changes will be finalized at the September OMSC meeting.

Richard stated that OHCS hired an intern for the summer to develop a methodology and do a pilot project for extracting housing and land use inventories across Oregon. This is a

problem for cities going through periodic review as they often do not know their housing and land inventories. The methodology and information may have value for land use and transportation modeling. Since this is a 10-week program, Richard was asked to give an overview of the methodology and pilot results at the next OMSC meeting.

Dave stated that DEQ has an interest in movement of freight, especially how truck and rail freight relate and interact. He requested that anyone with good background information send the information to him.

### **NEXT MEETING/AGENDA**

The next meeting will be held on Wednesday, September 21, 2005, from 1:00-4:00 p.m. at the ODOT Human Resources Building in Salem.

Agenda items include:

- Subcommittee Reports
  - Technical Services- Upton
  - Performance Measures - Reiff
  - Modeling Program Coordination - Jaffe
- Program Updates
  - COSMO - Upton
  - Oregon Transportation Plan Update - Bohard
- Announcements
  - 2005 Modeling Symposium - Upton
- OHCS Housing and Land Use Methodology/Pilot Project - Bjelland
- TPR Update – Bohard and Cortright.

The meeting adjourned at 4:00 p.m.

### **MEETING HANDOUTS/REFERENCES**

The following handout materials or links were provided at the OMSC meeting. For copies or more information, please contact the link provided or email Michal Wert at [mwert@teleport.com](mailto:mwert@teleport.com):

- OTP Update, available at [www.odot.state.or.us/tdb/planning/OTPUupdate](http://www.odot.state.or.us/tdb/planning/OTPUupdate)