



OREGON MODELING STEERING COMMITTEE
MWVCOG Conference Room
100 High St. SE, Suite 200, Salem Or
Wednesday, April 29, 2015 **NOTE REVISED DATE**
1:00 pm to 4:00 pm

Draft Agenda

Welcome and Introductions

Conferences

- Transportation for Sustainability – An International Conference, May 7-8, 2015 in Washington D.C.
- 15th TRB National Transportation Planning Applications Conference, May 17-21, 2015 in Atlantic City, New Jersey, <http://trbappcon.org/>
- 2015 TRB’s 5th International Conference on Transportation Systems Performance Measurement and Data, June 1-2, 2015 in Denver, CO
<http://onlinepubs.trb.org/onlinepubs/conferences/2015/PerformanceMeasurement/Announcement.pdf>
- International Conference on Transportation System Resilience to Climate Change and Extreme Weather Events, September 16-18, 2015 in Washington D.C.
<http://onlinepubs.trb.org/Onlinepubs/Conferences/2015/ClimateChange/CallforPresentations.pdf>
- Association of Metropolitan Planning Organizations 2015 Annual Conference, October 20-23, 2015, Las Vegas, NV <http://www.ampo.org>
- Other TRB Conferences and Webinars Posted: <http://www.trb.org/Calendar/Calendar.aspx>

General Business

Walker 15 min

Approval of minutes from last meeting
(<http://www.oregon.gov/ODOT/TD/TP/docs/OMSC/20141022Minutes.pdf>)

Next meeting proposed date: **Wednesday, October 21, 2015**
Subcommittee Chairs’ synopsis (summary of activity attached to Agenda):

- Modeling Program Coordination Committee – Ray Jackson
- Health Committee – Eric Main
- Freight Committee – Derek Jaeger

New Business

Salem/Keizer MPO Update	Jaffe	10 min
LCOG Update	Roll	10 min
Summary list of research conducted using the OHAS data	Knudson	5 min
OMSC Health Committee Poster Presentation	Main	20 min

BREAK

Attached Materials: Sub-Committee Reports

Modeling Program Coordination

At the January 2015 meeting the members of the Modeling Program Coordination subcommittee were presented with recent work on a number of topics. These were:

- Bud Reiff (Portland Metro) discussed the process to update Portland Metro's freight model. This will build off work done in other parts of the country. More than passenger travel, freight flows are highly influenced by the local, regional, national and global economies. A touring model for regional truck model will be implemented for the Portland area.
- Becky Knudson (ODOT TPAU) provided an update on the recent development and use of ODOT's Statewide Model (SWIM). Updates to SWIM are proceeding bringing new/revised submodels, updated input data (using 2010 as a base and switching from SIC to NAICS), and using Visum to assign the results instead of the previous custom assignment module. Becky summarized a number of recent studies that has used SWIM to provide insight into the impacts of the scenarios.
- The use of OHAS data in evaluating and updating the models that TPAU maintains was the topic for Jin Ren (ODOT TPAU) presentation. Jin focused on work done to date on the Grants Pass OSUM model and the RVMPO JEMnR model.
- Alex Bettinardi (ODOT TPAU) gave an overview of some of the tools used by TPAU to extract US Census data for use in travel demand models, and some of the uses in the SWIM-JEMnR-OSUM models.
- Brian Dun (ODOT TPAU) lead a discussion on statewide coordination, focusing mainly on a presentation that TPAU received from AirSage. AirSage provides data for trip between areas using cellular phone data that the phone companies collect. The data is anonymized so socio-economic/demographic data is not available. The group discussed possible uses of the data including providing insight into external travel.

One outcome of the meeting was the interest in having a webinar presented by AirSage to allow all members to have the same basic information. A webinar was arranged, inviting those on the MPC and OMSC mailing lists. The webinar took place on the 9th of March. There has been continuing discussion on which organizations are interested in proceeding and how that would be accomplished.

The April MPC meeting is scheduled for the morning of April 29th. Currently two presentations have been arranged:

- Josh Roll (CLMPO) will discuss the work he has been doing with bicycle counts in the Eugene-Springfield area.
- Dick Walker (Portland Metro) will present a number of one page informational papers produced by the Modeling Services Division, that provide background on a number of modeling related topics. These are used to provide a common language and understanding for all those involved with modeling results.

Transportation and Health Committee

Transportation & Health Subcommittee Update – January 29, 2015

- **Transportation interview questions**

Five transportation modelers in were interviewed to evaluate the state of transportation modeling in Oregon. Generalized responses were provided during the first presentation. Below is a list of the questions:

- Given a hypothetical project of a new BRT line, how far from the transit line would you expect travel behavior in TAZs to be impacted? Bottleneck relief?
 - What percent of arterials with AADTs greater than 10,000 do you have data?
 - Does your current travel model use demographic data broken down by sex and age groups: 00-04, 05-14, 15-29, 30-44, 45-59, 60-69, 70-79, 80+?
 - Are travel distances available in miles/person/ week for walk (including trips to transit stops), bike, and auto (driver/passenger)?
 - Does your current model have mean speed for each travel mode listed above? If so, is the information available for the baseline and a horizon year?
 - When does your agency anticipate transitioning to an activity-based model?
- **Preparing data for air quality dispersion modeling**
 Health impact modeling of programming and implementation projects will require the use of an air quality dispersion model. CAL3QHCR is a free open source dispersion model that the subcommittee has evaluated for use in the modeling process. A list of data required to run the model for the base and horizon are provided below:
 - Road network
 - Functional class
 - Annual average daily traffic (AADT)
 - Lane widths
 - Link orientation
 - Elevation
 - Pollutants (pm2.5) per vehicle mile
 - Meteorology data
 - Average speed (freeway)
 - Average vehicle class mix (optional)
- **Environmental Justice**
 The subcommittee will recommend EJSCREEN to pre-screen neighborhoods potentially impacted by regional transportation projects.
- **On-road emissions presentation and discussion**
 - Alex Bigazzi provided a detailed presentation of his work on on-road emissions
 - The subcommittee agreed that near-road residential exposure is the level of air quality exposure that the group is comfortable addressing
- **Follow-up questions/points for consideration at the next meeting**
 At the end of the meeting, Stephanie Millar provided a set of questions for the subcommittee to discuss at the next meeting for consideration of RFP recommendations:
 - Who will own the product?
 - Will it be open source?
 - Who will manage the contract?
 - Who will run the model?
 - What are the associated considerations for time and resources?
 - Will it be scalable?
 - At what scale will the model will be used (strategic level - like STS, or project level - to assess individual projects)?
 - How will the tools be integrated with each other?
 - Are there any considerations about liability that should be discussed?
 - What are its primary uses (goal that needs to be defined)?

- To whom will it be useful and for what purposes (goal that needs to be defined)?
- Are there things that need to be standardized in newly developing Activity Based Models?
 - If so, how do we establish that base line expectation for compatibility?

Freight Committee

Invitations to participate in the Freight Committee were distributed 4/28/2015. The first committee meeting is expected to be scheduled very soon.

MINUTES

Attending: Tyler Deke (Bend MPO, phone), Shinwon Kim (RTC, phone), Nick Fortey (FHWA), Scott Drumm (POP), Ray Jackson (MWVCOG), Mike Jaffe (MWVCOG), Eric Main (OHA), Wes Risher (DEQ), Eric Lowe (ODOE), Josh Roll (LCOG), Dick Walker (Metro), Cindy Pederson (Metro), Cody Meyer (DLCD), Josh Lehner (DAS OEA), Tara Weidner (ODOT), Becky Knudson (ODOT)

Introductions – Eric Lowe from Oregon Department of Energy introduced himself; Josh Lehner of the Dept. of Administrative Services, Office of Economic Analysis introduced himself. This is the first time attending OMSC for both.

General Business

- Josh Roll and Cindy Pederson will be attending the TRB Planning Applications Conference in May. Minutes from last meeting in October were approved.
- Next meeting date of October 21 does not appear to cause any known schedule conflicts.
- Scott Drumm provided a brief status for the new Freight Committee on behalf of Derek Jaeger. Invitations were sent yesterday asking for committee participation. The committee is likely to meet two times before the next OMSC meeting.
- Becky mentioned a scope of work is under development for OMSC facilitation activity, duties similar to what Mike Wert provided in the past under contract with ODOT.

New Business

ODOT – Becky noted that ODOT is developing a contract to provide OMSC facilitation services previously provided by Mike Wert until she retired. The goal is to have this contract in place before the next OMSC meeting in October.

Mid-Willamette Valley COG update – Mike Jaffe reported the Salem-Keizer Area Transportation Study (SKATS) 2015-2035 Regional Transportation System Plan is available for public review. Public review period ended May 1st. For more information see this [website](#). There is a current effort aimed at updating the 2009 travel demand model base year to 2014. Re-estimation of the model is expected to be completed by the end of 2016. The MPO (staffed by COG) is discussing the option to do a strategic assessment, a GHG scenario process done in partnership with ODOT and DLCD similar to what was prepared for Metro and LCOG. There are also discussions related to the appropriate timing of a baseline GHG assessment for SKATS. The COG has seen encouraging signs from the Policy Board regarding the purchase of bike counters using funds allocated by SKATS. The COG will return to the Board in June. The transit district is undergoing a system redesign, with the objective of efficient resourcing areas with demand, further development of on-demand services in West Salem will be implemented through a one year pilot study planned to be implemented in the near future. The COG

is also looking at the [Transit Mix Tool](#). Currently the river crossing project is the biggest planning effort.

Lane Council of Governments – Josh Roll reported Susan Payne has officially retired; she will transition into full retirement working as temporary staff. Josh is filling the role as the analytical lead. LCOG is considering options for modeling services, now that Susan has retired it is not clear how activity related to model development and application will proceed. LCOG is nearing completion of the HB 2001 GHG scenario analysis. The final report will be completed by the end of the current legislative session. LCOG is developing a test site for visualizing crash data. This is available via the LCOG [data portal](#), which is under development with the objective of providing transportation-related data in an accessible visual manner. Eugene is one of several cities, including Bend, Austin, TX; and Boulder, CO providing match toward a [National Institute for Transportation and Communities grant project](#) to create a centralized bike/ped database. Krista Nordback (PSU) is the project principle. Cities of Eugene and Springfield recently completed their Transportation System Plans. Information for Eugene is available [here](#) and Springfield [here](#). The last Regional Transportation System Plan was adopted over ten years ago and an update is planned. Learn more about the update [here](#).

The topic of the new PSU Population forecast duties was raised. Wes Risher asked whether [Executive Order Number EO 97-22](#) requirement to use the DAS OEA population forecast will be rescinded or will there be guidance to State agencies as to the official source of population and employment data. (Becky is looking into this and will share her findings at the next OMSC meeting. Also, The PSU Population Center will be on the agenda to present information on their new population forecast duties.)

Summary list of research conducted using the OHAS data – Becky Knudson shared two publications using the 2009-2011 Oregon Household Activity Survey data:

NCHRP 08-89 Applying GPS Data to Understand Travel Behavior:

Wolf, J., Bachman, W., Simas Oliveira, M., Auld, J., Mohammadian, A., & Vovsha, P. (2014). *NCHRP Report 755, Applying GPS Data to Understand Travel Behavior, Volume I: Background, Methods, and Tests*. Washington, D.C.: Transportation Research Board. http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_775v1.pdf

Wolf, J., Bachman, W., Simas Oliveira, M., Auld, J., Mohammadian, A., Vovsha, P., & Zmud, J. (2014). *NCHRP Report 775: Applying GPS Data to Understand Travel Behavior, Volume II: Guidelines*. Washington, D.C.: Transportation Research Board. http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_775v2.pdf

This study used the smart phone app data collected in the Portland Metro area.

OHAS has been used for many other activities by the survey partner agencies for model calibration, validation and estimation. Many researchers from universities have requested the data and new research based on OHAS is beginning to be published. The OMSC will be informed of new publications.

OHAS is actively being used with travel demand models across the state, GreenSTEP, and other planning analysis activity.

OMSC Health Committee Poster Presentation – Eric Main presented the [poster](#) presented at the Transportation Research Board annual meeting this year. The poster illustrates the process the OMSC Health Committee developed for modeling the impact to health from transportation investments. The final process will be an OMSC recommendation; it has not been vetted, adopted or

sanctioned by an agency. Eric provided an overview of the Health subcommittee activity. One of the original goals of the committee was to develop a RFP for the work necessary to implement this process. It may be possible to complete this work in-house because the modeling tools proposed are open-source and available to the public.

Eric noted he had the approval of the ITHM developer to make this an open source tool with his continued support. Eric noted the proposal reflected a long term commitment by the OMSC partners to maintain/update and build an interface from the tool as associated data. The ITHM approach, comparative risk assessment differs from the data-intensive land use regression models. Tara noted that crashes were dropped to avoid duplicating efforts already underway.

The group was asked whether the ODOT tool Mosaic modeled the health impacts of transportation investment. No one attending was certain of the mechanism within Mosaic to estimate health impacts. (Amanda Pietz provided information after the meeting describing Mosaic as using several sketch models to estimate the morbidity and mortality reduction effects of cycling and walking. More detail is available [here](#).)

Presentations

Amanda Pietz, manager of the ODOT Planning Unit presented an overview of the State long range plans including the Oregon Transportation Plan, Oregon Highway Plan, Oregon Freight Plan, Oregon State Rail Plan, Oregon Transportation Options Plan, Oregon Bicycle and Pedestrian Plan, Oregon Safety Plan, and the Oregon Public Transit Plan. The presentation is available [here](#). She discussed ongoing work to align the plans through identifying consistent and incompatible guidelines. There may be a need for a statewide strategy to prioritize actions, something that could be used by ACTs to determine how to best use limited funds to meet goals.

Scott Drumm, manager of the Research and Market Information, Port of Portland presented an overview of the Port of Portland's Five-Year Strategic Plan. Information included forecast commodity flows, industrial development, strategic areas of focus for the Port, and strategic plan objectives. The presentation is available [here](#). Scott noted the recent loss of two major container service carriers. Oregon shippers have adapted by working through the Port of Seattle. Most of the commodities moving through the Port are forecast to grow. It was noted that the Port serves the state, not only Portland and the Willamette Valley. For that reason, Scott noted the Port of Portland Board of Commissioners includes two members outside of the Willamette Valley region.

Open Mic "Q & A"

The group was asked about access to GIS training. MWVCOG indicated they offer GIS training periodically in Salem, which is open to other agencies.

There was a question about using the OreGo road user fee data for more than fee collection. ODOT indicated the data is not accessible; it is managed by an outside vendor.

There was a question about AirSage webinars. Since OMSC (courtesy of MWVCOG) hosted a recent event, more are not planned in the near future. However, AirSage provides recorded presentations that are informative online [here](#).

Potential Items for Next Meeting

Portland State University Population Forecast Center

Metro RTP, Map-21 Goals and environmental justice

Port of Portland Commodity Flow Forecast Results

OReGo program

Other topics of Interest

[Oregon Statewide Transportation Strategy](#) for greenhouse gas reduction

Global Warming Commission

Pay as you go insurance

Knudson, Draft Prepared 05/11/2015