

Oregon Highway Plan (OHP) Proposed Amendments

Add the following as a new goal.

OHP Goal 6: Tolling and Congestion Pricing

Overview

Oregon's citizens have become accustomed to public funding of roads through use taxes such as fuel and vehicle fees; they generally understand how these funding mechanisms work, and have built their traveling behavior on the basis of this system. The Oregon financing structure is based on the relationship between beneficiaries and responsibility for funding the road system.

However, roads are perceived by many as a "public good"; that is, roads are accessible to any citizen at any time and the cost of developing, operating and maintaining the system is borne by the population as a whole. Also, everyone benefits from some level of use; even if one does not drive, drives very little, or uses public transportation, they still benefit from a road system being in place as the goods and services that they have access to are delivered via a roadway system.

In Oregon, tolling has been limited to a few Columbia River bridges. The rationale for tolling bridges has been that they are extraordinarily expensive, vehicles have limited travel alternatives, tolls can be collected at one location and those that use the bridge pay for their use.

Highway tolling has two key attributes: 1) it can affect motorist behavior- drivers react to even small changes in price; and 2) tolls generate revenue which may not be obtainable by other means. Around the world, and in the United States, tolling is seeing a resurgence. There are two main drivers: 1) bridges and highways are increasingly expensive to build with limited public appetite for tax increases; and 2) modern electronic tolling technology allows creative new tolling applications that not only raise money, but potentially enhance transportation system performance by altering motorist behavior and, thereby, better managing congestion. Commensurate with this renewed interest, the Oregon Department of Transportation (ODOT) has undertaken a variety of tolling and congestion pricing studies supportive of the policies and strategies below.

The rapid and continuing improvement in tolling and in-vehicle navigation technology also has resulted in making the consideration of tolling in many cases more complex. First, there are a variety of policy objectives beyond the traditional financing of construction of a new road or bridge. Tolling can now be used to relieve congestion, improve the environment or enhance economic development. In fact, the number of possible objectives can be quite large, and in some cases, but not all, can be mutually reinforcing. Second, the number of different ways tolls can be applied also has expanded considerably. In addition to the new road or bridge, individual lanes, new or existing, can

be priced in various ways to encourage different behavior. Time-of-day (congestion) pricing can be applied to certain portions of an urban area or to select parts of the highway system. Finally, it is not always possible to separate tolling applied to new capacity, new facilities, and existing capacity. For instance, there may be situations where existing capacity will need to be tolled to help pay for new capacity in the same corridor, or situations where new facilities provide additional capacity while concurrently replacing existing capacity.

The degree of flexibility with the use of toll revenue in Oregon is statutorily limited to tollway projects, tollways, and related facilities. “Related facility” is narrowly defined and generally limits the use of revenues to investments to the operation and use of the tollway itself. This implies that improvements to parallel facilities affected by diversion from tolled facilities may not be funded with toll revenues.

The number of possible combinations of policy objectives and tolling applications raises the question of whether, or how well, particular applications can achieve particular objectives. The effectiveness of applications to objectives varies considerably, requiring each combination to be considered in and of itself. Further, for every tolling application there will be winners and losers. The winners may consider the toll a bargain, or at least feel indifferent between paying the toll and saving time. Those made worse off, either directly or indirectly, are likely to view tolling as an expensive or less affordable alternative to new capacity funded through higher fuel use and vehicle taxes or fees. Even those that benefit may question tolling as the most appropriate solution.

The indeterminate outcome of any application coupled with Oregon’s limited experience with tolling, implies that any proposed use of tolling of the state highway system should be preceded by a thorough analysis of likely effects and public acceptance. Oregon Revised Statutes, Chapter 383 grants the Oregon Transportation Commission authority over toll rates and over tolling state highways. Additionally, interstate bridge authority is granted to ODOT by Chapter 381. Therefore, the role of the Oregon Transportation Commission is to provide policy guidance for developing, evaluating and implementing tollway projects in Oregon in a manner consistent with Oregon statutes as well as existing Commission policies and the *Oregon Transportation Plan*.

Policy 6.1 – New Toll Facilities

Background

Most new highway capacity in the United States is not currently financed with toll revenues. Many projects are not suited to tolling due to low traffic volumes, traffic diversion impacts or inadequate revenue generation. As one example, Truck-only toll lanes (TOT lanes) have little utility in Oregon because the state already allows longer-combination vehicles; hence the ability to improve productivity is limited. In addition, limited urban right-of-way, high construction costs, environmental concerns and insufficient demand appear to limit utility for TOT lanes even in urban areas.

Other projects seem well suited to toll financing, and nationally the number of toll roads has increased significantly in recent years. Each project will have its own unique circumstances. National experience shows that the National Environmental Policy Act (NEPA) process, combined with required financial analysis, adequately demonstrates the societal effects of new toll facilities. The additional analysis needed for considering the impacts of tolling existing capacity, for which there is almost no experience nationally, is not required for new toll facilities.

ODOT has well-established procedures within the Statewide Transportation Improvement Program (STIP) process for developing and funding projects. The Oregon Transportation Commission has managed this process in a manner intended to provide public assurance that once a project is undertaken, it will move forward in an appropriate way. In Oregon, low traffic volumes indicate few, if any, projects can be funded solely with toll receipts so this introduces the issue of how ODOT should financially manage projects that have the potential to be partially funded with toll receipts.

Policy

It is the policy of the State of Oregon to consider the use of tolling for financing the construction, operations and maintenance of new roads, bridges or dedicated lanes only if expected toll receipts will pay for an acceptable portion of project costs.

Action 6.1.1

Tolling projects providing new capacity need to be in compliance with other State policies and be under consideration for inclusion as tollways in relevant local and regional land use and transportation plans.

Action 6.1.2

ODOT will only consider those toll projects ranked “medium to high” under tolling parameters considered by ODOT.¹

Action 6.1.3

Toll projects requesting statewide funds to supplement toll receipts must prepare and submit to ODOT a formal financing plan that includes debt service, operational, maintenance, and preservation expenses.²

¹Currently see, Table 4 in *Tolling White Paper #2 – Geographic and Situational Limits (February 2009)*.

² This is a separate requirement from the Federal requirement to have an annual financial plan for projects of over \$100 million.

Action 6.1.4

Proposed “premium service” high occupancy/toll (HOT) lanes must be expressly compared to high occupancy vehicle (HOV) lane(s) and “multi-class,” general purpose alternatives to ensure the overall best use of the limited additional capacity.³

Action 6.1.5

The equity of any tolling or pricing proposal for new facilities will be examined by ODOT and will comply with federal and state statutes, rules and guidance.

Policy 6.2 – Pricing Existing Capacity

Background

Applying tolls to existing roadways is likely to be viewed differently by the public than using tolls to finance new capacity. Our current financing system essentially treats roadways as “public goods.” Congested roadways, however, do not meet the classic definition of a public good as one person’s use can preclude or significantly limit the use by others at the same time. In addition, under many circumstances it may be possible to charge for the use of roadways. This reality, experienced in many urban areas, has driven the renewed interest in congestion pricing of existing roadways.

Several problems have been seen to impede the application of time-of-day tolls, despite the efficiency benefits cited in economic theory. The public seems to prefer the existing approach, with the notable exception of pricing existing HOV lanes which has seen considerable success in a number of locales. A few major cities (London, Singapore, Stockholm) have successfully priced access to their cores. Most cities, however, have not opted to do the same. The reasons for this are varied and not well documented by existing research. Therefore, consideration of road pricing in Oregon cities will warrant careful study of the economic, social, energy and environmental effects - positive and negative -, consistency with other statutes and policies, and public reaction.

Policy

It is the policy of the State of Oregon to consider the use of tolls, including time-of-day pricing, on existing, non-tolled state highways consistent with other Oregon Transportation Commission policies, state law, and federal statutes and planning regulations.

³ *Currently see, Benefit-Cost Assessment Guidance for Evaluating Proposed Highway Tolling and Pricing Options for Oregon (March 2010)*

Action 6.2.1

A project that tolls the existing capacity of a previously non-tolled state highway must be under consideration for inclusion in relevant local and regional land use and transportation plans.

Action 6.2.2

The proposer of any tolling or pricing project is required to have a clear statement of public policy objectives against which the effectiveness of the proposal can be measured.

Action 6.2.3

The proposer of any tolling or pricing project is required to compare the proposal to a non-tolled alternative to ensure the effects of introducing tolls can be clearly demonstrated.

Action 6.2.4

The economic, social and environmental effects of any proposed tolling or pricing project will be analyzed by ODOT according to analytical procedures adopted by ODOT.⁴

Action 6.2.5

The equity of any tolling or pricing proposal, particularly upon the transportation disadvantaged, will be examined by ODOT and will comply with federal and state statutes, rules and guidance.

Policy 6.3 – Consistent and Supportive Policy Objectives

Background

Roadway tolls may be levied for a variety of public policy objectives. The relative importance or degree of public acceptance of these objectives may vary in different locales and parts of the state. Similarly, a pricing program for a given purpose in one locale inadvertently may have undue negative effects on other parts of the region or state.

In addition, some potential policy objectives require tolls so high that facility throughput is reduced.

⁴ Currently see, *Economic Assessment of Tolling Schemes for Congestion Reduction (March 2010)* and *Benefit-Cost Assessment Guidance for Evaluating Proposed Highway Tolling and Pricing Options for Oregon (March 2010)*

It is unclear which policy objectives will be deemed the most important in future tolling or pricing proposals. It is clear, however, that attention may have to be given to the need for a degree of statewide consistency in policy objectives advanced through pricing proposals, as per Goal 7 of the Oregon Transportation Plan.

Policy

It is the policy of the State of Oregon to ensure motorists and its citizens have clear, consistent and coordinated objectives for any future highway tolling or pricing proposals, reflective of primary public concerns with the performance of the state highway system.

Action 6.3.1

Project proposers will review and document that their roadway tolling or pricing proposals are consistent with other tolling and congestion pricing policies, state and federal statutes and policies, and other tollway projects within the state.

Action 6.3.2

ODOT will analyze the likely transportation, economic, social, energy and environmental effects of any tolling or pricing project on parts of the region or state outside of the project area.

Action 6.3.3

ODOT will analyze the expected change, if implemented, in vehicle throughput due to any tolling or pricing proposal.

Action 6.3.4

ODOT region staff and local government agencies shall work together to evaluate public understanding of and support for the principal objectives for road tolling and pricing applications, as compared to allocating resources to other alternatives which may address the purpose and need.

Policy 6.4 – Toll Revenues

Background

The appropriate use of toll generated revenues may be dependent upon a number of factors. These include: a) the type of tolling application under consideration; b) the objective(s) for the application; c) the geographic scope of the application; d) public attitudes on transportation system needs; and e) how best to off-set any negative effects of levying tolls. The most appropriate use of toll revenues for any given application may be constrained by federal and state statutes or procedures.

Policy

The effectiveness, equity and overall utility of tolling projects can be affected by how net toll receipts are used. Multiple approaches to using revenue may need to be considered. It is the policy of the State of Oregon to treat the use of toll-generated revenue as an important component in evaluating any tolling proposal.

Action 6.4.1

For any proposed tolling or pricing project on a state highway, the project proposer will consider the allowable range of potential uses for toll generated revenue, conditional upon the policy objective for the application; and ODOT will incorporate the resultant investments into the economic, social, energy and environmental analysis undertaken for the proposed project.

Action 6.4.2

ODOT region staff and local government agencies shall work together to assess public attitudes toward proposed toll revenue usage for any tolling or pricing project on a state highway as a means of meeting public needs.

Policy 6.5 — Tolling Technology and Systems

Background

The trend in the United States is for state-owned tolling systems to offer electronic toll collection in addition to toll booth cash collection. In contrast, modern toll facilities in other parts of the world now operate as all-electronic systems with no cash payment option at entry to the facilities. Potential toll payers without transponders or bank accounts, or who seek privacy, have options for electronic payment derived from cash payment at another location. Typically, a motorist can obtain a day pass at roadside kiosks or retail stores.

Most state-owned toll facilities in the United States that allow electronic toll collections operate as closed proprietary systems that are not interoperable with each other. As a result, state-owned toll facilities become bound to one provider and limited to the capabilities of that provider. Motorists using toll facilities in multiple states may require more than one transponder for compliance. An alternative is to develop an integrated system based on common standards and an operating sub-system accessible by the marketplace where components performing the same function can be readily substituted or provided by multiple providers.

Policy

When tolling state highways, it is the policy of the state of Oregon to implement tolling systems that:

- (1) Enable cash-based motorists ready access to all-electronic toll facilities while eliminating the need for cash payment at the point of entry;
- (2) Deploy technology that facilitates interoperability with tolling systems of neighboring states and allows evolution of fully functional, non-proprietary tolling systems.

Action 6.5.1

For any proposed tolling or pricing project on a state highway, ODOT shall develop tolling systems that rely on all-electronic collection mechanisms, and enable at least one manner of toll collection that allows a readily accessible electronic payment method for cash customers.

Action 6.5.2

For any proposed tolling or pricing project on a state highway, ODOT will develop and utilize tolling technologies and systems that are based on common standards and an operating sub-system accessible by the marketplace where components performing the same function can be readily substituted or provided by multiple providers to the extent possible while compatible with tolling systems in the State of Washington.