

OREGON MODELING STEERING COMMITTEE

ODOT Materials Lab

800 Airport Rd SE, Salem OR

Wednesday, September 15, 2004

1:00-4:00 p.m.

MINUTES

ATTENDANCE

Richard Walker, Chair	Portland Metro
Richard Bjelland	OR Department of Housing & Community Services
Brian Dunn	OR Department of Transportation
Jerri Bohard	OR Department of Transportation
Dave Nordberg	OR Department of Environmental Quality
John Gorlorwulu	OR Department of Economic & Community Development
Bob Cortright	OR Department of Land Conservation & Development
Mike Jaffe	Mid-Willamette Valley Council of Governments
Bud Reiff	Lane Council of Governments
Ali Bonakdar	Corvallis Area Council of Governments
Fred Patron	Federal Highway Administration
Rob Bertini	Portland State University
Michal Wert	MW Consulting
<u>Guests</u>	
Brian Gregor	OR Department of Transportation

INTRODUCTIONS

Dick Walker asked for self-introductions for the benefit of new members. John Gorlorwulu was welcomed as a new member of the OMSC.

SUBCOMMITTEE REPORTS

Technical Services Subcommittee – Bill Upton, Chair

Bill Upton was absent and Technical Services issues are covered under the OTP Update. Fred Patron stated that Emily Lawton will replace Dave Reilly as FHWA Oregon Division Federal-Aid Assistant Division Administrator.

Performance Measures Subcommittee – Bud Reiff, Chair

Bud Reiff stated that a research project is underway to conduct an inventory of existing policy performance measures and identifying policies that are not well covered by performance measures. An expert panel meeting was held in the Spring to define which

measures are most reasonable to pursue. Information is being developed so that the next expert panel conference call can discuss specific measures and how they are calculated. Members of the OMSC will receive preliminary information before the next expert panel conference call is scheduled.

Bud stated that accessibility measures are a primary focus, specifically on measures required by the Transportation Planning Rule (TPR). It is important to separate *reliance* on the automobile from actual *use* of the auto, which is not a clear concept right now.

Dave Nordberg noted that DEQ does not have a major concern if VMT stays high if other transportation is or is being made available. Bud stated that the project is looking at a “market basket” of goods and services and how accessibility changes over different assumptions for things like auto cost.

John Gorlorwulu asked if the research considers non-traditional transportation. Bud stated that the project is trying to measure the relationship of transportation and economic vitality. It will try to get a measure of consumer surplus to be used in transportation plans.

John asked if changes in trips relative to changes in transportation are considered and how this can be brought into local plans. Bud stated that all transportation plans call for a transport system that supports economic vitality but there is no clear way to measure it.

Continuous Survey Modeling for Oregon (COSMO)

Dick stated that it has been ten years since the last household survey was completed for Oregon and it is time for an update. After extensive peer panel meetings and OMSC subcommittee discussions, the proposal is to conduct a continuous survey instead of a one-time survey. This would be a smaller survey over several years and would get at household transitions, such as how travel choices and behaviors change through the growth of a family or starting a new job.

A contract was recently signed with a consultant team to conduct a pilot survey, testing techniques to see what is the most effective way to conduct the survey. Methods being considered include GPS, diaries, and GPS+diary. The pilot will be done in Portland and is expected to be complete by June 30, 2005. It is intended that the pilot will provide a framework of how to proceed with the actual survey. This will be a statewide survey and data will be collected in all MPO areas.

Modeling Program Coordination (MPC), Mike Jaffe, Chair

Mike Jaffe stated that ODOT and the MPOs meet before the OMSC meeting to talk about common issues, research objectives, and other on-going programs. Everyone is very busy on several projects around the state:

- Metro is working on a Highway 217 Study (includes tolling options), Sunset Corridor project, and a long range study evaluating alternative development patterns (the Big Look).
- Corvallis Area COG is working with TPAU to update its Regional Transportation Plan.
- MWVCOG is working on an interchange plan, Highway 22 Plan, and a locational Environmental Impact Statement for a new bridge study in Salem.
- ODOT is applying the Joint Model Estimation (JEM-n-R) program in Medford. The Oregon Transitional Model is being calibrated and the modeling team is working to optimize the model to use it for the Oregon Transportation Plan (OTP) update and OTIA III.

MPOs and ODOT are looking at moving from EMME-2 to another more powerful and flexible software platform. Metro is taking the lead in looking at the next model platform for Oregon. A decision on software should be made by the end of the year.

Salem, Metro and ODOT completed emissions modeling for the Salem area. EMME-2 was linked to the EPA Mobile 6 to get carbon monoxide (CO) emissions for the area. The program worked well and was done in a timely manner and it is a good project to build on in the future. Dave noted that the project has a good flowchart on inputs and how they relate to each other and, with extensive notes, this could be good documentation for the analysis.

Mike stated that ODOT and the MPOs developed a planning work program that outlined modeling topics of interest. This Unified Planning Work Program for modeling was a loose guideline to share ongoing projects and to coordinate efforts. Many of the projects identified have been completed and it is time for the MPC Subcommittee to meet to update this work program. This should occur before the next OMSC meeting.

PROGRAM UPDATES

TRANSIMS

Dick gave an update on the TRANSIMS project. Algorithms have been defined and put into application code and issues are being addressed, i.e., lost cars in microsimulation. Through March 2005, Metro will do case studies in Portland. For the first case study, the TranSims base year will be 1996 and the forecast will be to year 2000 to allow measurement of data already in hand. This is the period when Westside Light Rail Transit came on line and the intent is to see how well TranSims can address this project.

If time permits, the second case study will have a more distant horizon year. It is intended to provide benchmark comparisons against more traditional methods. Comparisons will be made against several criteria, i.e., how easy it is to run scenarios, results, how long does it take. The demand model was built using 1994-95 survey data and all parameters are derived from this. Several procedure items need to be addressed but TRANSIMS can be scaled to any metropolitan area and travel choices are

transportable between communities. If the case studies are successful, then the user benefits need to be calculated, i.e., if we can do a study today in one week and it takes four weeks using TranSims, even if it is a better answer was it worth the extra time?

Richard Bjelland stated that the profile of people in different communities are different and demographics will affect the transportation affects. It is important to construct individuals for the region based on Census and PUMS data and then develop activity patterns associated with different kinds of individuals. If the profile of the populace is changed, different activity patterns will emerge. This theory needs to be tested.

Dave asked if TRANSIMS will be used for conformity analysis. Dick stated that modeling individuals as they travel is a different analytical approach to modeling for emissions. Current models do simulations that calculate VMT and average speeds but TranSims has no average speed through a segment. Cars are traveling independently and each has its own acceleration/deceleration profile. Hence, it is not clear how it will align with Mobile 6. A subconsultant on the TRANSIMS team is working on pilot studies with EPA to consider how TRANSIMS can be used for conformity analysis. It is recognized that this needs to be addressed but may take a couple years to resolve. Other outstanding issues include emergency response issues and FTA New Starts analysis.

TRB Planning Application Conference Update

Dick stated that about 170 abstracts have been received for the April 2005 TRB Planning Applications Conference to be held in Portland. This is similar to the number of abstracts received for the last conference. The conference committee will review the abstracts and about 50 of the most useful and timely to users will be selected. Information on the conference is available at www.trb-portland-05.com

Michal circulated a summary of sponsors and exhibitors committed to support the conference and requested an update of those contacted who declined to participate and those that are pending. The Conference Steering Committee will continue to contact potential sponsors and exhibitors to reduce the overall cost of the conference.

TTI Urban Mobility Report - A Local Perspective

Rob Bertini stated that the Texas Transportation Institute (TTI) publishes an annual Urban Mobility Report which reports on mobility throughout the country in urban areas, categorized by size. This information was used by ODOT to prepare the 2004 Oregon Statewide Congestion Overview Report. Using the information and methodologies in these documents, the Portland State University Center for Transportation Studies prepared the first Annual Portland Metropolitan Region Transportation System Performance Report. The report was formatted to allow annual updating and reporting.

Rob reviewed results of his analysis. A copy of the report is at www.portal.its.pdx.edu. Specific comments/suggestions:

- Slide 7, Portland-Vancouver Urbanized Area – PSU students worked with raw HPMS data to change the Portland-Vancouver urbanized area to see how results change with changes in the area analyzed.
- Slide 13, Oregon Population, Vehicle Miles Traveled and Transit Ridership –the start of Portland light rail service should be specifically noted.
- Slide 18, Oregon Highway Capital Investment – this should flatten out for maintenance and operations.
- Slide 19, Oregon Gasoline Prices – income/VMT/gas price relationships would be interesting. Also look at gas price per mile.
- Slide 24, Portland Area Per Capita VMT and Transit Trends – there have been large investments in transit in the Portland area. Does this show that providing alternative transportation options decreases VMT? In other parts of the country (Atlanta, GA), ridership on transit has increased as people have moved back into urban cities. It was noted that the graph does not include CTRAN and it would be good to add that service. Tri-Met has data to 1982 which may be useful.
- Slide 25, Portland Daily Freeway and Arterial VMT and Lane Miles – this should be normalized for direct comparisons. There is arbitrariness for much of this information, i.e., reclassification of arterials shows that number of arterial lane miles dropped but that is not the case. HPMS data is not completely reliable and it samples for a different purpose.
- Slide 46, Motor Vehicle Safety – this is an issue in certain cities and should be linked to slide 47, Pedestrian Safety.
- Slide 48, Freight Trends - there should be better local freight information next year.
- Slide 58, Lane Equivalents Saved by Transit Ridership – it is intended to include light rail transit routes next year.
- Slide 63, Future Data Sources – PSU is archiving data that is now available on-line and anyone can open an account to access data. For example, data from ramp detectors can be accessed on the PSU website. The intent is to be able to download data in report format.

Dick stated that Metro used PSU information to define delay functions on Highway 217. Rob stated that PSU is working with ODOT and FHWA to increase data and reporting capabilities. This is a good resource for the entire state and it would be good if permanent funding can be provided to update the report annually.

Transportation Planning Rule Update

Bob Cortright stated that the TPR was adopted 13 years ago. At that time, it was agreed that the TPR would be reviewed on a regular basis. VMT and reducing reliance on the automobile are part of the TPR that are being reviewed. Bob provided a summary of interviews with TPR stakeholders. He also provided an outline of possible next steps for the Metropolitan Status Report. Copies of these materials are available on the DLCDC website at www.lcd.state.or.us.

In January, the Directors of ODOT and DLCDC met to discuss how the two agencies can work together to meet the intent of the *Jaqua v. City of Springfield* ruling. The ruling

concerns a TPR requirement for local governments to assess whether transportation facilities are adequate to support increased traffic resulting from plan amendments and zone changes. Even if it is found that planned transportation capacity will be adequate to support a project by the end of a 20-year planning period, must a city assess whether the plan amendment will result in temporary failures during this intervening time. This would result in a ‘concurrency’-type commitment to meet interim goals, not just the planning horizon. Part of the TPR update is intended to address this question.

Bob stated that DLCD has been working with MPOs to document efforts and progress of MPOs for VMT reduction and non-reliance on the auto and alternative standards. A 1998 amendment to the TPR allowed alternative measures to meet the VMT reduction requirement and so far three MPOs have developed alternative measures. The intent is to document work that has been done and this effort does not include new MPOs.

The primary goal of the TPR is integrated land use and transportation plans. Good progress has been made in several areas, including bike/ped improvements. Transportation System Plans (TSPs) are in place for most cities and counties in the state and they give an idea of the cost to provide transportation needs over time. Some jurisdictions have struggled to provide alternative modes, including Salem, Eugene and Medford. It is clear that this goal will take longer than originally anticipated and the time frame for rural governments to meet these requirements needs to be extended.

Several general themes emerged from the stakeholder interviews and include:

- *Performance Standards.* There is general support for what the TPR is trying to accomplish. An issue is whether performance standards are realistic given future funding for the transportation system and the way TSPs are prepared. This is not addressed directly in the TPR but sets a framework for applying standards for the Oregon Highway Plan and local plans.
- *The Jaqua v. City of Springfield (June 2004) LUBA and Court of Appeals decision* needs to be clarified. How should the capacity of transportation systems be considered when plan amendments are proposed? When a plan amendment is proposed, what should be measured? Does a jurisdiction need to look at the end of the 20-year plan period or at interim years? How should large-scale transportation projects be considered that do not have committed funding?
- *Alternative mobility standards through Special Transportation Areas (STAs)* are viewed as a positive option, but actual application is frustrating and time-consuming.
- *The hierarchy of TSPs* should be more clearly defined. Many elements are not applicable to small jurisdictions, i.e., parking standards.
- *The TPR focuses on reducing reliance*, not reducing use, of the automobile. Distinguishing between reliance and use of the auto has been problematic. “Increasing transportation choices and options” may be a better way to frame the discussion.
- *The TPR tries to sort out how a transportation project works through the development process.* Transportation plans are intended to create certainty so that when a project is in a plan, there is some certainty that it will be built.

- *Exceptions for transportation facilities* can be cumbersome and are more project specific than applicable to a linear facility like a road. The length of time required to go through an exceptions process will be considered.
- *The Statewide Planning Goal 12-Goal 14 connection* is a question. Goal 14 only requires a feasibility finding that transportation is available when changes in urban growth boundaries are considered. The decision on how to provide transportation is made after the urban growth boundary change is already made.
- *Transportation financing* is an ongoing issue, especially since the TPR does not require funding to be in place for a project to be included in a TSP. Changing land use or transportation does not change behavior and pricing is a part of the solution. It is difficult, however, for metro areas to talk about pricing without adequate alternative modes.
- *Aspirations v. requirements* should be clearly defined.

Dave noted that VMT reduction is a positive TPR element for DEQ. Bob noted that VMT is the default standard and, although measuring VMT should be done, it may not be the best measure.

Dave asked how transportation planning is occurring for the Damascus area. Dick noted that it is desirable to bring a large area into the urban growth boundary so that service options can be developed. Bob stated that this is a large area that is difficult and expensive to serve with public facilities and that funding for all facilities is not identified.

Bob stated that staff has identified actions that can occur in a short time period, as well as longer term modifications. Jerri Bohard stated that this information will be presented to the Oregon Transportation Commission (OTC) and Land Conservation and Development Commission (LCDC) at the end of the month. There will be a joint OTC-LCDC committee to identify mid-, short-, and long-term efforts. The intent is to have information available for the upcoming legislative session.

Rob stated that Cy Adler and other PSU faculty are available to help with studies on the TPR. Rob volunteered to coordinate between DLCD and PSU faculty.

Bob stated that more information will be available in the spring after the joint commission makes recommendations. He requested comments from the OMSC by the end of September on the materials presented at the meeting.

Oregon Transportation Plan (OTP) Update

Jerri stated that background information is available on the ODOT website at <http://www.odot.state.or.us/tdb/planning/OTPUpdate/>. Three policy committees were formed to work with the Steering Committee. The working vision is intended to start to define how everything comes together. The draft goals, policies and actions look at goals and policies but did not spend much time on actions because these may change when analysis work is complete.

Rob asked if the analysis can be set up so that data can be shared. He asked if employees of public transportation agencies are considered in the OTP, especially hiring and retention of qualified staff. This will continue to be an issue in the future and PSU is interested in helping define the human components of providing transportation services.

Jerri provided an Analysis Process flowchart that illustrates how analysis fits into the overall OTP update process and what is needed before modeling analysis begins. The diagram shows basic components of establishing an analysis process to support the OTP policy work. This relates to the integrated modeling but could be useful for other modeling. Several activities should be complete before modeling starts, including performance criteria, goals and objectives, and an understanding of how analysis information will be used. Two reference cases may be considered for the OTP update, one extending current trends and the other considering more realistic higher fuel prices.

Jerri stated that there has been discussion on what version of the statewide model to use – Gen1 which was used for the Economic & Bridge Options Study or the new Transitional Model (TM). Michal circulated three tables comparing characteristics and performance capabilities of Gen1 and the TM. These address: general model properties with implications for policy analysis; model theory with implications for policy analysis, and comparison for relevant OTP and OTIA3 policy questions. Clearly, the TM has more capabilities to respond to more complex policy questions, but will require more time for calibration and testing and this is an important tradeoff conversation for the OTP update.

Ali asked if the OTP will identify specific projects. Brian Gregor stated that, for modeling purposes, general assumptions are made on likely improvements for the future, but the OTP is not intended to identify specific projects. The OTP will discuss policies and not specific projects. Fred noted that identifying specific projects is a federal requirement for MPO plans, but not for a statewide plan. Bob stated that it is important that the model assumptions on project improvements be well documented.

Jerri stated that the OTC will hold a workshop the end of September and will be briefed on the status of the OTP. A public review draft should be available by the end of 2005.

OTHER ISSUES

Rob stated that the ODOT research problem statement deadline is probably before the next OMSC meeting. He noted that PSU, ODOT and other members of the OMSC brainstormed on joint projects last year and it would be good to do that again this year. Jerri will send submittal information to Michal, who will forward the information to OMSC members and coordinate research project interests among the members.

NEXT MEETING/AGENDA

The next meeting is Wednesday, December 15, 2004, from 1:00-4:00 p.m. in the ODOT Human Resources Building, Salem.

Agenda items include:

- Subcommittee Reports
 - Technical Services
 - Performance Measures
 - Modeling Program Coordination
 - COSMO
- Program Updates
 - Oregon Transportation Plan
 - Research Projects
- Announcements
 - 2005 TRB Planning Methods Conference

The meeting adjourned at 4:00 p.m.

MEETING HANDOUTS

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

- TRB April 2005 Planning Applications Conference - Summary of sponsors/exhibitors
- TTI Urban Mobility Report - First Annual Portland Metropolitan Region Transportation System Performance Report, available at www.cts.pdx.edu.
- TPR Update, available at www.lcd.state.or.us.
 - Possible Next Steps for Metropolitan Status Report, September 9, 2004, Memo by Bob Cortright
 - Summary of Transportation Planning Rule Stakeholder Interviews, September 7, 2004, memo by Angelo-Eaton Associates
- OTP Update, available at www.odot.state.or.us/tdb/planning/OTPUupdate
 - OTP Draft Table of Contents
 - OTP Working Draft Vision Statement, July 9, 2004
 - Draft Integrated Transportation Planning – process diagram and relationship of the OTP and other plans
 - OTP Draft Goals, Policies and Actions, September 14, 2004 Revisions
 - OTP Analysis Process Ideas, 8/25/04
 - Comparison of Integrated Analysis Tools for use in OTIA3 and OTP Projects, 9/13/04 draft