

To: Bill Upton
From: Rick Donnelly <Rick.Donnelly@worldnet.att.net>
Subject: Seskin's Review of Statewide Policy Relationships
Cc:
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X-Attachments:

>This is the review of statewide policy relationships that Sam Seskin
>recently completed. It is the background paper for the TLUMIP peer
>review panel meeting next week. The material will serve as a starting
>point for discussion on the important policy variables the model
>should incorporate. I will take this material and develop several
>overhead transparencies that both summarize these comments as well as
>put them in a somewhat different light (a view from a modeler)...

The purpose of this memorandum is to supplement work already completed in Task 1.04, in which we summarized relevant state transportation and land use policies and their potential relationship to the statewide and sub-state models under development. During the month of November, Portland staff have interviewed state and local policy makers and technical staff, asking the following questions:

1. What are the transportation/land use issues that have the highest level of visibility and interest in terms of the agency you represent?
2. Can you furnish examples that illustrate the importance of these issues?
3. At what geographic scale or scales do these issues apply?

The following individuals participated in these interviews:

Bill Blosser, Land Conservation and Development Commission
Susan Brody, Oregon Transportation Commission
Andy Cotugno, Metropolitan Service District, Portland
Gary Johnson, Oregon Department of Transportation, Region 2
Robin MacArthur-Phillips, Governor's Office
Sam Sadler, Oregon Department of Energy
Charles Vars, Land Conservation and Development Commission
Peter Watt and Staff, Lane Council of Governments

We were aided in the conduct of these interviews by the simultaneous opportunity to interview several of these individuals as part of our ongoing evaluation of the implementation of the State's Transportation Planning Rule (TPR). For your information and reference we also have summaries of the interviews which were conducted for the Transportation Planning Rule Review.

Our findings from this work are summarized below.

1. Many interviewees want information on the effects of changes in land supply on land use and locational decisions. In metropolitan areas, interviewees want information on the ways in which additional land will affect the location of population and employment and the density and types of housing which may be constructed.

Outside metropolitan areas, but within incorporated cities, there is a strong policy interest in understanding the consequences of increases in lands within urban growth boundaries. Similarly, inter-

viewees have questions about land outside of urban growth boundaries, including potential development at selected interchanges or intersections of key state facilities.

2. Interviewees expect the models to be able to address the effects of these land supply changes on travel behavior as well. These include the model's ability to estimate how vehicle miles of travel and vehicle trips will vary. The interest in these transportation performance measures applies not only to land within metropolitan and municipal urban growth boundaries, but also to travel between cities. In particular, the growing interdependence of communities in the northern Willamette Valley is a key policy issue which interviewees expect the model to be able to address. We might call this extra-metropolitan travel rather than intra-metropolitan travel, and we might distinguish this from intercity travel which (to me) refers to movements between larger cities in metropolitan areas, rather than between some very small cities such as those which are growing in the northern Willamette Valley counties.
3. What are the effects of congestion (measured in the form of vehicle hours of delay or vehicle hours of travel) on the location and distribution of population and employment? What are the effects of this congestion on the amount of vehicular travel? On the destinations of vehicular trips?
4. Conversely, how does a reduction in congestion which results from highway capacity increases affect travel behavior (vehicle trips and trip lengths)? How do highway capacity increases affect the location of population and employment? These issues apply both within and between cities and metropolitan areas. There is a special interest in understanding the effect of highway capacity increases on retail locations, especially "strip development."
5. How do recent trends in retail location affect future retail location decisions? How can the models help to evaluate the likely location and land consumption needs of "big box" retailing? To the extent that "big box" retailing can be categorized in the framework of standard industrial classifications, are we in a position to evaluate behavior apart from other kinds of retailing? Will our models be in a position to distinguish "strip development" from any other kind of retail development? Can our zone structure be configured in such a way as to make this distinction possible? Is it possible to separately evaluate the effects on travel behavior of retail concentrations in nodes versus retail distribution in the form of "strip development?"
6. How will we deal with the effects of various characteristics of urban form in the built environment on mode choice? Since the model will not be working with other modal data, how will we be adjusting trip generation rates and other measures of automobile use for the effects of various urban design characteristics, such as the quality of the pedestrian environment, on mode choice? Will our models explicitly take into consideration the effects of urban residential and employment densities on vehicle use (miles of travel and trip generation rates)?
7. Another kind of land use which has special interest to policy makers is the large employer locating at the periphery of an urban area. An example is the location of Hyundai in Eugene. How does the location of large industrial or office facility of this kind affect subse-

quent residential and employment location decisions?

8. Turning away from the effects of land use and land supply, another set of questions relates to the consequences of different types of transportation facilities. Will the model operating at a sub-state level be able to explore the ways in which greater local street connectivity affects vehicle miles of travel?
9. Will our models be able to explore the ways in which changes in the provision of parking supply in metropolitan areas (as required by the transportation planning rule) will affect vehicle miles of travel? Will we be gathering any data on parking supply as a land use? Will we be introducing parking land into our land use model in any way?
10. Even though the model focuses on highway travel, how might we take into account the effects of rail investments (passenger and freight) on highway use? There is ongoing interest in the effects of inter-city rail on highway use. (These have been the subject of a separate study by PB as part of the Willamette Valley Strategy, in which we developed the passenger rail demand forecasts and estimates of trip diversions from I-5.) Several people sought information on the extent of goods movements by means other than highways. Rail, air and water came up in the conversation. In Oregon, as elsewhere, multi-modal freight and goods movement is a subject of special interest to policy makers.
11. How will our models deal with the evolving demographic character of Oregon's population? Will the model take into account in-migration explicitly? Will the models be able to estimate the effects, for example, of a growing number of retirees in certain southern and central Oregon communities such as Ashland and Bend? How will concentrations of relatively senior households effect intercity travel?

All the above relationships were the subject of substantial interest on the part of the interviewees. In addition, several interviewees referenced specific "benchmarks" and other performance measures which are part of the policy making framework in Oregon. These dependent variables in the model would be of special interest. Most of them (but not all) appear to lend themselves quite well to modeled output. The variables include:

- The percentage of national highway system miles which are congested.
- The percentage of national highway system miles on which there is a significant change in forecast travel speed.
- The percentage of commute trips by Oregon residents which exceed 30 minutes in duration.
- Forecast levels of vehicle miles of travel per capita per year in metropolitan areas.
- The percentage of commute trips which are made by means other than the single occupant vehicle.

Another broad set of dependent variables which have interest to interviewees are estimates of population and employment at the sub-county (community) level. Recognizing the uncertainty involved in such forecasts, several interviewees expressed a strong need to have such data in

order to be able to develop benchmarks for specific transportation system service standards, air quality standards or parking standards. In other words, the ability of our models to furnish population or employment estimates at the "local" level would enable planners to develop certain performance standards which currently are hampered in part by a lack of consensus on an acceptable future population or employment forecast.

Several other points came up which don't fit neatly anywhere else in this discussion. One interviewee stressed the importance of being able to develop statewide estimates of air quality and emissions. His strong interest is in CO2 emissions. Several others expressed interest in measuring "livability." This frequently used noun refers to a variety of quality of life measures, some of which have origins in transportation system performance and travel behavior, others in employment opportunity and others in measures of environmental quality. To what extent might we develop anything that helps the state to define or measure of this term?

In summary, the cross-section of people interviewed for this memorandum identified a variety of state, sub-state and local policy issues and situations which they hope to be able to understand better as a result of our integrated transportation and land use model. Many of their expectations seem reasonable; a few are quite problematic. They hope that the information summarized in this memo will be reviewed at this early stage of the project in order to ensure that the models we develop are as useful as possible for the issues they face in the future.