

OREGON MODELING STEERING COMMITTEE
ODOT Human Resource Center, 2775 19th Street SE, Salem, OR
Wednesday, April 18, 2007
1:00 p.m.-4:00 p.m.

MINUTES

ATTENDANCE

Bill Upton, Chair	OR Department of Transportation
Richard Bjelland, Vice-chair	OR Department of Housing & Community Services
Brian Dunn	OR Department of Transportation
Dave Nordberg	OR Department of Environmental Quality
Dick Walker	Metro
Bud Reiff	Lane Council of Governments
Susan Payne	Lane Council of Governments
Ray Jackson	Mid-Willamette Valley Council of Governments
Matt Hermen	Rogue Valley Council of Governments
Shinwon Kim	SW Washington Region Transportation Council
John Gliebe	Portland State University
Scott Drumm	Port of Portland
Michal Wert	MW Consulting

Guests

Becky Steckler	OR Department of Land Conservation & Dev.
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INTRODUCTIONS – Self-introductions.

ELECTION OF OFFICERS

Chair Upton thanked all those who served as officers in 2006. The following slate of officers was accepted for 2007:

- Bill Upton, Chair
- Richard Bjelland, Vice-Chair
- Dick Walker, Chair, Modeling Program Coordination Standing Subcommittee
- Bud Reiff, Chair, Applications Standing Subcommittee
- Ray Jackson, Chair, Professional Development Standing Subcommittee

2006 OMSC ANNUAL REPORT

Michal Wert noted that the draft 2006 Annual Report was circulated with the preliminary agenda and that minor comments and corrections have been incorporated into the report. There being no additional comments or corrections, the 2006 Annual Report will be finalized and posted on the OMSC website.

SUBCOMMITTEE REPORTS

Professional Development Subcommittee – Ray Jackson, Chair

Ray stated that the Oregon Modeling Users Group (OMUG) met in March and about 20 people attended. Topics included implementing a model within the VISUM software package instead of using VISUM as an assignment platform and an overview of EMME-3 features. OMUG discussed whether it should meet quarterly or less often. There are several topics for the June meeting and they agreed to make a decision on meeting frequency based on the number of topics of interest to the group.

Applications Subcommittee – Bud Reiff, Chair

Bud stated that the Subcommittee will schedule a peer review as soon as the Bend model is ready. Bill stated that a contract was recently signed with the consultant who is preparing final documentation and the model should be ready for peer review this spring.

Modeling Program Coordination (MPC) – Dick Walker, Chair

Dick stated that the MPC met in the morning and covered a broad variety of topics.

- Metroscope, LUSDR and UrbanSim land use models are three land use allocation models that have seen use in Oregon. However, all three have never been applied in the same location. The Oregon Transportation Research and Education Consortium (OTREC) research funds are being sought to conduct a study to illustrate the strengths of each tool. The goal of the research is not to determine which tool is best, but rather to point out the unique effects that each is designed to address. Regardless of the outcome for the request for research dollars, Metro and MWVCOG will partner in applying the tool in the Salem-Keizer area
- ODOT is funding the initial phase of the Oregon Household Activity Survey (OHAS). A Request for Proposal was circulated and a consultant team headed by NuStats was selected to manage and conduct the survey. A final work scope and contracting is underway and work should begin in Mid-May. MWVCOG and ODOT Region 2 will be the first areas to be surveyed, probably this fall.
- Metro is working with Portland State University to design and implement a new tour-based activity model over the next 1–2 years.
- A presentation on three land use allocation models (Metroscope, LUSDR, and the Statewide Model) will be made at the July Oregon MPO Consortium meeting.
- The MPC brainstormed a list of topics for agenda items for the next several meetings. More information is available from Dick or Michal.

PROGRAM UPDATES

OR Household Activity Survey (OHAS)

Bill expanded on Dick's summary of the OHAS. Contracting will be a two-tier process. ODOT is currently developing an overall price agreement with the contractor. Individual work order contracts (WOC) will be issued for specific products or surveys under this price agreement. The first WOC will be to develop an overall timetable and schedule for surveys and a general scope of work for these surveys. It is hoped that this will be complete by early summer so that actual surveys can begin in the fall.

Michal noted that technical oversight will be provided at two levels. Individual MPOs or ODOT will manage the individual WOC for its area; the OMSC OHAS Subcommittee will be responsible for technical review and quality assurance to ensure statewide consistency and uniformity.

Dick stated that these surveys will provide information that all MPOs and ODOT can use. Combined data can be used for joint estimation and broader surveys can be developed to provide more regionalized detailed information.

Susan Payne noted that it is important to make sure that surveys conducted outside an MPO are done consistently with surveys inside the MPO. If Region 2 surveys unincorporated areas this fall and LCOG does not conduct surveys until later, it is important that data collection at different times be consistent. It was noted that Region 2 includes both MWVCOG and LCOG and that Salem and Eugene are growing faster than other communities in Region 2. This issue needs to be addressed in construct and the timing of the surveys.

Other questions:

- When will information be available from the surveys? NuStats will collect the data but processing the data is not part of the contract.
- Contracts can spread across the Federal fiscal year, which may help local government pay for it more easily (the Federal FY begins in October and local government FY begins in July).

THE BIG LOOK

Becky Steckler is the Project Manager for The Big Look and gave an overview of the project. A ten-member Task Force was appointed in 2006 by Governor Kulongoski, House Speaker Karen Minnis and Senate President Peter Courtney to chart the future of the state's land use planning system. The Task Force was created under Senate Bill (SB) 82 in 2005, which called for a broad review of the state land use planning program and recommendations for any needed changes to land use policy.

SB82 is the second attempt to conduct an evaluation of the Oregon land use program. An effort in the 1980s formed a task force but the evaluation took less than a year and there were only a few recommendations. Ballot Measures 7 and 37 were clear signs that the Oregon land use program needs to be reevaluated and updated. There is a feeling that the Measure 37 vote was as much a sign of distrust of government as much as a vote on land use planning, but it is timely to conduct the review directed by SB82.

The Task Force was charged with studying and making recommendations on the:

1. Effectiveness of Oregon's land use planning program in meeting the current and future needs of Oregonians in all parts of the state;
2. Respective roles and responsibilities of state and local governments in land use planning; and

3. Land use issues specific to areas inside and outside urban growth boundaries (UGB) and the interface between areas inside and outside UGBs.

The Task Force refined and expanded this charge to include six key issues:

1. What are the appropriate roles of state and local governments in land use in Oregon?
2. What is the appropriate role of citizen involvement in land use?
3. What role should land use planning play in enhancing Oregon's economy now and in the future? Agriculture and forestry were important when the Statewide Planning Goals were adopted but the Task Force wants to look at current economic potential and issues.
4. What are the most effective tools to manage population growth to achieve community goals? The UGB is only one tool. The Task Force wants to look at other tools available to recommend the most effective ways to manage growth.
5. How should Oregon's system of infrastructure, finance and governance influence land use? The Task Force is interested in how we pay for growth equitably and what government structure is needed to provide services.
6. How to address the benefits and burdens that fall on individual land owners and the general public? This fairness issue was raised in Measure 37.

It is not possible for all Task Force members to become informed on all six issues so three or four members are assigned to each of these issues. The Task Force has been meeting for a year and will start a conversation with the public in preparation for sending recommendations to the 2009 Legislature. A work program was prepared to conduct the evaluation in five phases:

1. Identify major issues – the six issues listed above concluded Phase 1.
2. Analyze key issues and identify tradeoffs between policy options to address the issues – this is taking longer than originally anticipated. A consultant team was recently hired to help identify and analyze key issues.
3. Conduct targeted and interactive discussions with the public – the public conversation is starting now. The intent is to have a focused conversation with the public to discuss trade-offs.
4. Debate information from tasks 1-4 and develop recommendations
5. Present and advocate for recommendations to the 2009 Legislature – this will include writing legislative language and identifying supporters for the recommendations.

The project is using the housing model developed by Richard Bjelland to look at housing issues. Becky talked with ODOT to see if the statewide model could be used for the project and the consultant team is interested in looking at different scenarios. Brian Dunn stated that identifying measures and what is to be modeled takes time and the Task Force is still framing the issues. Right now, no TPAU staff is assigned to work with the Task Force to help define the issues in a manner that they can be modeled, but Brian Gregor has been listed as a technical committee member. Additionally, the Transitional Model is not ready for application right now.

Becky stated that if the statewide model is available when the Task Force has recommendations in March 2008, it would be useful to see what happens with

implementation and how the recommendations affect development patterns on the ground.

Becky stated that the consultant team is using simplistic population and employment forecasts and are looking at local and state government roles. Many local governments want more local control and if decisions are made at a different level, the decisions look very different. The Task Force is looking at short-, medium- and long-term impacts of different trade-offs and options.

The consultant team started in February and are to define how to present information to the public by June. The Task Force intends to spend August-January 2007 talking with people around the state on the six issues. Recommendations will be made to the governor, the 2009 legislature and LCDC. They can also make recommendations to local governments and others.

Other discussion:

- The consultant team is talking with the Task Force about setting priorities.
- There will probably be no discussion about soil classifications for farm or forest land – this is deeper than the Task Force can go at this time.
- The environment is not included in the list of six issues but the consultant team is recommending that the Task Force consider sustainability.
- What does it mean if land use laws become looser? How will things change over time?
- The Task Force is not participating in the 2007 legislative discussion on Measure 37. They decided that their work should not become involved in this short-term and highly charged discussion.

Additional information on The Big Look is available at <http://www.oregonbiglook.org/>.

REGIONAL FREIGHT DATA COLLECTION PROJECT

In September 2005, Scott Drumm gave an overview to the OMSC on the Freight Data Collection Project that is being conducted in the Portland area. The region is interested in freight flows around the region and filling in other data needs. Cambridge Systematics was hired to do a needs assessment and to help define the kinds of freight data that the Portland-Vancouver area needs and the issues that need to be resolved. This has been a joint project with the Port of Portland, Metro, Multnomah County, WSDOT and ODOT.

Phase I of the project defined freight data questions on goods movement and the economy; land use and goods movement; truck routes and utilization; relationship of trucking to other modes; and corridor/project specific data needs.

Phase II was the freight data collection program. Sources of data included road intercept, terminal gate and motor carrier surveys; a truck following study; and vehicle classification counts. Data types included origin-destination (O-D) data, freight facility flow information, transportation network information, truck count data, commodity

information, routing information, temporal variability of freight flows, and truck classification and carrier information.

Key findings included:

Road Intercept Survey

- More than 50 percent of trucks entering the region do not stop inside the region.
- Through trips pick up in mid-morning and are steady into the PM peak.
- Trips with an origin or destination in the region peak late morning and decline steadily through the PM peak.
- Roughly 60 percent of all external trips from late afternoon and beyond PM peak are through trips.
- More than half of all external trips move to/from a re-load facility. Re-load facilities are a critical component of the movement of goods.
- About 20 percent of trucks were empty. Four commodity groups comprise about 42 percent of all truck trips, with food products as the largest.
- Lumber is the largest through-trip commodity (19 percent). A smaller percentage of through trips were empty (15 percent) than for inbound/outbound trips (25 percent).
- The I-5 corridor is the route for 60 percent of the Region's pass-through trips.
- Trucks entering the region from I-84 are more likely to stop in the Region than trucks entering the Region from I-5 (either from north or south).

Terminal Gateway Surveys

- Most truck trips stayed within the study area.
- Pass-through trips tend to represent a greater portion of truck trips during the very early AM and again at the PM peak, similar (not identical) to the regional data for external trips.

Truck County Program

- The majority of truck trips on I-5 South are heavy trucks.
- Truck traffic peaks mid-day in comparison to autos, which have distinct AM & PM peaking
- This pattern holds for State highways and arterial freight routes.

Facility Flow and Operations

- Interviews uncovered a blurring of lines between services offered by truckload, private, and LTL fleets.
- Generally speaking, LTL fleets typically make fewer empty trips than truckload or private fleets.
- Motor carrier facilities operate based on customer need.
- There is no pattern in hours or size of operation.
- Payloads are substantially lighter for freight moving inside the region than that moving in and/or out.

Several things worked well in the project:

- Starting with a focus on freight planning questions satisfied freight planning efforts of local and state agencies and regional travel demand model needs.
- Hourly vehicle classification counts helped with:
 - Understanding patterns by truck type, facility type and trip type

- Validating analytical tools
- Collecting vehicle classification data for first 15 minutes every hour maximized project resources
- 24-hour count data for interstates, 72-hour counts for other roads
- Roadside truck O-D surveys provided a detailed understanding of inter-regional trip patterns and an understanding of land use relationships. Routing information should be useful for future planning.
- Roadside truck O-D surveys at port terminals and intermodal yards should allow for better modeling of gateway facilities.
- The truck-following survey was well-suited for collecting truck O-D data for a small subregion and provided useful routing information.

Lessons learned included:

- Immediate data QA/QC for all data elements is needed at multiple levels. While this is expensive, it can save money in the long-term.
- Establishment surveys and data collection should be re-evaluated. This requires extensive access to establishments. Dispatch data was not provided and it may be more effective for focusing on supply chain patterns.
- Collecting truck O-D data for truck movements internal to the region continues to be an elusive element. Trip diaries may still be the best approach or move to GPS.

Next steps include a Regional Truck Count Program, more data collection for trips that stay in the Region, and mapping of the supply chain flow process, including a warehouse trip purpose module to understand how investments affect supply chain performance.

Dick stated that past truck counts at Metro were disconnected because they were done in different locations, in different ways, at different times. By gathering this data across the region at the same time with the same methodology, much better benchmark data is secured.

General discussion:

- It would be interesting to see the flows into and out of the Willamette Valley if this is available.
- Whether trucks adjust loads at the state line to meet OR regulations was not considered in the study.
- The Metro model does a good job of estimating truck trips. It is a little under estimated but that is partly because of using 5-6 year old data.
- The study did not try to capture passenger-type trucks, i.e., pickups or delivery vans. The focus was on freight and not service vehicles.

A copy of Scott's slide presentation is on the OMSC website at <http://www.oregon.gov/ODOT/TD/TP/OMSC.shtml>. A link to the final report is on the Port of Portland FTP site until June 15, 2007 at <ftp://ftp.portofportland.com/postings/60/>.

MPO SURVEY RESULTS

Dick served on a Transportation Research Board (TRB) committee that is documenting the “state of the practice” of MPO Travel Forecasting Procedures around the country. A consultant was hired to conduct a web survey of all MPOs in the country to determine their approach and capability for transport modeling. The committee is writing a report that will summarize the results and include impediments to good modeling practices, areas of concern and recommendations on what needs to be done. The final report will be issued following a thorough review process.

Dick gave a presentation of the results of the survey. A total of 381 surveys were sent and 228 were returned, for a 60 percent return rate. Eighty-four percent of large MPOs (over 1 million population) responded, and 57 percent of medium (200,000-1 million population) and small (less than 200,000 population) MPOs responded. There was wide distribution of respondents around the country.

One key message from this survey is that the modeling methods across the country are extremely varied. That is not a bad thing. Modeling techniques are primarily dictated by the unique needs of a modeling area. For example, the model design of a small city with no transit service or emission problems will be very different from a city with an extensive investment in transit or emission concerns. This differential correlates with urban size, but it is not “pure”.

Discussion:

- Small MPOs tend to do 24-hour assignments. Large MPOs do more time of day modeling because of congestion, air quality, etc.
- The size of the MPO is not a good measure for the type of model used. The need dictates the model that is used, e.g., air quality issues require different models than transit considerations.
- There has been a slowing of implementation of more recent modeling advances.
- It would be interesting to see results presented geographically to see what features are being used in different states.
- It was noted that some MPOs were concerned about participating and being identified and then open to challenge or lawsuit because of model capabilities.

A copy of Dick’s slide presentation is on the OMSC website at <http://www.oregon.gov/ODOT/TD/TP/OMSC.shtml>. The full TRB slide presentation is available at <http://onlinepubs.trb.org/onlinepubs/reports/BMI-SG-Sept2005-Draft.pdf>

OTHER ISSUES/AGENDA TOPICS

John Gliebe stated that OTREC is in the process of issuing a Request for Proposals for research projects. Proposals submitted may be an appropriate agenda topic for the next OMSC meeting.

Dave Nordberg stated that the Portland area Joint Policy Advisory Committee for Transportation (JPACT) has been a good forum for transportation policy nationally. Rep. Earl Blumenauer asked JPACT to offer ideas on national transportation topics and Fred Hansen/Tri-Met suggested land use conformity. FL and WA have conformity requirements for transportation and land use and require an assessment of how large land use actions impact the transportation system. This may be a good topic for the OMSC to discuss.

John stated that Jennifer Dill is conducting research under a Robert Wood Johnson grant to determine what aspects of the urban environment encourage or discourage bicycling and walking. PSU students are concerned that bikes are not well represented in travel demand models. The Portland DOT is also interested in more representation in the denser areas of the city. Historically bikes and walking have not had a large impact on infrastructure and development but this is changing. It was agreed that Jennifer should be invited to share her research with the OMSC at its July meeting.

Brian Dunn asked if the MPC discusses priorities on where time should be spent for modeling. Dick noted that MPC members discuss what is being done but do not set statewide priorities because needs are so different around the state, i.e., Eugene has a strong interest in bicycling and Portland focuses on light rail and streetcars.

NEXT MEETING/AGENDA

The next quarterly OMSC meeting will be on Wednesday, July 18, 2007, from 1:00-4:00 p.m. in Salem. Agenda items include:

- Subcommittee Reports
 - Applications - Reiff
 - Modeling Program Coordination – Walker
 - Professional Development - Jackson
- Program Updates
 - Oregon Household Activity Survey – Upton
 - MPO/Statewide Model Integration Project – Upton
 - OTREC Research Proposals - Gliebe
- Healthy Communities Project – Jennifer Dill

The meeting adjourned at 4:10 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:

- The 2006 OMSC Annual Report is posted at http://www.oregon.gov/ODOT/TD/TP/OMSC.shtml#Annual_Reports.
- A copy of the Regional Freight Data Collection Project slide presentation is on the OMSC website at <http://www.oregon.gov/ODOT/TD/TP/OMSC.shtml>. A link to the

final report is on the Port of Portland FTP site until June 15, 2007 at <ftp://ftp.portofportland.com/postings/60/>.

- Additional information on The Big Look is posted on the DLCD website and at <http://www.oregonbiglook.org/>.
- A copy of the slide presentation on results of the MPO Travel Forecasting Procedures Survey is available website at <http://www.oregon.gov/ODOT/TD/TP/OMSC.shtml>. The full TRB slide presentation is available at <http://onlinepubs.trb.org/onlinepubs/reports/BMI-SG-Sept2005-Draft.pdf>.