Study of Existing Bypasses

Introduction

The Oregon Transportation Commission is concerned about methods for maintaining the utility of bypasses and assuring that land uses around the bypass are consistent and compatible with compact urban development and the statewide land use goals.

During their February 2002 meeting in Ashland, the Commissioners discussed methods being used in other parts of the United States and in Australia for protecting bypasses and achieving compatible land uses. They asked ODOT staff to analyze the 16 existing bypasses listed in the proposed policy to see whether the policy should be modified. They were specifically interested in whether the original purposes and need for each bypass were being achieved.

To respond to the Commission, this report will address the following questions related to the existing bypasses:

1. What were the purposes and need for the existing bypasses?
2. Have the bypasses achieved their purpose and fulfilled the original need?
3. What were the impacts of the bypass on land use? What land uses were in the local plan, if known? What change in uses have occurred?
4. What changes in public and private approaches have occurred?
5. How have the traffic volumes changed?
6. How have crash rates changed?
7. How have these factors affected the utility of the bypasses?
8. What are the implications of these analyses?

The 16 bypasses were constructed over a period of 50 years so that data are not available for some bypasses on some questions. Information is especially scarce and uneven on those bypasses constructed before the mid-1970s when the federal government began requiring environmental assessments on projects.

Even when the bypasses had Environmental Assessments (EAs) or Environmental Impact Statements (EISs), construction sometimes came years after the analysis, and/or only part of the project studied in the EA or EIS was constructed. In these cases the purpose and need and original conditions are partially conjecture. To get a more complete picture, the analyses include information from construction data, crash data, and recent corridor plans, transportation system plans and other sources.

Recently ODOT conducted a research study of the indirect impacts of highway improvements. The study provides an in-depth examination of land use impacts and sheds light on the changes in the existing bypasses.

Research Project on Indirect Land Use and Growth Impacts

In 1998 ODOT sponsored research summarized in a report entitled *A Guidebook for Evaluating the Indirect Land Use and Growth Impacts of Highway Improvements*. The report's abstract describes the research as a "study of the impacts of highway capacity improvements on land uses and growth, particularly at the urban fringe. The objective was to better understand the cause and effect relationships among highway capacity, travel demand and development patterns."

The study evaluated a variety of factors and included an in-depth study of the impacts of state highway projects in six communities. The research focused on the following question: "Is there any evidence that ODOT projects completed after 1985 caused land uses to change from what adopted plans at that time envisioned?" The case studies involved highway widening projects in Albany, Bend, Corvallis, La Grande, and McMinnville and a widening and project on new alignment in Grants Pass.

One finding of the research study was that most highway capacity increases do not cause development to be dramatically different from local land use plan guidance or from what would have occurred in absence of the highway improvement. In Oregon, local governments hold the tools to determine development patterns, using planning, zoning and development of water and sewer facilities and roads.

The Study's Appendix D summarizes general patterns and trends from the six case studies as follows:

"All the case studies illustrate that the development that occurred after the highway improvement was generally consistent with the development envisioned in local plans before the improvement. All the case studies illustrate that interactive, iterative, and incremental nature of most urban development. . . . The case studies all paint a picture of incremental and iterative decisions: small changes in land use plans and highway improvements, each responding to previous changes in land use and transportation.

> The case studies support the hypothesis that the scale of land use change will correlate with the scale of the improvement to accessibility. Where access already existed (as in all of the case studies), widenings did not cause any obvious changes in the type of development
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> None of the highway improvements could be directly correlated with annexations or UGB expansions. . . . In two of the case studies [Bend and Corvallis], however, evidence was found that suggest that the improvements may have influenced the rate of development. It appears, however, that a strong economy and other site specific factors (availability of infrastructure, visibility) were significant factors in the rate of growth.
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> Good accessibility is a necessary but not sufficient condition for local

> development. . . . [T]he amount [of] development responds to the availability of other key public facilities (especially water and sewer) and their costs. . .

In all of the case studies, development of all types was dispersed throughout the communities. All of the case study highway improvements were completed in the late 1980s or early 1990s, mostly before Oregon's economic boom in the 1990s. . . . While substantial development occurred after the highway improvements, the growth cannot be solely attributed to the influence of the improvements. As implemented by counties, state policies that restrict development of resource lands have been effective in limiting development associated with highway improvements outside UGBs. The case studies did not identify any major new developments outside UGBs.

These six case studies support the conclusion that highway widening projects, by themselves, are not likely to cause changes in land use from what they would have been in the absence of those improvements. The highway improvements may contribute to such changes in land use, but it is difficult to determine the extent of their influence. Local governments have ample tools to plan and control land use changes with or without highway improvements. The market will respond to the available accessibility. Given sufficient market demand and reasonable land prices, development will occur if public services like sewer and water, and some minimal level of access . . . are available. Highway widenings are unlikely to change what gets developed, but will likely to facilitate whatever development is already allowed.

The case studies *did* show that land use changes generally were consistent with zoning and comprehensive plan designations. . . .

The evidence from the case studies shows that small ODOT projects will generally have minimal, if any, effects on land use that can be measured and uniquely attributed to those projects."

The Grants Pass Parkway and the Three-Mile Lane section of the McMinnville Bypass were included in the case studies and are included in the list of existing bypasses in the proposed Bypass Policy. Generally bypasses differ from major widenings in that they are on new alignments and may be expected, at least in other states, to have greater land use impacts.