

**OREGON MODELING STEERING COMMITTEE**  
**ODOT Human Resource Center, Suite C**  
**2775 19th Street SE, Salem, OR**  
**Wednesday, July 15, 2009**  
**1:00 p.m.-4:00 p.m.**

**MINUTES**

**ATTENDANCE**

**Members**

Bill Upton/Oregon Department of Transportation, Chair  
Dave Nordberg/Oregon Department of Environmental Quality, Vice-chair  
Brian Dunn/Oregon Department of Transportation  
Dick Walker/Portland Metro  
Dennis Yee/Metro  
Susan Payne/Lane Council of Governments  
Tyler Deke, /Bend Metropolitan Planning Organization  
Satvinder Sandhu/Federal Highway Administration  
John Gliebe/Oregon Transportation Research and Education Consortium

**Others**

Jerri Bohard/Oregon Department of Transportation  
Sonny Condor/Metro  
Cindy Pederson, Metro  
Michal Wert/MW Consulting

**FY2008-2009 OMSC ANNUAL REPORT**

Michal summarized the accomplishments of the OMSC and its subcommittees for FY2008-2009. The Annual Report is available at <http://www.odot.state.or.us/tddtpau/modeling.html>.

**LEGISLATIVE OVERVIEW/UPDATE**

Jerri Bohard stated that the ODOT Director's office is outlining legislation that affects ODOT and this should be complete by the end of August. A copy will be provided to the OMSC when it is finalized.

A section-by-section outline of House Bill 2001, the Jobs and Transportation Act, was circulated to the OMSC prior to the meeting. ODOT is strategizing on how to implement HB2001 and is preparing a work program for consideration by the Oregon Transportation Commission (OTC) at its October workshop. Much of the implementation work will be done by the ODOT Transportation Development Division (TDD), but with no new staff,

there is discussion on what work will be set aside to respond to HB2001. The bill becomes effective the end of September.

Key elements of HB2001 include:

- Deals with governance issues and will include looking at regional problem solving. An inherent conflict is how to get projects done faster but to be more transparent in the process. This section sunsets in January 2012.
- Requires one or more congestion pricing pilot programs to be implemented by 2012. This direction will be repealed in 2016. It was asked how the white papers that were prepared by ODOT will inform this task. Jerri stated that a background paper will probably be developed with lessons learned in Europe for congestion pricing. It will be challenging to present information to the legislature on how congestion pricing works and what are the hurdles to overcome to make it work.
- Requires transparency on projects and most ODOT projects are already on its website. This may be a challenge for local governments that use state or federal money and this will require coordination.
- Addresses least cost planning (LCP) and links to a requirement to develop State Transportation Improvement Project (STIP) selection criteria for projects. A STIP stakeholder subcommittee will consider criteria that will help build assumptions for LCP. The stakeholder subcommittee membership will be very broad, including JPACT, RVCOG, SKATS, Westside Alliance, PGE, PSU, public transit agencies, and others. It will be chaired by Scott Ashford, head of the OSU Civil Engineering program and the first meeting will be August 11. A progress report is to be made to the 2011 legislature.
- Establishes ConnectOregon III for multi-modal transportation facilities to be funded with lottery funds. Five modal committees will meet and make recommendations to the OTC, which will probably take action in August 2010. It includes a set aside for rural airports and requires some rule changes but it will generally follow the ConnectOregon II process.
- Defines a new vehicle class for medium speed electric vehicles, addresses traffic and safety issues, and ensures that charging stations are in place. This work is being managed by the ODOT Innovative Partnerships group and is being coordinated with electric vehicle discussions around the state.
- Requires ODOT outreach to others for shared facilities.
- Looks at some of the streamlining and programmatic efforts that were developed for the 2003 Oregon Transportation Investment Act to see how they can be expanded.
- Directs ODOT to look at design practices to maximize flexibility in applying design standards to reduce cost but preserve safety and mobility. A peer exchange including ODOT and representatives from other states will be held on July 28 in ODOT Region 1 to discuss how to do practical design. A report will be prepared following this meeting and a report on new design practices must be submitted to the legislature by November 2010.
- Directs ODOT to develop design alternatives to improve safety for hazardous material routing for a road in Washington County. A report is due to the next legislature and this requirement sunsets in 2012.

- Directs ODOT to conduct a pilot asset management program for all maintenance activities on a selected state highway segment.
- Establishes a four-year moratorium on enacting local motor vehicle fuel taxes and requires voter approval for motor vehicle fuel taxes after 2014.
- Prohibits car rental surcharges.
- Requires the Department of Administrative Services to prepare an alternative cost allocation study and recommendations for implementation by the next legislative session.
- Establishes a fund to create urban trails and some seed money to identify trails to development and maintain.
- Requires ODOT to contract to maintain certain roadside rest areas on I-5 and I-84 and to develop a plan to install electric motor vehicle recharging stations at rest areas.
- Requires planning to reduce vehicle miles travelled (VMT) and greenhouse gas (GHG) emissions. Requires Metro to develop two or more land use and transportation scenarios designed to reduce GHG emissions while accommodating population and economic growth, and Metro and local governments to adopt one scenario. Requires ODOT and DLCD to provide technical and financial assistance. Requires LCDC to adopt rules for Metro for GHG reductions, with ODOT and DEQ providing information needed to determine the amount of reduction. Requires ODOT, DEQ and DOE to recommend to LCDC modeling tools and other methods to adjust Metro's target VMT reduction. Requires interim progress reports and rules to be adopted by January 2013. Requires the same process for LCOG, if funds and assistance are available. LCDC is developing a climate change strategy that will guide rule-making. They are not considering a new statewide planning goal, but are considering strengthening existing goals relative to climate change.
- Several provisions related to county and state vehicle registration fees, vehicle title fees, license plate manufacturing fees, vehicle trip permit fees, custom plate fees for passenger rail, ID car fees, truck taxes and fees. Increases the gasoline and diesel fuel tax by 6 cents per gallon. Defines revenue distribution and other fee issues. The gas tax does not go into effect until two consecutive quarters increase of at least two percent, so it will likely not go into effect until January 2011. Truck fees will be addressed in a special session.
- Thirty projects, with construction year and cost, were identified. If the costs or schedules change, a change in legislation will be required.

House Bill 2186 address issues that the environmental community did not feel were adequately addressed in HB2001. Key provisions of HB2186 include:

- Requires DEQ to evaluate truck issues relative to GHG.
- Authorizes DEQ to adopt requirements relative to pollution control systems.
- Authorizes the Environmental Quality Commission (EQC) to adopt low carbon fuel standards.
- Establishes a 16-member MPO GHG Task Force directed to study and evaluate alternative land and transportation scenarios and implementation costs for MPOs. A report is required to be completed for a special session in January 2010. A Technical Advisory Committee will likely be needed to support work on HB2186. It is anticipated that the task force will meet 3-4 times beginning after Labor Day, with a

report due by the end of the year. Two papers may be prepared to synthesize what has been done nationally with land use/transportation, and to look at how climate change can be addressed with available analysis tools.

Other bills were also passed that increased taxes on business and high earners. By January 26, it will be known whether any bills that increase taxes will be referred to voters and a special election could be held by the end of February.

Dave noted that HB2186 is a low carbon fuels bill. Low carbon fuels is “low-hanging fruit” and it will be attractive when people see the VMT reductions needed to meet Oregon’s 2035 emissions reduction standard. DEQ is taking the lead and targets will reduce the life cycle carbon intensity of fuel from 2010 to 2020. Most of this will come from electric vehicles, which have more efficient drive trains than conventional vehicles, even if they are charged from a “dirty” power plant. This should be included in the rule-making and will correlate with GreenSTEP and LCP. A major compromise included a sunset provision in 2015, which will require reauthorization halfway through the program. It also includes a study to look at EPA’s SmartWay program to identify opportunities for large trucks to save money while reducing GHG.

Jerri reviewed other bills passed by the 2009 Legislature:

- HB3379 addresses local transportation system plans that do not have adequate funding and meeting requirements of the Transportation Planning Rule. It requires the OTC to conduct rule-making. This bill is confusing and rule-making will not begin until next year because of other priorities.
- HB2229 relates to recommendations from the Big Look Task Force on Land Use Planning. Several recommendations from the Task Force have already been implemented. The bill includes time limits on regional problem-solving and allows counties to revisit rural designations.
- HB2227 modifies provisions for siting destination resorts and authorizes LCDC to evaluate destination resort policies and update key requirements. It requires a transfer of development rights pilot project in central Oregon to allow clustering of destination resorts in certain areas.

Susan asked whether electric vehicles that can reach only 45 mph would be excluded from bridges and other major highways that have a 55 mph speed limit. This could require substantial out-of-direction travel and therefore more VMT. Can the County set these requirements aside? Jerri referred Susan to Art James/ODOT. Brian noted that most cars being built will be able to meet the speed requirements.

Tyler asked if more staff was provided to TDD with the additional legislative requirements. Jerri stated that TDD received money but no positions. A vacant management position will be used for an engineering position in TPAU, there is a commitment for a rotational engineer, and limited duration staff may be hired if qualified staff can be found. The three people working on the freight plan will absorb the ConnectOregon III workload.

## **SUBCOMMITTEE REPORTS**

### **Long-Range Strategy**

The Long-Range Strategy Subcommittee meets prior to each quarterly OMSC meeting. All items discussed by the subcommittee are covered in other agenda items.

### **Professional Development**

A summary of the June meeting of the Oregon Modeling Users Group, written by Ray Jackson, was presented. The meeting was held in Portland to accommodate those attending the MOVES training in the afternoon. The OMUG discussed three topics:

- Developing a Bicycle Model for the Portland Metro area - Bill Stein and John Mermin of Portland Metro presented an overview of the work being done by Metro and PSU to develop a more robust bicycle model. Previously Jennifer Dill of PSU conducted a survey of bicycle travel in the Portland area using GPS devices attached to participant's bikes. Data was collected for a week and then analyzed. Portions of that data will be used to estimate mode choice and destination choice submodels. These will be validated and then placed into the existing Metro model, which will be modified to allow assignment of the bicycle trips. They also discussed some of the rationale for developing this type of bicycle model in comparison to the existing process of estimating the number of bicycle trips that are never assigned to the model network. One motivation is the fact that the current system does not take into account the type and 'quality' of the bicycle network. Estimated completion date is December 2009.
- Overview of CT-RAMP Modeling System - Joel Freedman of PB Consult provided an overview of the CT-RAMP modeling system. This is an activity-based tour model that PB has been developing over the last decade. It differs from the majority of the existing activity models by including explicit consideration of intra-household time-space budgets and constraints, and in particular, the "joint non-mandatory tours" that families make.
- LUSDR in SKATS-land - Mike Jaffe/SKATS discussed the work that has been ongoing to implement LUSDR in the Salem-Keizer area.

Dick noted that the Metro bicycle model provides an easy way to get a handle on bike usage. It will be useful to address House Bill 2001, to have a tool that better estimates the effects of a bicycle infrastructure improvement.

### **Applications**

Brian stated that the Albany area model will be peer reviewed on August 3. This will be the first peer review of the Oregon Small Urban Models (OSUM) model structure.

Susan stated that LCOG is sponsoring a meeting of ODOT, MPOs, PSU and others to discuss traffic data and ITS issues on the afternoon of August 11. LCOG is installing sensors that will provide significant amounts of traffic data. There is a lot of data being

collected around the state. Some are acquiring, storing and accessing the data in a meaningful way. Others have a lot of data and do not know what to do with it. There is much interest in bringing this broad group together to talk about how to share information seamlessly and to talk about how to use, store and access it.

Some local consulting firms are working with devices that can communicate through a USB antenna plugged into a Bluetooth device in a car to acquire electronic data on vehicles. The data feeds into a software program that can track a variety of activities. It is being used to look at travel time delays, signal timing issues, and generally how people move on highways. It may be useful for origin-destination surveys. It is wireless and appears to be a way to gather information cheaply and quickly. Privacy was a concern but this is addressed by removing the part of the signature that makes it unique to the driver. This may provide an opportunity for permanent counters that could transmit data to a central location.

Susan will report back on the results of the meeting and suggestions on how to coordinate and share information.

### **Modeling Program Coordination**

Dick stated that MPC met in the morning and discussed several items:

- Brian Gregor/ODOT talked about legislative bills as they relate to climate change. Recent legislation will set GHG emissions targets and Metro is required to develop/evaluate alternative scenarios to meet the targets. A question is what if the targets cannot be met. There is a need to look at modeling tools and to determine what can be done effectively in the time allotted. Metro is developing a tour-based model and it would be good to have a dynamic traffic assignment (DTA) available to do GHG work. Addressing non-motorized travel and demand management programs will be important, as well as use of land use allocation models and the statewide model for intercity and statewide flows.
- There is discussion at Metro on convening an expert panel to talk about what needs to be done to address the House Bills. A summary of existing tools would be provided and the panel would be charged to make a statement on enhancements necessary to provide the needed information. This would include the urgency for enhancement and how much it would require for staffing/funding/time. This would help define priorities and provide an overview of necessary tasks. If the expert panel identifies several things to be done and there are only time/resources to do a few, this will be documented and will help set priorities. It will be useful to have expert opinions on the tools available to do the work required to respond to the House Bills.
- As the Federal transportation bill emerges, additional GHG discussions will occur and modeling requirements may differ from what is needed to address Oregon requirements. Potential solutions to GHG issues may require significant political will to implement and this will be part of the discussion.
- It was agreed that the OMSC MPC should prepare a white paper to address analytical tools, data, and MPO/ODOT activities relative to GHG requirements. A

survey will be conducted of ODOT and MPOs and this information will be incorporated into a white paper.

- Bill provided information on the Intergovernmental Agreements (IGAs) being developed between ODOT/TPAU and all MPOs.
- In preparation for the next round of research solicitations for ODOT Research, OTREC and for the emerging modeling center, there is a need to identify and prioritize research ideas of mutual interest to OMSC members. A special meeting will be held in late July to solicit ideas, whether funded or not, on research projects that would be of benefit to all OMSC members.

Brian suggested that any information developed relative to GHG legislation be shared with DOE and DEQ so they have all the information available as they prepare recommendations for DLCD, consistent with legislative requirements.

## **PROGRAM UPDATES**

### **Oregon Household Activity Survey**

Becky Knudson provided a written update on the OHAS. In the public realm, the survey is referred to as the Oregon Travel & Activity Survey.

- Completed tasks:
  - Preliminary Survey preparation and design occurred last year and ended with the completion of a Pilot Survey last fall. The Pilot Survey resulted in the final list of survey questions and an estimated cost per survey.
  - Early 2009, several pre-data collection tasks were completed. The project contractor NuStats prepared the statewide sampling plan, weighting scheme, finalized and printed survey materials, completed computer programming required for collecting and entering data via telephone, designed and implemented the survey web page. Preparations were also completed for potential special survey components to be implemented in the event funding is acquired. Special features include potential use of GPS technology; conducting a panel survey over time; special surveys aimed at long distance travel patterns, recreational travel, special demographic groups, public health issues such as Air Pollution Advisory days, to name a few.
  - Phase 1 data collection began April 1 for ODOT Regions 2, 3, and 4 outside MPO areas and ended in early June. Region 3 and 4 data collection was completed and a very small portion of Region 2 data was collected.
- Scheduled tasks:
  - Phase 2 of the survey begins late summer 2009 with preparation for the Lane COG Survey, Vancouver WA survey, and the remaining ODOT Region 2 survey. Data collection will begin after Labor Day and end before Thanksgiving. Phase 3 is planned for spring of 2010. Mid-Willamette Valley COG, Lane COG and ODOT Region 5 are expected to collect data during Phase 3.
- Results:
  - In general, the spring survey went very well. We faced recruitment challenges as expected, but in the end met most of the demographic goals. Experience gained

- from Phase 1 lead to several improvements to the survey process and implementation. Public response to the survey was positive overall. However, the number of public contacts made to staff by survey participants was significantly higher than the last survey. We logged a total of 300 calls and emails from participants during Phase 1, an average of six contacts a day. A few inquiries came through the offices of state legislators.
- Final data sets are nearly ready for review. A meeting of the OMSC MPC OHAS Subcommittee is likely to be scheduled within the next month to review the data and provide direction for the project ahead.

Brian noted that there were several inquiries to find out whether this is a legitimate survey. Once that was confirmed, people were happy to participate. Identity theft is more of an issue now than it was in the previous surveys. The calling staff needed to be trained and there was a spike in the number of calls to staff until this was completed. It took time to get information on the survey on the main ODOT webpage, but once that was done, there were fewer calls.

### **Metro Research Center Strategic Plan**

Dick stated that the new department formed under Metro under its reorganization includes all transportation and land use modeling and data. A draft strategic plan was presented to the OMSC by Mike Hoglund, and includes values, goals and objectives, business plan, protocols, etc. The target is to have it 75 percent complete by September. It will include a five-year schematic work program with different levels of tasks. The level 1 group of tasks will include every day expenditures and maintenance activities necessary to stay in business. Level 2 includes projects, such as support to MTIP, RTP, Columbia River Crossing project, technical and contractual assistance. Level 3 includes improvements necessary to keep existing tools current and up-to-date. This is a long list because staff has been focused on projects and has not been working on research and development. Of the 10 people in the transportation modeling group, two are dedicated to model/tool development activities. The strategic plan will help define this need and if more support is needed than is offered, Metro needs to define how that will occur.

Examples of specific values fall within three broad categories: ethics, skills, and performance. Among other things, the strategic plan will be useful to define rules of conduct relative to the use of models by staff, consultants and others. For example, for the demand model and assignments, consultants/others can run the assignment but not the demand model itself.

Dick will inquire whether the strategic plan can be shared with partners/clients at this draft stage.

### **Oregon Modeling Center**

Bill stated that an OMSC Steering Committee, composed of himself, Dick Walker, John Gliebe, Keith Lawton and Michal Wert, has been looking at options for establishing a

modeling center to work with Portland State University (PSU). Options included an independent entity, a stand-alone center within PSU, a center under the OTREC umbrella. The conclusion is that there is an advantage to create the Center at PSU in partnership with OTREC. There is no money for administrative activities for the Center, and it is efficient to make use of OTREC administrative support.

The initial focus of the Center will be model development and applied research, building on existing contracts between PSU, ODOT and Metro. Project funding could include funding by local governments, as Metro and ODOT are doing now, OTREC or other federal grants, service surcharges or other methods not yet identified. It is hoped that OTREC grants staff will be available to help the Center identify funding opportunities. The OMSC MPC Subcommittee will help identify research and development projects and OTREC will help search for faculty sponsors and funding. A draft proposal requesting that the Center be part of OTREC is being prepared.

John stated that the Center needs to create a space on the OTREC website. The Center will operate in the spirit of bringing together different jurisdictions to work on projects of mutual interest. A goal is to attract high quality graduate and postdoc students. The name Center for Analytical Methods in Planning (CAMP) has been suggested.

Dave asked if there is a role for this group with the GHG and VMT work. Can this group facilitate multi-agency collaboration and cooperation on GHG? Dick stated that legislative timelines will probably preclude working on GHG and VMT issues mandated by the legislature. Eventually, the Modeling Center will have broad expertise that will be available to address questions, such as how to improve modeling for pedestrian travel. This question could evolve into a proposal that could find funding through the OTREC umbrella. The broad nature of the program will encourage considering all disciplines.

Susan stated that there is a need to have performance measures for new strategies to determine the effectiveness of different policy actions. For example, how do we determine whether a policy action makes it better for pedestrian use? This does not necessarily require modeling but it is important to help policy makers understand concepts and how to measure them.

Dave stated that Oregon has a lot to offer for national legislation from its unique land use environment and this should be incorporated into the Center.

## **2009 CONFERENCES**

The following conferences are scheduled in 2009:

- July 28-29 - 2009 Transportation Planning, Land Use, and Air Quality Conference, Ames, Iowa - <http://www.ucs.iastate.edu/mnet/tpluaq/home.html>
- October 19-21, TRB 8th National Conference on Transportation Asset Management, Portland, OR - <http://guest.cvent.com/EVENTS/Info/Summary.aspx?e=82b0cb1d-279e-4586-bfd7-3778382e1b69>

Bill stated that there is discussion on holding the next Oregon Modeling Symposium in 2010 but a theme for that Symposium is still being discussed. The theme may have something to do with climate change. John Gliebe, Rick Donnelly and Bill Upton are the planning team, and any suggestions on a theme should be sent to Bill.

John is the co-chair of the next TRB Innovations Conference, which will be held in May 2010 in Tempe, AZ and will be hosted by Arizona State University. There is a conference website and there will soon be a call for papers. When the program started, it covered everything innovative; it was narrowed to six themes in 2008. The 2010 conference will include such topics as:

- Certainty and risk analysis for forecasting
- Modeling and measuring transport system reliability – all modes
- Integration of dynamic network modeling tools
- Modeling non-motorized travel and ancillary travel (walking, biking, access modes that make transit possible)

### **OTHER ISSUES/NEXT MEETING AGENDA ITEMS**

Susan requested that talking points be provided on how GHG emissions are being addressed on ODOT projects. LCOG receives questions on this at public meetings and it would be good to respond to them consistently statewide. Brian stated that GHG issues are addressed at the system level (Transportation System Plans) and that questions should be referred to the local ODOT region so that responses are legally correct and consistent.

Satvinder stated that FHWA is preparing a workshop on safety and long-range planning that will be targeted to MPOs. He will provide more information as it is available.

### **NEXT MEETING/AGENDA**

The next OMSC quarterly meeting will be on Wednesday, October 21, 2009, from 1:00-4:00 p.m. in Salem.

Suggested future agenda topics include:

- Updates on activities undertaken to address legislative requirements
- Federal transportation bill reauthorization
- Metro 2040 Growth Concept: *Making the Greatest Place*
- An update on MOVES for either the OMSC or MPC
- FHWA (re)organization
- What is least cost planning?
- Research topics and application schedules

The meeting adjourned at 3:40 p.m.