OREGON MODELING STEERING COMMITTEE
ODOT Human Resource Center, Suite C
2775 19th Street SE, Salem, OR
Wednesday, December 14, 2005
1:00 p.m.-4:00 p.m.

MINUTES

ATTENDANCE

Richard Bjelland, Vice-chair	OR Department of Housing & Community Services
Bill Upton	OR Department of Transportation
Jerri Bohard	OR Department of Transportation
Dave Nordberg	OR Department of Environmental Quality
Jennifer John	Portland Metro
Bud Reiff	Lane Council of Governments
Mike Jaffe	Mid-Willamette Valley Council of Governments
Matt Hermen	Rogue Valley Council of Governments
Tyler Deke	Bend Area Metropolitan Planning Organization
Shinwon Kim	SW Washington Region Transportation Council
Jon Young	Federal Highway Administration
Satvinder Sandhu	Federal Highway Administration
Michal Wert	MW Consulting
Guests	
Brian Dunn	OR Department of Transportation
Ray Jackson	Mid-Willamette Valley Council of Governments

INTRODUCTIONS

Vice-chair Bjelland asked for self-introductions for the benefit of new members.

SUBCOMMITTEE REPORTS

Technical Services Subcommittee – Bill Upton, Chair

Bill stated that the ODOT Transportation Planning Analysis Unit (TPAU) is building models for small cities. Corvallis and Bend base models are complete and staff is working on futures modeling. The Medford model is still being developed.

TPAU is examining converting from EMME2 to VISUM. There are some problems with the conversion where the same assignment is different. There are not huge differences but even subtle differences can make a difference in small towns. He stated that TPAU does not have anything fully operating in VISUM yet. Jennifer John stated that Metro is experiencing similar problems converting from EMME2 to VISUM.

The fourth Transportation/Land Use Model Implementation Program (TLUMIP4) contract is finally signed. It is a flexible services contract and work orders will be written for specific tasks. This works better than a standard contract for research and development because of the uncertain nature of the work. Four work orders have been signed or are in process: management of the overall TLUMIP4 program, the Symposium that was recently held, MPO/TLUMIP integration task that will be headed up by Keith Lawton, and specifications for the GenII model.

Performance Measures Subcommittee – Bud Reiff, Chair

Bud Reiff stated that the three-year joint research project on Transportation Planning Performance Measures, conducted by LCOG, TPAU and the ODOT Research Unit, is complete. The project looked at state and MPO transportation plans that did not have performance measures. A list of performance measures was developed to fill gaps, some data issues were identified, and six performance measures were developed and tested in the Medford and Eugene areas using sample data. All six passed "proof of concept" and others need some refinements.

The Urban Mobility Measures took what is reported in the Texas Transportation Institute (TTI) Annual Mobility Report (travel delay, cost of congestion, etc) and looked at what it would take to extend the performance measures into the future. This measure can be implemented immediately and will be considered for use for the next LCOG Regional Transportation Plan (RTP) update.

The Freight Delay Cost measure was not developed as far as it could be. Further definition will need a truck model that differentiates by commodity.

The Transportation Cost Index (TCI) is comparable to the consumer price index. The intent was to develop a measure of multi-model accessibility but also address equity and balance issues. The TCI measures the relative cost of accessing a market basket of travel destinations and can be used to compare accessibility by trip purpose, travel mode, income group, geographic area and time period. It can be calculated for different models or compare different zones and is more robust than a standard mobility index. The TCI is modeled with JEMnR. There is more work needed to describe the relationship of this measure with actual policy applications and to make it more accessible to policy-makers.

The Road Network Concentration Index addresses system balance and system vulnerability. More work is needed to tie this measure to policy pertaining to safety and vulnerability.

Several areas recommended for further research include:

- Balance – develop more objective criteria for how to invest in different transportation modes and look at potential projects in terms of consumer surplus.
- Reliability - models do not measure real travel time and do not adequately forecast travel time variability.

- Safety – could not find good performance measures. More could be done with historic crash data but it would be good to develop forecasting information at the planning level.
- Economic vitality – need integrated land use and transportation models.

Bud responded to several questions:
- This research did not address projects specifically, but that is probably part of balance. Everyone wants a "balanced" plan but getting an objective measure for balance is difficult. Evaluating consumer surplus may be one way to address this.
- The measures are output-based. Model output is used to forecast measures but results will not be seen for 20 years. It is possible to use historical data to test the forecasts to see how accurate they are.
- The research team is pleased with the results. Most people who are interested in transportation are familiar with TTI measures. There is value in seeing how TTI results change in the future and measures that are directly comparable with TTI measures allows that to be done.

Jerri Bohard stated that this project came about because of the Vehicle Miles Traveled (VMT) reduction requirement of the OR Transportation Planning Rule (TPR). The Land Conservation and Development Commission will adopt new TPR measures in the spring that allow more flexibility. This work has been coordinated with ODOT and the MPOs.

Modeling Program Coordination (MPC) - Mike Jaffe, Chair

Bud Reiff stated that the MPC did not hold a formal meeting this quarter. In an informal discussion before the OMSC meeting, it was noted that the original idea for JEMnR was to have many people contribute to the code and move forward in unison but this has not happened. JEM-n-R is being used by ODOT in smaller MPOs, including Salem, Corvallis, Bend and Medford. It is being used in Metro to some extent but not in Eugene.

ANNOUNCEMENTS

4th Oregon Symposium on Integrated Land Use and Transport Models

Bill stated that the 4th Oregon Symposium was held November 15-17, 2005. About 90 people registered, representing 13 states and 7 countries. This is fewer than the 120 attendees in previous years. Presentations from the Symposium are available on the ODOT website. There was discussion that this would be the last Symposium but there has been enough positive response that another will likely be held in the future. It is hoped that the next Symposium can be hosted through the Transportation Center at Portland State University (PSU).

Bud stated that this Symposium had less theory than previous ones because models are being used. It was interesting to see results of the different applications, especially in the Metro area.

Shinwon stated that, for the next Symposium, it would be good to see how other MPOs in other states integrate transportation and land use models. It has been demonstrated that

the economic element is very important. He suggested that Doug Hunt be engaged to develop a short course on microsimulation, especially for truck information. Courses have been offered at PSU and MIT but they are expensive. Doug is a practical modeler and is good at instructing in an easy to understand manner.

Jon Young stated that FHWA supported the Symposium financially. He stated that FHWA will work with the OMSC for specific training programs. Bill stated that a training plan was developed early in the OR modeling program and it may be a good time to update the plan.

PROGRAM UPDATES

Oregon Transportation Plan (OTP) Update

Jerri distributed copies of A Citizens Primer on Oregon's Statewide Transportation Improvement Program (STIP), the funding and scheduling document for major road, highway and transit projects in Oregon. This brochure is a brief overview of the STIP and how it is developed. It was prepared in English and Spanish. A detailed document was also prepared. The Primer will be distributed at the OTP outreach meetings.

Previous presentations to the OMSC focused on modeling and analysis and results. The following documents for the OTP Update were distributed:

- November 2005 OTP Update Newsletter
- OTP Public Survey
- OTP Public Review Draft, Volume 1, November 17, 2005 – this is the OTP policy document. Volume II includes technical appendixes and is available on request.
- PowerPoint presentation handout which is being used for OTP outreach around the state. This is also available on a CD.

The OTP lists three investment strategy levels:

- Investment Strategy Level 1 assumes current spending level of $2.18 billion to maintain the existing system as well as possible.
- Investment Strategy Level 2 assumes a spending level of $2.68 billion to keep up with inflation and to preserve the existing infrastructure and services.
- Investment Strategy Level 3 assumes a spending level of $3.45 billion which is necessary to add and expand facilities.

Even with Level 1 there is not enough money to maintain the existing system and the state is currently making investment decisions because there is not enough money to address all needs.

The Steering Committee identified what they really want to accomplish in the OTP. In priority order, these are:

- Maintain the existing transportation system to maximize the value of the assets – this is a theme throughout the OTP.
- Optimize system capacity and safety through information technology and other methods
- Integrate transportation, land use, economic development and the environment

- Integrate the transportation system across jurisdictions, ownerships and modes
- Create a sustainable funding plan for Oregon transportation
- Invest strategically in capacity enhancement

The OTP is a planning document and is not project specific. However, there are a few general corridors that need improvement and these are identified: build a north-south highway and rail super corridor; preserve and extend highway, public transportation and rail options in east-west and north-south corridors; expand public transit services; create second day rail freight service to southern CA; and expand regional air services especially air freight services.

Jon stated that there seems to be an unwillingness to talk about a tax increase. Even level 1 talks needs a 1¢ increase but that may not be possible because people do not want to pay. Michal noted that it is important to focus the message on the economic ramifications of not investing in the transportation system. This approach was successful to obtain funding for OTIA III to address Oregon's deteriorating bridges.

Richard stated that there are two primary marketing targets – the Oregon legislature and the general public. A specific marketing strategy that talks about the impacts of investing or not in the system should be developed and discussions should be held on tax increases and other user fees, tailored to the audience. Area Commissions for Transportation (ACTS) are given $2-3 million to address $600 million in needs. This amount does not begin to address even right-of-way needs.

Jerri stated that ODOT is doing a refinement plan in Bend and the OTC made it clear that there will not be a new bypass in that area. Cities are being charged to protect what they have and make the transportation system operate as efficiently as possible.

Dave Nordberg stated that DEQ is interested in greenhouse gas and asked if this is addressed in the OTP. Jerri stated that this is included in the sustainability element to comply with the Governor's directive. It is not clear, however, what this really means. The OTP is intended to be a guidance document for highways, other modes, and local governments and it helps to frame the issues. She suggested that DEQ can use what is in the OTP as a base to build on to take this issue further.

Jerri noted that there are limitations at the federal and state levels on how public money can be spent on other modes, such as rail. She suggested that it may be time to begin discussions on changing the state constitution to address funding for all modes.

It is hoped that a plan will be ready for adoption by the Oregon Transportation Commission (OTC) in June or July 2006. Jerri offered that ODOT staff is available for presentations upon request.

Statewide Survey

Michal stated that a subcommittee of the OMSC met to review the consultant report and recommendations from the pilot study for the Continuous Survey Modeling for Oregon

(COSMO). Developing information for the statewide survey has taken several years and it is hoped that a request for proposals (RFP) can be issued before the end of this fiscal year. There is urgency for Metro to begin the survey in the Portland area but this can be the first phase of the project and the remainder of the state can take the time necessary to assimilate the information collected to date and to raise the funds to conduct the survey.

The Subcommittee directed Michal and Keith Lawton to prepare a more detailed work program that recommends an affordable survey, outlines remaining questions that need to be addressed and how to obtain this information. The work program should define an estimated cost and suggest strategies for raising the money for the survey. For example, it is important to identify different regional information needs and it may be possible to have Keith expand his discussions with MPOs for the MPO/TLUMIP Integration project to obtain information on these needs.

Bud stated that the cost of the GPS units to conduct the survey is a big issue. Richard stated that the OMSC needs to develop a filtering approach to using GPS units to determine where a GPS unit is useful and the most effective way to use this tool.

COLUMBIA RIVER CROSSING

Jennifer John stated that substantial technical work was conducted for the Portland/Vancouver I-5 Transportation and Trade Partnership (I-5 Partnership) beginning in 2001. A multi-agency Task Force considered this information and published a Final Draft Recommendation in 2002, addressing highway and transit assumptions, performance measures, transportation demand management (TDM) assumptions, and others. The next step is to prepare an Environmental Impact Statement (EIS). Information from the I-5 Partnership is being used to develop a problem definition and purpose and need statement for the Columbia River Crossing EIS.

There are three areas considered in developing alternatives for the EIS. These include:
- Bridge influence area (BIA) – generally confined to the I-5 bridge
- Corridor area – extend the BIA north to 219th and south to the Marquam Bridge
- Study area – expanded to include I-205.

Metro is leading the modeling effort for the EIS, supported by RTC. A lot of data collection has been done. Select link assignments were done for the I-5 Bridge to help define the influence area and the markets using I-5. Work is now being done to develop base year model information using VISUM.

There does not appear to be much controversy on the No-build alternative. Build alternatives will include TDM and system management strategies and highway/transit combinations. The future forecast year is 2030. A *Bingo Chart* was prepared to help define different highway and transit combinations. Using this chart, there could be up to 15 different model runs.

Organization is a big challenge. The project is very large and there are many people and agencies involved. Typically, an EIS looks at a highway package or a transit package and the highway/transit combination alternatives will be challenging. FHWA and FTA have very different requirements. Metro modeling staff has had to work hard to stay current with what is happening on the project because the project is so large.

The project will use a 2029 zone system that includes all transportation analysis zones in Clark, Multnomah, Clackamas and Washington Counties. The model has also been expanded southward to include Newberg, McMinnville, Woodburn and North Marion County. This is the first project that includes all these areas.

Metro is working to convert the networks to VISUM and are looking at what assignment techniques to use. VISUM has transit capabilities and Metro is looking at how this can be used to do user benefit calculations for FTA. Tolling will be a big part of the project and VISUM will be used to look at total impacts. VISSIM will be used for microsimulation to show impacts. Air quality modeling will be conducted in the future and it is intended to have more interaction with the Metroscope model to look at accessibility for housing and employment. Brian Dunn noted that ODOT found VISSIM to be very complicated. It works best on a very tight corridor and recommended that it not be used for the entire project area.

Jennifer stated that the Corridor Planning Section is managing the project for Metro. Metro has dedicated 2.5 full-time equivalents (FTE) from the modeling staff for the project. The project team includes Washington and Oregon Departments of Transportation, Dave Parisi, David Evans & Associates, PB Consult and Volmer Associates for tolling review forecasting.

Shinwon stated that WSDOT provided $50 million for a joint office in Vancouver for the project team. There will be two waves of modeling, first to screen alternatives and then for the EIS alternatives. Modeling will cost about $1million. ODOT has been requested to match the $50 million for the project office.

Shinwon stated that the consultant team brought experts to talk about different modes and held a workshop to discuss different options. The *Bingo Chart* was used to start to define alternatives. The consultant team will take information from this workshop and make recommendations on different alternatives to be considered. He noted that restrictions from other modes are challenging. Pearson Air Park and Portland International Airport want a low bridge so it does not interfere with air traffic. Barge traffic on the river wants a high bridge so that water traffic is not impeded. The Burlington Northern Railroad crosses over I-5 in Washington state and that is also a consideration.

Other comments included:

- There was discussion about early proposals to locate a new bridge in a place other than the I-5 corridor. The differences would be significant between a new vs. an existing crossing because of existing land use, impacts to the river, and other issues.

- It is important that Metro determine whether tolling is intended to manage congestion or to pay for implementation.
- Different methods of tolling require different land areas and constructions.
- Impacts will be different if only I-5 or I-205 is tolled or if both are tolled.
- How tolling affects mobility should be considered.
- FTA and FHWA are working closely together to make sure all requirements are addressed through the project.

Jennifer stated that Metro will provide traffic modeling and output demand and the consultant will do traffic and tolling projections and finance impacts. It will be important to make sure that any alternatives taken forward in the EIS are feasible. It is proposed that the draft EIS will be published by the end of 2007. She agreed to have a Metro staff person available to brief the Salem Bridge Crossing Policy Committee.

SALEM BRIDGE CROSSING

Ray Jackson stated that the Willamette River crossing at Salem has been studied several times. The last study looked at 15 corridors. A capacity study was completed in 1997 and an EIS is now being started. The RFP for the EIS closed last week and proposals from four consultant teams were received. It is anticipated that the EIS will begin in January 2006 and will take 2-4 years to complete; $2 million is allocated for the EIS. Tolling will be of major interest. The EIS will be managed by ODOT with input from others. It has not been decided how modeling will be done.

Mike stated that public involvement will be important. The purpose and need statement must be developed in a manner that all involved jurisdictions agree with. The environmental issues are important but a financial strategy for implementing the project is just as important. A land use modeling component is not anticipated but it could be folded into the analysis. SKATS does not current have a land use model. A preferred alternative will be adopted as part of the Salem/Keizer Area Transportation Study (SKATS) RTP so all members of SKATS will be involved.

MEETING DATES FOR 2006

Michal stated that the OMSC originally met quarterly in January, April, July and October. This meeting included election of officers, an annual report, and a proposed work program for the next year. The meeting dates were changed to accommodate Keith Lawton as chair. Because of holiday and spring break conflicts, Michal suggested that the OMSC meeting dates be changed back to the original dates. Members agreed and the next quarterly meeting of the OMSC will be April 19, 2006.

OTHER ISSUES

Jerri stated that applications are now open for the Governor's ConnectOregon program, a lottery bond-based $100 million initiative to invest in air, rail, marine and transit infrastructure.

Michal stated that election of officers will be held at the next meeting. She requested anyone interested in serving as an OMSC officer or subcommittee chair, or nominations of others, be sent to her at mwert@teleport.com.

NEXT MEETING/AGENDA

The next quarterly OMSC meeting will be on Wednesday, April 19, 2005, from 1:00-4:00 p.m. at the ODOT Human Resources Building in Salem. Agenda items include:

- Election of Officers
- Subcommittee Reports
  - Technical Services- Upton
  - Performance Measures - Reiff
  - Modeling Program Coordination - Jaffe
- Program Updates
  - Statewide Survey - Upton
  - Oregon Transportation Plan Update-summary of public comments – Bohard
  - Columbia River Crossing update – Walker
  - Salem River Crossing update - Jaffe
- Oregon Innovative Partnerships Program (OIPP) demonstration projects – Jim Whitty
- ODOT Research projects selected – Bohard
- Portland State University Transportation Center update - Bertini

The meeting adjourned at 3:30 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:

- Transportation Planning Performance Measures - Abstract and Final Report are available at www.oregon.gov/ODOT/TD/TP_RES/ReportsbyYear.shtml#2005.
- 4th OR Symposium on Integrated Land Use and Transport Models presentations, see http://www.oregon.gov/ODOT/TD/TP/Modeling.shtml#4th_Oregon_Symposium.
- A Citizens Primer on Oregon's Statewide Transportation Improvement Program (STIP), see www.oregon.gov/ODOT/HWY/STIP.
- OTP Update public survey, OTP public review drafts-Volumes I and II, and OTP outreach PowerPoint presentation, see www.oregon.gov/ODOT/TD/TP/ortransplanupdate.shtml