Transportation Policy Studies and Plans

Statewide Transportation Studies

Many planning efforts are underway around the state that have influenced and have been influenced by the Washington Transportation Plan. In addition, various studies have influenced the plan, just as future studies will affect future transportation planning in the future. Given that these plans and studies occur at different times, it is expected that their relationships to each other will continue to evolve and help guide transportation policy.

This section of the WTP highlights some of the more recent policy and study efforts that are likely to influence transportation policy in the near future. In addition, routine updates to modal plans, regional transportation plans, and tribal plans will occur during the twenty-year period of this plan. Each study or plan connects and relates to the WTP; in many ways each contributing to the shaping of the others.

Washington Transportation Commission Tolling Study—September 19, 2006

The purpose of the tolling study is to help the state make policy-level decisions regarding if, where, when, and how to toll, by providing a practical, step-by-step tolling strategy for Washington State. Although the state had numerous toll facilities in the past, with the exception of the Washington State Ferries, there are none currently in operation. Two facilities, the Tacoma Narrows Bridge and the SR 167 HOT Lanes Pilot Project, are authorized as toll facilities and are currently under construction. WSDOT and the Puget Sound Regional Council have been reviewing 21 tolling proposals – each in various stages of study and demonstration.

This comprehensive tolling study outlines a broad strategy for advancing tolling in Washington. If the legislature accepts these recommendations, tolling and pricing transportation systems will become a more common travel experience.

Summary of study tasks

- Potential tolling opportunities in the near- mid- and long-term
- Traffic analysis; how tolls will affect roadway use
- Fiscal analysis; assessing fiscal opportunities and strategies
- Technology analysis; technologies for facilities, vehicles, and financial systems
- Assessment of social and environmental impacts
- Legal and regulatory constraints
- Public attitudes, including current experiences elsewhere in the country
- Administrative arrangements; implementing and managing tolled facilities
- Project evaluation and selection; how projects should be considered and implemented

The study analyzed the following specific topics:

- The possibilities for a more uniform and equitable distribution of the financial impact on those paying tolls and explore options for reducing the outstanding debt on the Tacoma Narrows Bridge.
- The use of value pricing by the Regional Transportation Improvement District to pay for needed transportation facilities within the districts.
- The potential for tolling SR 704 (Cross-Base Highway).

The study is due to the legislature by December 1, 2006.

Tolling Study Recommended Policies

1. Overall Direction
Washington should use tolling to encourage effective use of the transportation system and provide a supplementary source of transportation funding. That policy should evolve over time.

Short-Term (within 10 years)
- Accelerate implementation of high-cost/high-need projects, such as SR 520, the Columbia River Crossing at Vancouver, and Snoqualmie Pass.
- Use price differentials as appropriate to make the most effective use of the system.
- Convert HOV lanes to HOV/tolled express lanes to optimize performance and maintain free-flowing service for transit, vanpools, and carpools.

Medium-Term (within 20 years)
- Consider the potential for building additional capacity as tolled express lanes through more extensive study of long-term costs and benefits.
- Consider broader use of tolling to optimize system performance.

Long-Term (beyond 20 years)
Consider more extensive use of tolls as the ability to build more capacity is constrained, traditional revenue sources decline, and technology advances.

2. When to use Tolling

Tolling should be used when it can be demonstrated to:
- Contribute to a significant portion of the cost of a project that cannot be funded solely with existing sources; and/or
- Optimize system performance, such as with an HOV/Tolled Express lane.

Such tolling should in all cases:
- Be fairly and equitably applied in the context of the statewide transportation system.
- Not have significant adverse impacts through the diversion of traffic to other routes.

3. Use of Toll Revenue
Toll revenue should only be used to improve, preserve, or operate the transportation system.

4. Setting Toll Rates
Toll rates, which may include variable pricing, should be set to optimize system performance, recognizing necessary tradeoffs to generate revenue.

5. Duration of Toll Collection
Since transportation infrastructure projects have costs and benefits that extend well beyond those paid for by initial construction funding, tolls should remain in place to fund additional capacity, capital rehabilitation, maintenance, and operations, and to optimize performance of the system.

6. State Toll Authority to Set Toll Policy
Following broad statutory direction, the Washington State Transportation Commission, as the designated State Tolling Authority, should develop policies and criteria for selecting the parts of the transportation system to be tolled; propose the study of potential toll facilities; recommend toll deployments to the Governor and legislature; and set toll rates. The Authority should engage in robust and continuous coordination continuously with state-authorized regional or multi-state entities that may propose toll facilities to the Authority.

7. WSDOT to Implement Policy
The Washington State Department of Transportation should be responsible for planning, development, operations, and administration of toll projects and toll operations within the state.

8. Toll Collection Systems
Toll collection systems in the State of Washington should be simple, unified, and interoperable, and avoid attended tollbooths, wherever possible.

Washington Transportation Commission Rail Capacity and System Needs Study

Insufficient rail capacity within the State of Washington impacts the ability to improve passenger rail service and may result in a loss of business to the state. Therefore, the Legislature has asked the Washington State Transportation Commission to assess the rail freight and rail passenger infrastructure needs in this state, review the state's current powers, authorities, and interests in freight and passenger rail and recommend policies for state participation and ownership in rail infrastructure and service delivery, including planning and governance issues. The policy recommendations, including a methodology to evaluate benefits and impacts, will be submitted to the Legislature for consideration in the 2007 Legislative session.

Underlying principle of study

It is in the State's interest to increase and improve railroad transportation availability for both passenger and freight movements. The State should pursue a variety of options including focused communication with carriers, adjustments in permitting, and financial investment where warranted. To maximize state investments, state dollars should be leveraged with private and/or other public partner funding. That kind of leveraged financing can make larger projects more feasible and ensure the State has the local or private support necessary for ultimate success.

Preliminary Findings

Freight demand for use of the Washington State rail system is growing. Businesses within the state require more rail capacity, but much of the growth is driven by shippers and receivers outside of the state. Overall, the railroad industry is not keeping pace with demand.

Class I railroads are changing their business model to more of a "hook and haul" system which is available to fewer low volume individual shippers and reduces access by short line railroads to the main lines.

Short line railroads touch a large percentage of rail freight (30 percent of the Union Pacific traffic) and will continue to play an important role serving carload traffic in Washington State.Yet some short line railroads in Washington State will continue to have financial difficulties that will affect service quality and availability. The impacts will be most noticeable in the agricultural sector.

International trade growth will continue to dominate growth in rail traffic. Rail connections will be critical to port competitiveness. The future competitiveness of Washington's international trade ports will require resolution of a mix of main line capacity, access/egress, and intermodal terminal capacity issues. Solutions will require partnerships among the ports, the state, the Class I railroads, and local governments and may require the use of new financing mechanisms.

Addressing capacity issues alone may not be sufficient to ensure that state rail system is responsive to the needs of traditional carload shippers and receivers within Washington State. Carload shippers which generate small volumes of cargo are already finding that the BNSF and UP shift to longer trains and "hook and haul" strategies often results in service that is harder to obtain, more costly, and of lower quality—unless transload facilities are readily available.

Passenger rail ridership in Washington State is effectively capped by current capacity, bottlenecks, high freight volume and associated limitations on service frequency. Without changes to the system passenger rail will continue to be disadvantaged in competing for access to capacity on a strained rail network. The planned long-range investments in the passenger rail system have potential to improve overall rail capacity (both passenger and freight) in the Washington State rail system, but they need to be more clearly linked to a system-level strategy.

Emerging Policies and Processes:

- The benefit evaluation processes used by other states and organizations offer some guidance for Washington to evaluate benefits of state investment.
- Every project, package, or policy under consideration must be reviewed through the lens of each of the different key stakeholder groups.
- The Rail Study will recommend a benefit/impact methodology that provides a standard process and clear decisional criteria to comprehensively evaluate quantitative and qualitative public benefits to the State.
- Case studies will refine and test the methodology presented to decide if it is the correct approach to take.

Washington State Ferry System Finance Study

The 2006 Legislature instructed the Joint Transportation Committee to conduct a finance study of the Washington State Ferry system to facilitate policy discussions and decisions.

The study is expected to:
- Improve the predictability of cash flows
- Increase transparency
- Assess the organizational structure
- Verify that the Washington State Ferry system is operating at maximum efficiency
- Improve labor relations

The committee shall report the study results to the House of Representatives and Senate transportation committees by January 1, 2007.

The study must include, at a minimum, a review and evaluation of the ferry system's financial plan, including current assumptions and past studies, in the following areas:
- Operating program, including ridership, revenue, and cost forecasts, and the accuracy of those forecasts; and
- Capital program, including project scoping, prioritization and cost estimating, project changes including legislative input regarding significant project changes, and performance measures.

Washington State Long-Term Air Transportation Study

In 2005, the Governor signed into law Engrossed Substitute Senate Bill (ESSB) 5121, which authorizes a long-term air transportation and air cargo planning study for general aviation and commercial airports statewide. The legislation is also known as the Washington State Long-Term Air Transportation Study (LATS).

The purpose of LATS is to understand the current capacity of aviation facilities and what will be needed to meet future demand for air transportation. The bill requires WSDOT Aviation to conduct an airport capacity/facility assessment in Phase I and a demand/market analysis in Phase II.

In the final phase the Governor will appoint an aviation planning council. The council will review the data and make recommendations to the Governor, legislature, and Transportation Commission on how to best meet statewide commercial and general aviation capacity needs. The project will be funded primarily through Federal Aviation Administration (FAA) grants.

The statewide assessment, Phase I, is required to be submitted to the Governor, appropriate standing committees of the legislature, the Transportation Commission, and regional transportation planning organizations by July 1, 2006.

The statewide airport capacity and facilities market analysis, Phase II, is required to be submitted to the Governor, appropriate standing committees of the legislature, the Transportation Commission, and regional transportation planning organizations by July 1, 2007. High-speed passenger transportation facilities assessment is also required to be completed by July 1, 2007. The Airport Planning Council report and recommendations, Phase III is required to be completed by July 1, 2009.

Urban Areas Congestion Relief Analysis

The 2003 Legislature asked WSDOT to conduct a congestion relief analysis for the urban areas of Seattle, Spokane, and Vancouver, Washington. They required the study to include proposals to alleviate congestion consistent with population and land use expectations under the Growth Management Act and include measurements of all modes of transportation.

The analysis examined a variety of congestion relief scenarios. Its purpose was to answer the questions, "What would it take to significantly reduce expected future traffic delay due to congestion in the state's major urban areas?" and "What are the associated costs and impacts?" The study was based on adopted regional growth management plans as required by the Growth Management Act of 1990.

Primary Focus of the Analysis

1. Existing system performance—baseline condition
2. The cost of doing only the funded projects by 2025
3. The price of meeting "unconstrained demand" by 2025
4. The transit/travel demand management (TDM) pricing effect on congestion relief including various highway approaches to congestion relief (answering the following questions):
    - With optimum TDM, transit and pricing strategies in place, how much highway improvement is needed to achieve a particular level of congestion relief?
    - How much will it cost?
    - What impacts will it have?
    - What benefits will it bring?

Primary findings of the Analysis

As the urban areas grow, congestion will grow too. A computer analysis showed that, without a substantial increase in transportation capacity or significant changes in travel behavior, by 2025 total travel delay could increase from three to five times current levels in the three major urban areas.

Large-scale roadway expansion could reduce travel delay on highways. However, future population and job growth would overwhelm the ability of the most extensive capacity expansion scenarios tested in this study to reduce total regional delay to below today's levels. Furthermore, due to man-made and/or natural environmental constraints, it is estimated that the cost to reduce travel delay in 2025 to below today's level could exceed $100 billion dollars in the Central Puget Sound region alone.

Major transit expansion in the three urban areas would provide an alternative to single-occupancy vehicles for people traveling congested corridors during peak periods. However, according to computer modeling, transit expansion alone is not shown to be effective in reducing total delay at the system level. The lack of supportive land use densities and the difficulty in serving non-commute travel limits the ability of transit to serve trips that are now customarily made by automobile.

Combining roadway and transit improvements to match the unique characteristics of particular corridors is shown to provide the potential for more practical congestion relief when compared to single strategies. The monetary cost for the combined improvements would be cheaper than the roadway improvement alone in order to achieve the same level of travel delay reduction.

Region-wide value pricing (roadway toll rates vary according to demand levels) is indicated to be very effective in reducing total delay. Roadway tolling helps to dampen travel demand, shorten trips, shift travel to non-peak periods, and encourage use of other travel options (transit, carpooling, biking, and walking) that are not subject to toll charges. Value pricing helps to maximize the efficiency of our transportation system. Value pricing is consistent with the way almost all other utility and transportation services are provided in market-based economies (for example, water, electricity, air travel, and telecommunications services). As with the use of prices to establish access to services in other utility areas, special provisions may be necessary to ensure adequate access by those unable to pay market prices for indispensable services. The special requirements need to be carefully considered.

Value pricing in the form of High Occupancy Toll (HOT) lanes is found to reduce corridor delay and make the corridor operate more efficiently. HOT lanes make corridor travel time more reliable, which benefits everyone, including occasional users.

The computer models suggest that a strategic combination of transportation supply and demand management will be effective in fighting the growing demand and capacity imbalance. When value pricing is added to a mix of highway and transit capacity improvements, the model analysis shows a large increase in benefits for a small additional cost. This combination of capacity improvements and value pricing should be given much greater attention as an implementation strategy.

Strategic Highway Safety Plan

A state-developed Strategic Highway Safety Plan (SHSP) is a new federal requirement of SAFETEA-LU, 23 USC 148. The SHSP will meet those federal requirements for Washington State.

The purpose of the Strategic Highway Safety Plan is to identify Washington State's traffic safety needs and guide investment decisions to achieve significant reductions in traffic fatalities and serious injuries. In developing this plan, Washington State seeks to build traffic safety partnerships throughout the state in order to align and leverage our resources to address Washington's traffic safety challenges.

Closely following the successful model adopted in the AASHTO Strategic Highway Safety Plan, Washington State's SHSP is strongly data driven. The AASHTO SHSP model was developed in cooperation with the Federal Highway Administration (FHWA), The National Highway Traffic Safety Administration (NHTSA), and the Transportation Research Board (TRB). At the core of Washington State's SHSP are traffic safety emphasis areas and proven strategies and countermeasures that target problems unique to Washington roadways. These emphasis areas and proven strategies are organized under the following five basic categories: Driver and Occupant Behaviors; Other Special Users; Roadways; Emergency Medical Services; and Traffic Information Systems.

The SHSP provides a comprehensive framework of specific goals, objectives, and strategies for reducing traffic fatalities and serious injuries.

> *"Like the Canoe Journey, transportation development involves years of coordinated effort charting a journey to destinations where high priority transportation projects become a reality, growing our communities into a better place to live."*
>
> ***Jim Peters,*** *Chairman*
> **Squaxin Island Tribe**
> **Tribal/State Transportation Conference**
> **October 17, 2005**

Statewide Transportation System Plans

The WTP is a multimodal transportation plan. The various transportation system plans developed by WSDOT and partner agencies directly connect with the WTP to improve statewide transportation planning and policies. The following plans are listed in alphabetical order:

Aviation System Plan

Airline passengers, mail and parcel services, emergency services, agriculture, and aviation-related businesses all depend on an adequate network of airports and connections to intermodal transportation services and facilities. The aviation system plan provides the framework for the preservation, enhancement, and public investment strategies of the state and federal government to meet current and future aviation needs. The plan determines the number, location, and type of aviation facilities required to adequately serve the state's aviation needs over the next 20 years.

State Statutory Authority: RCW 36.70, RCW 36.70A, RCW 47.06, RCW 47.68, RCW 47.80

Bicycle Transportation and Pedestrian Walkways Plan

Bicycling and walking are two modes that signify a dynamic transportation system. They not only provide environmental and health benefits, but also provide a strategy to reduce traffic congestion and have a positive economic impact across the state. The goals of the plan are to improve bicycle and pedestrian safety while increasing the number of people who bicycle and walk. The strategies for accomplishing these goals include: maximizing funding through partnerships; raising awareness of the needs for bicycle and pedestrian safety; and sharing information on bicycle and pedestrian issues between agencies, jurisdictions, and organizations in Washington State.

State Statutory Authority: RCW 47.06.100

Freight and Goods Transportation System Update

The Washington State Freight and Goods Transportation System (FGTS) is a classification of state highways, county roads, and city streets based on their average annual gross truck tonnage. The FGTS report is updated on a periodic basis, is data driven, and identifies the highways and roads most heavily used to move freight by truck. Projects that improve conditions for freight transportation serve as a resource for establishing project eligibility for Freight Mobility Strategic Investment Board grants, and designation as Highways of Statewide Significance, and fulfill federal reporting requirements for truck and traffic counts. In addition, the FGTS report also supports pavement upgrade planning, traffic congestion management, and other investment decisions, and allows preliminary assessment of statewide freight needs and impacts.

Last Updated: December 2005
Next Scheduled Update: 2007
State Statutory Authority: RCW 47.06.045, RCW 81.104.100

Highway System Plan

The Highway System Plan (HSP) guides WSDOT in prioritizing and budgeting for highway projects and is updated every two years. The HSP is a result of federal and state legislative action that introduced greater integrated and coordinated planning processes. Together with the WTP, the HSP assesses future transportation needs through a collaborative planning process with the goal of ensuring that the transportation system provides convenient, reliable, safe, efficient, and seamless connections and services.

State Statutory Authority: RCW 47.06.050, RCW 36.70A.70, RCW 47.80.030

Passenger Rail Plan

The Passenger Rail Plan, through multiple studies, addresses key areas, including but not limited to, ridership estimates; preliminary location and environmental analysis on new corridors; detailed station location assessments in concert with affected local jurisdictions; coordination with the air transportation commission on statewide air transportation policy and its effects on high-speed ground transportation service; and coordination with the governments of other states and provinces, when appropriate, on alignment, station location, and environmental analysis.

Last Updated: May 2006
State Statutory Authority: RCW 47.79.040

Planning Studies

Planning studies are comprehensive evaluations of specified routes conducted by WSDOT region planning offices. These studies assess highway corridors to evaluate future needs over a 20-year period. The studies identify what state system improvements are appropriate and what local system improvements are needed to keep the state system functioning. The approach to the studies varies depending upon the characteristics of the specific route. The general process for developing a planning study involves the following: define the study area, establish goals and objectives, collect data, conduct public meetings, coordinate with agencies and communities, conduct traffic analysis, and develop proposals for implementation and evaluation.

State Statutory Authority: RCW 47.06, 36.70A

Public Transportation Plan

Developed with the vision that people should be able to easily and efficiently move through congested intercity corridors using a variety of transportation options, the Public Transportation Plan guides the state in its public transportation role, describes the condition of public transportation, discusses significant issues, identifies future needs, and proposes realistic strategies and responsibilities for achieving the vision. It provides the framework for preserving the public transportation system while improving mobility for a growing population.

State Statutory Authority: RCW 47.06.110

Roadside Classification Plan
The Roadside Classification Plan provides policy and guidelines for the management of Washington State highway roadsides, including planning, design, construction, and maintenance activities. The intent of this plan is to provide a uniform framework for consistent, proactive roadside management statewide and to facilitate cost-effective restoration of roadsides. In coordination with the State Highway System Plan, it sets statewide goals and objectives for roadside management, establishes roadside character classifications, provides guidelines for roadside restoration, and advocates the use of native plants, integrated vegetation management (IVM), and a long-term approach to achieve sustainable roadsides.

Scenic Byway Corridor Management Plans
Planning studies take an in-depth look at how transportation needs to accommodate planned growth or other changes along a corridor or in an area. These studies often focus on vehicular use of roadways, but also need to take into account how people and goods can be moved better. They should include looking at transit services, use of commute trip reduction, and walking and bicycling as appropriate.

While somewhat different in purpose than a highway, route or corridor plan, Corridor Management Plans (CMPs) provide an analysis of a corridor over a 20-year planning horizon. CMPs are developed in coordination with the United States Department of Transportation and the Federal Highway Administration Scenic Byways program. These plans follow FHWA guidelines for a master planning process along a corridor, with a focus both within and outside of the highway right of way. CMPs establish community-based goals and implementation strategies along a corridor and describe how to use community resources efficiently, how to conserve intrinsic qualities of the corridor, and how to enhance its value to the community. For additional information, see the Scenic Byways map in Part IV. Chapter B.

State Statutory Authority: RCW 47.39

Sustainability Plan and Progress Report
A sustainability plan is an action plan that incorporates sustainable business practices. The governor-signed executive orders directing state government operations to apply principles of sustainability and to contribute positively to the quality of life of all citizens apply to all state agencies and their day-to-day operations.

State agencies are required by these executive orders to adopt targets and take action to use sustainable practices, phase out persistent toxic chemicals, and establish goals for sustainable operations.

The WTP recognizes that these approaches can be applied not only to state agencies, but also to private businesses and citizens of Washington State. Living and working in a more sustainable way benefits all citizens and all businesses, and contributes positively to their quality of life. Creative approaches to making transportation options available has a direct relationship to supporting sustainable practices.

Governor's Executive Order 02-03 (2002) *Sustainable Practices by State Agencies*
Governor's Executive Order 04-01 (2004) *Phase Out of Persistent Toxic Chemicals in Washington*
Governor's Executive Orders 04-06 (2004) and 05-01 (2005) *Establish Sustainability Goals for State Operations*

Washington State Ferries Long-Range Strategic Plan
The Washington State Ferries Draft Long-Range Strategic Plan guides future service and investment decisions of the Washington State Ferries through the year 2030. The primary goal of the plan is to prepare Washington State Ferries to provide ferry service that is best able to meet future customer demand. The plan guides key policy decisions in the following areas: long-term funding, role of fares in long-term funding, capital investments, and growth and service expansion. Ultimately, the plan attempts to minimize congestion delays on all routes and add service where it is needed most. See the Ferry Route map in Part IV. Chapter B. for further information

Last Updated: 1999
Next Scheduled Update: 2006
State Statutory Authority: RCW 47.06.040