

***Transportation Action***  
***Final Recommendations to the Governor and Legislature***



The Blue Ribbon **Commission on Transportation**



# THE BLUE RIBBON COMMISSION ON TRANSPORTATION

Final Recommendations to the Governor and Legislature

December, 2000

# THE BLUE RIBBON COMMISSION ON TRANSPORTATION

## **Doug Beighle**

The Boeing Company  
CHAIRMAN OF THE COMMISSION

## **John V. Rindlaub**

Bank of America Northwest Banking  
VICE CHAIRMAN OF THE COMMISSION  
VICE CHAIRMAN, BENCHMARK COMMITTEE

## **Bruce Anderson**

SUPERVALU, Inc.

## **Rick Bender**

Washington State Labor Council AFL-CIO

## **Peter Bennett**

K Line America, Inc.  
VICE CHAIRMAN, ADMINISTRATION COMMITTEE

## **Ted Bottiger**

Washington Public Ports Association

## **Don Briscoe**

Professional & Technical Engineers, Local 17

## **Rodney Brown**

Marten & Brown LLP

## **Marty Brown**

Governor's Office of Financial Management

## **Greg Devereux**

State Employees Council #28

## **Roger Dormaier**

Wheat Growers Association

## **Honorable Dave Earling**

City of Edmonds

## **Honorable Ruth Fisher**

Washington State House of Representatives

## **Jim Fitzgerald**

Amalgamated Transit Union #1015

## **Honorable Booth Gardner**

former Governor

## **Honorable Shirley Hankins**

Washington State House of Representatives

## **Honorable Mary Margaret Haugen**

Washington State Senate

## **Robert M. Helsell**

Wilder Construction Company  
VICE CHAIRMAN, REVENUE COMMITTEE  
CHAIRMAN, BENCHMARK COMMITTEE

## **Honorable Robert M. Higgins**

City of Spokane

## **Honorable Jim Horn**

Washington State Senate

## **Doug Hurley**

CH2M HILL  
CHAIRMAN, ADMINISTRATION COMMITTEE

## **Peter Hurley**

Transportation Choices Coalition

## **Bettie Ingham**

Yakima County

## **Andrew K. Johnsen**

Governor's Executive Policy Office

## **John F. Kelly**

Alaska Airlines, Inc.  
VICE CHAIRMAN, BENCHMARK COMMITTEE

## **Bill Lampson**

Lampson International, Ltd.  
VICE CHAIRMAN, INVESTMENT STRATEGIES COMMITTEE

## **Honorable Valoria Loveland**

Washington State Senate

## **Honorable Richard McIver**

City of Seattle

## **Paul McNeil**

District Council of Laborers

## **Honorable Maryann Mitchell**

Washington State House of Representatives

## **Tomio Moriguchi**

Uwajimaya, Inc.

## **Charles Mott**

Innovac

## **Honorable Ed B. Murray**

Washington State House of Representatives

## **Connie Niva**

Washington State Transportation Commission

## **Aaron Ostrom**

1000 Friends of Washington

## **Patricia Otley**

Burlington Northern Santa Fe Railway

## **Neil Peterson**

Transportation Solutions

## **Larry A. Pursley**

Washington State Trucking Associations

## **George 'Skip' Rowley, Jr.**

Rowley Enterprises, Inc.  
CHAIRMAN, REVENUE COMMITTEE

## **Karen Schmidt**

Freight Mobility Strategic Investment Board

## **Randy Scott**

Association of Washington Tribes

## **Honorable George L. Sellar**

Washington State Senate

## **Honorable Judie Stanton**

Clark County

## **Dale Stedman**

Washington Good Roads & Transportation Association  
CHAIRMAN, INVESTMENT STRATEGIES COMMITTEE

## **Doug Vaughn**

Office of Financial Management

## **Honorable Judy Wilson**

Thurston County

# THE BLUE RIBBON COMMISSION ON TRANSPORTATION

Final Recommendations

December 1, 2000

## Table of Contents



Introduction 1



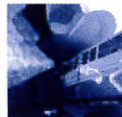
The Committees 3



Findings 5



Recommendations 31



Early Action 71

# INTRODUCTION



## **W**ashington's Transportation System Is on a Collision Course with Reality. We must take action now.

Looking ahead 20 years, if nothing changes, the Puget Sound region will experience severe traffic on every major roadway during most of the day. Congestion will also spread and worsen north and south along the entire length of I-5, east on I-90 from Seattle to the I-82 junction and on to Yakima. Traffic and delay will also expand along I-90 and U.S. 2 through Spokane, on U.S. 395 to Colville, on U.S. 195 to Pullman and on U.S. 12 between Walla Walla to the Tri-Cities. Critical rail and freight corridors throughout Washington will also be increasingly bogged down, delaying farm products and other goods from reaching our ports.

Perhaps the most sobering realization is that our state has no transportation plan in place today that, if implemented, would come anywhere close to meeting the challenges of the future. While Washington has an extensive and interconnected transportation network, we are not prepared for current and future growth, and our investment as well as the state's economic well being are threatened.

### **Who We Are**

The Governor and Legislature created the Blue Ribbon Commission on Transportation in 1998 to: assess the local, regional and state transportation system; ensure that current and future money is spent wisely; make the system more accountable and predictable; and prepare a 20-year plan for funding and investing in the transportation system. The commission consisted of 46 members representing business, labor, agriculture, tribes, government, ports, shipping, trucking, transit, rail, environmental interests and the general public.

As an independent, non-partisan group, the commission conducted a comprehensive review of transportation in Washington. Its members were committed to asking tough questions and recommending ways to shift resources to meet top priorities. The Blue Ribbon Commission on Transportation worked diligently for over two years to recommend how to make Washington's transportation system a national model for maximizing efficiency, embracing innovation and identifying the public's top priorities.

The commission listened to state and national experts as well as to citizens from all part of the state to study, explore, and analyze many aspects of transportation throughout the state. This pursuit led to a set of findings on the current status of the transportation system. The commission looked at how transportation is managed and administered, at every level of government. They studied the ways that money is raised for transportation spending, and examined how that money is invested. The commission has come to recognize that the state's needs and how those needs are addressed are complicated, complex, and outdated.

Following a six-month period of public comment gathered through public hearings, web-based surveys, correspondence, speaking engagements, and committee deliberations, the 46 members of the Blue Ribbon Commission on Transportation approved a set of recommendations for the future of our transportation system.

This document presents the recommendations as well as the findings of the Blue Ribbon Commission on Transportation.

The diversity of Washington state dictates that transportation needs will vary greatly throughout the state, from road-dependent rural areas to Puget Sound's complex multi-modal network. We must recognize these regional priorities in funding programs. Our recommendations call for a new way of doing business that will require both legislative and institutional change — both of which the public deserves and demands.

The Blue Ribbon Commission on Transportation's recommendations identify ways to solve critical problems in the areas of investment, revenue, and administration. The recommendations reflect the commission's twenty-year outlook, respecting the need to approach some problems immediately and others over a longer timeframe.

Recognizing the urgency of Washington's transportation dilemma, the Commission recommended an Early Action Strategy. This state cannot afford to wait until all of the commission's recommended changes and efficiencies are in place. We must take action now. What we need is decisive leadership and quick actions on a balanced investment plan. The Blue Ribbon Commission is proposing an early investment strategy that if adopted will start us on the path to fix this state's transportation problems.

We understand that the problems facing us are enormous, and the issues complex. Nonetheless, these recommendations spell out in straightforward terms what we believe are positive steps toward putting the transportation system on firmer ground for the future.

In one sentence, "For the good of Washington, we must take action."

## THE COMMITTEES

**A** Steering Committee provided overall direction for the Blue Ribbon Commission on Transportation and integrated the work of the Benchmark, Administration, Investment Strategies, and Revenue Committees of the Commission. The discussion papers, final reports, and meeting summaries of the committees are all available at the BRCT web site, [www.brct.wa.gov](http://www.brct.wa.gov).

The Benchmark Committee analyzed, developed, and recommended a set of quantifiable goals for the state's transportation system. These goals were intended to communicate to the public what will be achieved by the investment plan and how the state's vision of a first-class transportation system can be translated into measurable outcomes.

The Administration Committee researched and made recommendations in four topic areas related to improving the accountability and efficiency of our transportation system: governance, project delivery, operation and maintenance, and permit reform.

The Investment Strategies Committee developed options for addressing five broad areas of investment: needs exceed funding, congestion, maintenance and preservation of transportation facilities, economic development, and land use. The committee then prepared an investment plan of policy guidelines, priorities and illustrative projects designed to achieve the benchmark targets.

The Revenue Committee's recommended package is directly linked to the work of the three other committees and provides the funding tools and revenue streams to make the work of the other committees a reality. The months of July through October 2000 were spent conducting a detailed fiscal analysis of the various structural reforms of the transportation funding system as well as the new revenue options.

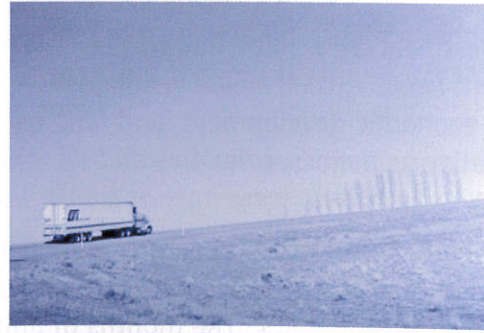
Early on, it became clear that it was the intent of the Blue Ribbon Commission to achieve savings through administrative reforms and accountability and those savings were estimated and included in the revenue recommendations. As options for regional governance and priority programming were developed and as the Commission's investment priorities began to take shape fiscal impacts were analyzed and incorporated into scenarios for the revenue package.



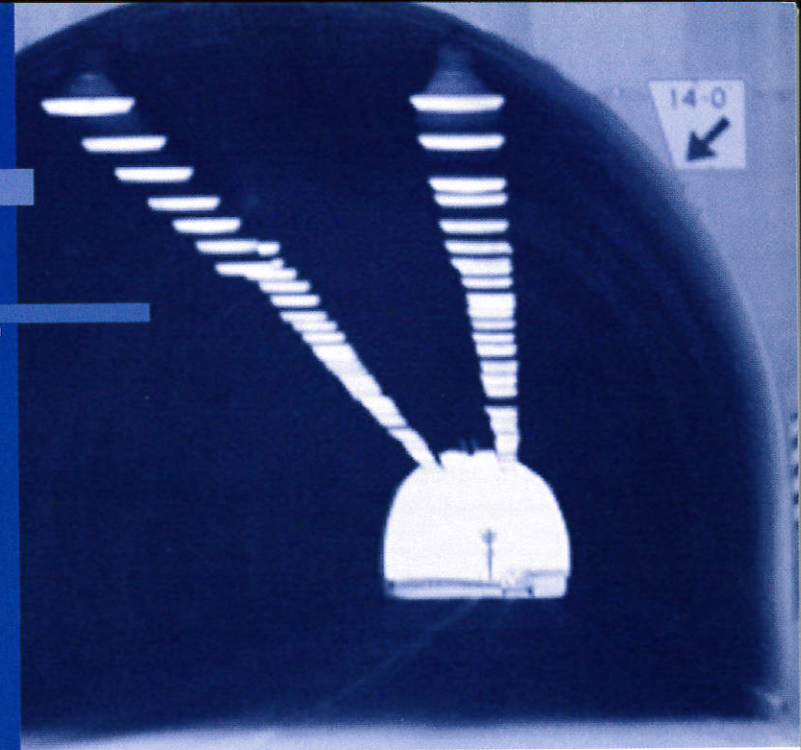
PUGET SOUND REGIONAL COUNCIL



WASHINGTON STATE DEPT. OF TRANSPORTATION



# FINDINGS



## FINDINGS

Adopted January 12, 2000

From October 1998 through January 2000, the Blue Ribbon Commission on Transportation worked to inform itself about the key transportation issues confronting the state of Washington over the next twenty years.

The Commission addressed sixteen main areas within the current system:

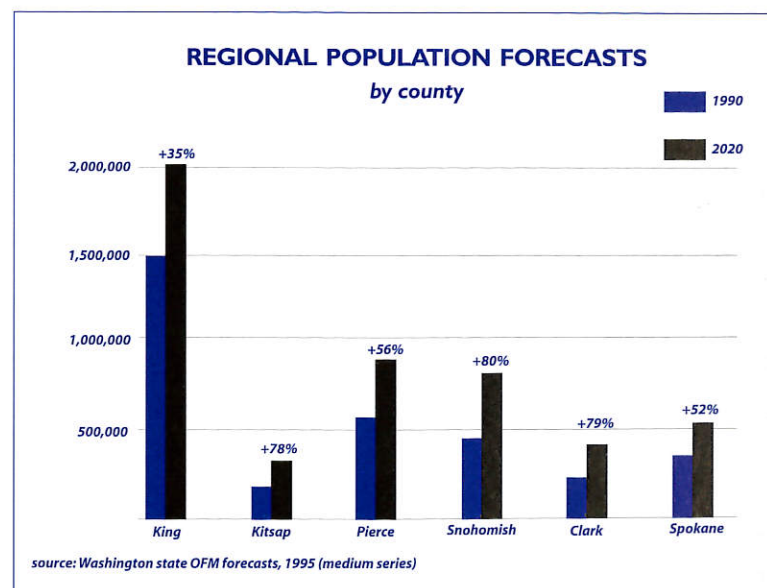
- Transportation trends and overview
- Investment 'needs' that vastly exceed current funding levels
- Congested roadways in urban areas and other parts of the state
- Poor conditions of some streets, roads, highways, and bridges
- Uneven economic development throughout the state
- Governance
- Conflicts in land use and transportation planning
- Permitting
- Project delivery efficiencies
- Operation and maintenance efficiencies
- The transportation funding structure
- The distribution of gas tax to the state, cities and counties
- Local funding
- Non-traditional funding mechanisms
- Market mechanisms and user fees
- Public opinion on transportation funding

Given the scale and scope of the transportation system and some of its problems, it is impossible to summarize all pertinent information. There are literally hundreds of relevant studies on each of the topics that could have bearing on potential reforms. Rather than providing a comprehensive review of relevant findings, this document highlights some of the most important observations and insights the Commission agreed should serve as a foundation for moving forward. Greater detail on many of these topics can be found in the discussion papers of the Blue Ribbon Commission on Transportation. These discussion papers are available on the BRCT website, [www.brct.wa.gov](http://www.brct.wa.gov).

## DETAILED FINDINGS

### Transportation Trends and Overview

#### 1. In population and economic activity, factors which strongly influence transportation use, Washington is experiencing a period of accelerated growth, and can expect more growth in the coming decades.



Population — Washington is experiencing a period of sustained population growth, and its population is increasingly urban. Washington’s population is projected to increase over 36% from 1997 to 2020. Over half of the growth is projected to be in the three counties of central Puget Sound.<sup>1</sup>

Economy — By 2020, projections show one million more participants in Washington’s labor force than there are today. Growth in the labor force will average 1.3% annually. A larger workforce indicates that more people will be making the journey to work, adding to traffic, and increasing the demand for transportation solutions.<sup>2</sup>

<sup>1</sup> Puget Sound Regional Council, August 1999.  
<sup>2</sup> WSDOT, Trends Analysis, March 1998.

#### 2. Increased travel and traffic congestion on the state’s roadways are some of the effects of population growth, economic growth, and low density land use patterns. The state’s highway system has found it difficult to keep up with traffic growth and the demands placed upon it. Transit plays an important role in specific areas and times of day. Freight movement is an important part of the state’s economy.

Congestion — In two measures of urban congestion, percent of urban lanes congested and traffic per lane, Washington ranks among the worst in the nation. Traffic congestion has grown worse, and more trips are being made by car than ever. There are no signs that peak demand periods will diminish; on the contrary, these periods are likely to expand throughout the workday.<sup>3</sup>



Highway System — Washington’s ‘centerline’ miles of highway have remained constant at approximately 7,000 from the period 1980 to 1997, but approximately 500 lane miles were added to existing roadways since 1997 to increase capacity. The state’s highway system is aging. However, according to WSDOT, the number of roadways rated ‘good’ increased from 7,200 lane miles to 11,610 lane miles from 1969 to 1997.<sup>4</sup>

Transit — Transit is essential to overall mobility in Washington state. Its importance is especially highlighted in urban areas, during commute periods, and among those who do not drive. For some of the state’s largest employers, transit carries a large number<sup>5</sup> of commute trips along the most congested corridors, and also provides an important travel option. The ferry system provides a necessary link for peninsula and island communities.

Freight — Freight and goods movement are expected to play a larger role in metropolitan areas and in the agricultural industry. Port container cargo is expected to grow 167% from 1990 to 2015. Impacts will ensue to land-side traffic. Additionally, the globalization of markets will contribute to projected strong growth at major ports.<sup>6</sup>

Trip reduction programs — State and local governments, working with employers, have adopted a number of programs and policies that provide alternatives to driving alone in a car to get to work. These include telecommuting, van pools, and creating communities where people can walk to reach key services.

<sup>3</sup> *ibid.*  
<sup>4</sup> FHWA, 1996.  
<sup>5</sup> For employers with 100 or more employees, transit carries 47% of all commute trips into downtown Seattle. Source: Puget Sound Regional Council, *Baseline System Performance Report*, 1998. (Data is for the year 1995.)  
<sup>6</sup> WSDOT, *Trends Analysis*, March 1998.



**3. The high quality of life in Washington is based to a great extent on the value of our environment. Protecting our natural resources is essential to our future, and environmental issues will strongly influence the delivery and cost of transportation projects in the future.**

**Air pollution** — Air quality in Washington is generally better than it was ten years ago. Carbon monoxide (CO) and Nitrogen oxide (NO<sub>2</sub>) emissions, which contribute to ozone and smog, dropped between 1985 and 1995. Although cars are cleaner than ever, air quality improvements will likely continue to be offset by increasing amounts of driving. CO<sub>2</sub> emissions are projected to increase 1.3% annually through 2010. As driving increases, various regions of Washington state are in danger of becoming non-attainment areas under Federal air quality standards, thereby losing their eligibility to receive Federal transportation funds.<sup>7</sup>



**Water quality** — Our transportation system strongly affects storm water, drainage, and the proper functioning of wetlands. The Federal Clean Water Act as well as state and local laws and regulations, provide standards and safeguards to which construction projects must adhere.

**Endangered species** — With the listing of endangered and threatened species in virtually every section of Washington state, the transportation impacts are as yet unknown but could be major. Development and construction projects will require closer scrutiny if they are located near or have an impact on the habitat of an endangered species.

**4. Despite a 75% increase in vehicle miles traveled in the last twenty years within Washington, annual traffic fatalities have dropped by 23%. Annual traffic injuries have increased 26% in the last twenty years, but have grown at only one third the rate of increase in vehicle miles traveled. While the risk of accidents while driving has fallen, the losses due to accidents remain substantial.**

**Traffic fatalities** — Washington currently experiences 1.32 traffic deaths per million miles traveled, compared to a national average of 1.6. Reductions in fatalities are principally the result of increased seat belt use and reduced drunken driving.<sup>8</sup>

<sup>7</sup> *ibid.*

<sup>8</sup> Washington Traffic Safety Commission, *1997 Fatal Traffic Collisions in Washington State*, July 1999. Traffic fatalities account for more than 90% of transportation-related fatalities. Despite declines in fatalities, deaths and injuries from motor vehicle collisions are still the leading cause of death for persons five to twenty-nine years old. (U. S. Department of Transportation, *Traffic Safety Facts 1998*, National Highway Traffic Safety Administration, DOT HS 808 956, 1998.)

**Traffic injuries** — Approximately 85,000 people were injured in automobile accidents in Washington in 1996, which generated economic losses due to injury, death, and damage of \$2.054 billion.<sup>9</sup>

**Structural integrity of roads and bridges** — In the event of an earthquake, highways and roads are not expected to experience significant seismic damage. However, many bridges are inadequately prepared for earthquakes due to incomplete seismic retrofit programs. Washington state has had a seismic retrofit program since 1991; remaining state seismic repairs are estimated to cost \$220 million. A state program is in place to complete the retrofits by 2015.<sup>10</sup> However, city and county bridges are not included in the state program, and city and county retrofit programs are generally under-funded.



**Flooding** — Flooding can compromise the structural integrity of roads and bridges. Funding limitations sometimes prevent transportation agencies from completing necessary flood preparations.

**5. The state's surface transportation system is a remarkably large and diverse system that represents a significant part of the state economy.**

Government spends over \$3.7 billion annually providing roads, ferries, transit services, and port facilities; households and businesses spend approximately another \$11 billion.<sup>11</sup> All told, transportation spending represents approximately 10% of the total economic activity in the state. Our transportation system influences almost every facet of life in Washington, including how we spend our time, where we live and work, the productivity of our economy, our personal safety, and the quality of our natural environment.

<sup>9</sup> Washington Traffic Safety Commission, *1996 Traffic Collisions in Washington State: Data Summary and Highway Safety Problem Analysis*, September 1997. Economic loss is in 1996 constant dollars.

<sup>10</sup> Personal communication with the Washington State Department of Transportation's Bridge Engineering Division. The program does not include the Alaskan Way viaduct in Seattle, which is estimated to cost more than \$350 million to retrofit for a 7.5 magnitude earthquake.

<sup>11</sup> Total transportation spending estimate from documents provided by the Washington State Department of Transportation and the Washington Transportation Alliance. See BRCT paper "Overview of Transportation Funding System in Washington." Cost of private transportation from "Washington's Transportation Plan 1997-2016," Washington State Department of Transportation, April 1996.

**6. The roads, streets, bridges, and highways in Washington represent public assets worth over \$100 billion that require regular maintenance and rehabilitation to provide cost-effective transportation services.**

Statewide, there are over 80,000 centerline miles on our state highways, county roads, and city streets, with over 5.5 million registered vehicles that traveled over 52 billion miles in 1999.

The state rail system carried over 74 million tons of cargo in 1997 and the Amtrak system carried over 550,000 people in the Pacific Northwest Rail Corridor (Eugene, Oregon to Vancouver, B.C.) in 1998.



There are 26 public transit systems in Washington that carried over 156 million passenger trips in 1998. Voters approved a 1996 ten-year \$3.9 billion investment in a high capacity transit system in the Puget Sound Region.

Washington's ferry fleet consists of 29 boats that carried 25 million passengers to 20 different ports of call in 1999.

The state's aviation system accommodates over ten million passengers a year and handles more than 500,000 metric tons of air cargo per year; The bulk of the aviation traffic goes through Seattle-Tacoma International Airport, operated by the Port of Seattle, but the state and local agencies maintain 129 public use airports.<sup>12</sup>

A healthy non-motorized system of bike trails, on-street bicycle paths and walking trails also exists.

**7. The state's road network is an interconnected series of national and international travel routes on which jurisdictional boundaries are invisible to the traveling public.**

Yet transportation funding is organized into numerous categories characterized by a high degree of fund dedication and restriction.

**'Needs' Exceed Funding**

**8. The most recent state transportation plan estimates that, taken together, all levels of government in Washington have over \$50 billion in unfunded needs/requests over the next twenty years. The current update of the state transportation plan will likely show even higher levels of 'needed' investments in streets, roads, highways, transit, ferries, and freight mobility.**

This figure was doubled in the course of one year of additional data collection by the Invest-

<sup>12</sup> Washington State Department of Transportation, "Key Facts, A Summary of Transportation Information," January 2000.

ment Strategies Committee of the BRCT. See the committee's final report, Appendix B, available on the BRCT website, [www.brct.wa.gov](http://www.brct.wa.gov).

**9. Current estimates of transportation needs/requests are subjective and not consistent across jurisdictions.**

Different jurisdictions do not share common definitions of needs and service objectives. According to presentations made to the committee, analytic tools for measuring costs and benefits are not used consistently and few 'needs' have been subject to rigorous analysis of their cost-effectiveness.

**10. State and local governments do not use all of the best tools available for identifying the most cost-effective investments.**

WSDOT uses benefit-cost techniques to set priorities for highway investments but not for other modes, such as transit and ferries, or to programs that influence travel demand. Other levels of government use a wide variety of procedures when evaluating transportation projects.

**11. Dedicated funding makes it difficult to optimize transportation investments across modes; each mode "gets its share," regardless of cost-effectiveness.**

The consolidation of funding sources at the federal level under Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 and Transportation Efficiency Act for the 21st Century (TEA-21) of 1998 have enabled greater flexibility and efficiency in the use of transportation dollars. At the state level, opportunities exist to consolidate funding sources and improve flexibility.

**Congestion**

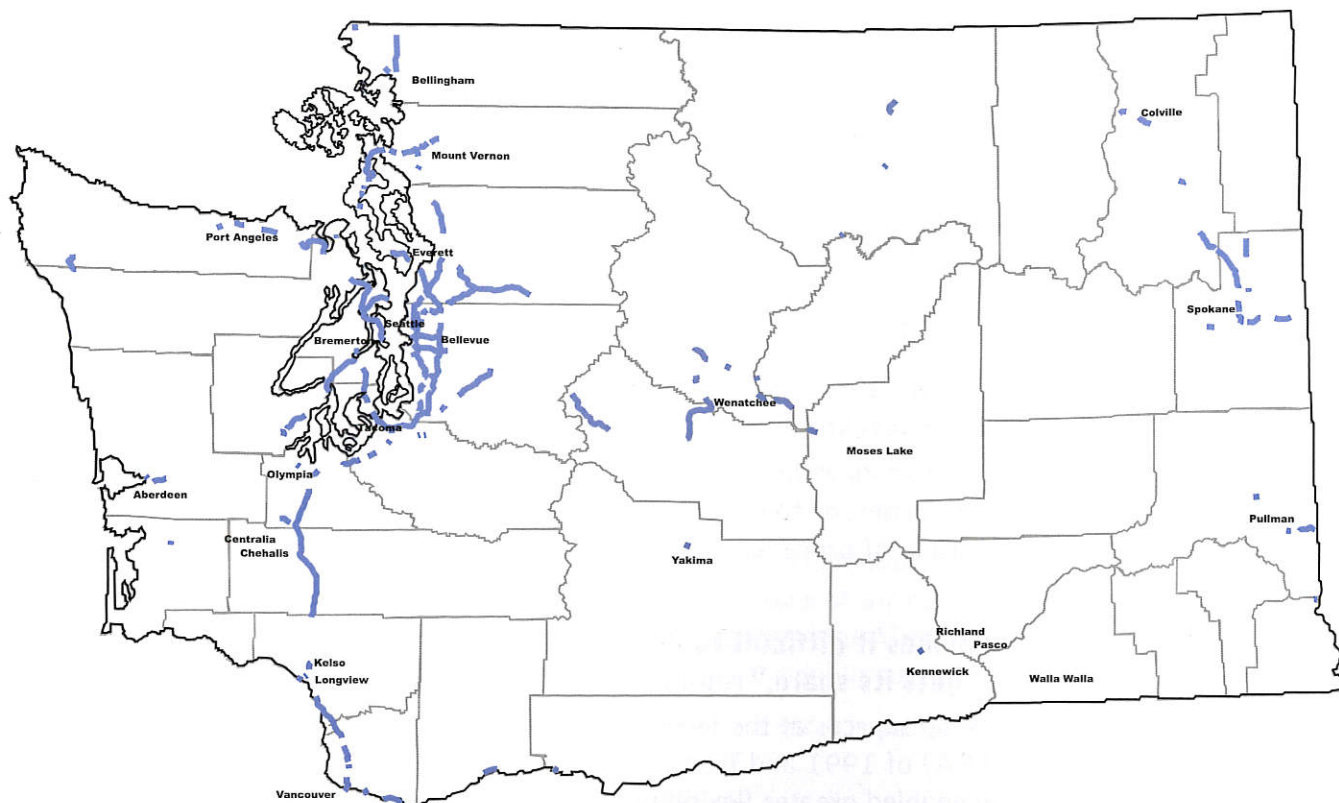
**12. In Washington state, traffic congestion wastes time and resources worth over \$2 billion dollars each year.<sup>13</sup>**

Time lost to congestion delays has increased steadily throughout the 1980s and 1990s, especially in the Puget Sound region. Washington residents waste 130 million hours<sup>14</sup> each year in congestion-related delays. Congestion diminishes the quality of life in our large urban areas and limits opportunities for economic growth. By impeding the movement of freight to market, congestion raises the costs for producers and consumers throughout the state.

<sup>13</sup> Texas Transportation Institute, 1998.

<sup>14</sup> Texas Transportation Institute, 1998.

### TRAFFIC CONGESTION, 1998



— congested state highway, representing 3-to 5-hour peak periods based on material provided by WSDOT

**13. Congestion increases vehicle emissions per mile traveled and worsens air quality.**

Vehicles stuck in traffic consume more fuel and cause more pollution than those moving at normal speeds. Solutions to the problem of congestion must address related environmental and air quality issues.

**14. Congestion is a result of many factors, including growing population, increased intensity of vehicle use by the average person, a failure to provide an appropriate balance between building more roads or significantly expanding transit use and trip reduction programs, and a failure to require drivers to pay the costs they generate when choosing to drive on congested roads.**

**15. While policy makers generally agree we have too much traffic, they have not reached consensus on what constitutes an inappropriate level of congestion.**

### TRAFFIC CONGESTION, 2022



— congested state highway, representing 3-to 5-hour peak periods based on material provided by WSDOT

Many argue that some congestion is probably a good thing, as it means that we have vital urban areas and make regular use of the large public investments in roads. Roads that never operate near their capacity represent under-utilized capital resources. Some believe measures of transportation system such as such as access, mobility, or choice deserve greater emphasis than congestion.

**16. Most regions in North America, including those in Washington, have attempted to address their congestion problems by adopting a multi-faceted approach.**

Regions differ in their relative emphasis on:

- Adding more road and ferry capacity
- Adding more bus and rail transit capacity and service
- Encouraging transportation demand management programs

- Adopting land-use planning to limit sprawl
- Taking steps towards market-based pricing of road capacity in congested corridors
- Non-motorized transportation
- Freight rail

**17. Park and ride lots encourage carpooling and transit use; many lots in congested corridors are currently full. The success of park and ride lots depends on the frequency of transit service, the travel time and cost advantage to transit and carpool users, and the safety of the park and ride lot, including adequate lighting.**

### Maintenance and Preservation of Transportation Facilities

**18. Currently, while most state highways are generally in good condition, many bridges, urban arterials, county roads, and city streets are not.**

In the state of Washington, the total annual cost to drivers for poorly maintained roads is \$156 million. This implies an average cost per vehicle of \$542 over the life of the car.

**19. Pavement management systems and road maintenance that focus on lowest life cycle costs can save money for governments and road users.**

Keeping roads properly maintained is cheaper over the long run for governments and motorists.

**20. Utility cuts on roads and streets contribute to premature wear and tear.**

Improved management of utility cuts can reduce the frequency of traffic disruption and slow the deterioration of streets and roads.

**21. Heavy vehicles, studded tires, and weather contribute significantly to wear and tear on the roads.**

Roads are built to different standards depending on their intended use. Trucks impose a heavier cost on local roads than on state highways because local roads are less likely to be designed for heavy loads. Weather also plays a role in the deterioration of pavements across the state.

**22. The other elements of Washington's public transportation system such as ferries, waterways, ports, bus and rail transit also require adequate maintenance.**

### Using Transportation Investments to Promote Economic Development

**23. Washington state as a whole has enjoyed robust economic growth in recent decades, but not all regions of the state have shared equally in that prosperity.**

While many areas enjoy vibrant economies with rapid growth in personal incomes and low unemployment, the economies of other areas remain sluggish. In fact, in many rural counties across the state, unemployment rates have hovered in the double digits for years.

**24. Because of Washington state's importance as a freight link to the rest of the world, increasing congestion in urban areas poses a threat to the economic well being of the entire state.**

Improving our ability to move products through urban areas to the rest of the world could improve the economic position of the entire state.

**25. Eliminating barge traffic from the lower Snake River will shift traffic onto state highways, county roads, and city streets, and major infrastructure investments will be required.**

Studies are now underway to determine the feasibility of breaching four dams on the lower Snake River in an effort to restore sockeye salmon habitat. Total state transportation cost impacts of the proposed drawdowns could total \$132 million to \$406 million.<sup>15</sup>



**26. Adequate transportation infrastructure is a necessary but not sufficient condition for economic growth.**

In general, the best investment rule for transportation investments is to focus on transportation benefits rather than potential changes in economic development.

### Governance

**27. More than 468 governmental entities have authority for transportation planning, funding, management, and construction in Washington state.**

The governments include the state, cities, counties, tribes, ports, transit agencies, the federal government, and regional transportation planning organizations. Although these governments

<sup>15</sup> Washington State Legislative Transportation Committee, "Lower Snake River Drawdown Study, Summary of Transportation Impacts, Technical Memoranda 4 and 6," February 1999. Figures are for state highway and rail facilities and do not include cost impacts for city streets and county roads.

have created a comprehensive transportation system for the state, it is difficult for those not actively involved in transportation to understand Washington's transportation structure and who is accountable.

**28. Transportation governance seems to work best when authority for planning, funding, and implementing projects rests with a given body.**

This is the case when a local city or county has cradle-to-grave responsibility for a local street improvement, for example. In many cities and counties across the state, the present delineation of responsibility for planning and implementing projects seems to be appropriate and work well, although the ability to fund the desired projects is often missing.

**29. In some areas of Washington state, the complexity of the structure and the many players involved suggest the value of examining structures that might improve and simplify the process.**

When there are multiple jurisdictions and transportation modes involved, and when corridors pass through many jurisdictions with different investment priorities, the requirements for coordination go up geometrically. In these areas, different governance structures are worth considering.

**30. When a lack of agreement on priorities occurs among adjacent jurisdictions, this results in lack of effective coordination.**

Despite numerous partnerships and voluntary project collaborations among jurisdictions, transportation investments are often not planned as a cohesive, integrated system.

**31. In considering any adjustments to the current structure, it is worthwhile to examine regional transportation planning organizations (RTPOs); roadway hierarchy and responsibility; and models from other jurisdictions.**

RTPOs have improved planning and coordination among jurisdictions but lack decision making, funding, and implementing authority, which rests with member jurisdictions or with the state.

The Washington Legislature's recent effort to identify roadways of regional, state, and local significance offers promise in delineating which level of government is responsible for what part of the system.

Other models, including from jurisdictions outside the state, should be examined to determine how they might fit in particular regions of Washington state.

There is a need to integrate transit and trip reduction strategies into planning, funding, and implementation processes.

## Land Use and Transportation

**32. While the state's Growth Management Act (GMA) has improved the coordination of land use and transportation, opportunities remain to strengthen the linkage to achieve land use goals.**

Despite the GMA's requirements for concurrency, public transportation infrastructure is often inadequate to support the transportation demands from development.

**33. Other large metropolitan areas have created regional governments designed to better coordinate and enforce land use and transportation plans.**

Their ability to direct funding into transportation projects that support regional land-use goals has improved the integration of land use and transportation. Portland, Oregon's Metro is often cited as model of a regional government with authority to integrate land-use and transportation plans. TransLink in Vancouver B.C., recently brought several diverse agencies providing transportation services under the control of one regional government.

**34. New development over the last fifty years has tended towards low-density suburbs with a heavy reliance on autos.**

These areas are often not designed to accommodate pedestrians and are uneconomical to serve with transit. Zoning requirements in suburban areas may create barriers that limit development of more compact, pedestrian-oriented development.

**35. Recent demographic changes indicate increased demand for more compact developments that require less auto-oriented transportation systems.**

An emerging movement known as 'smart growth' uses incentives to promote higher densities with a mix of land uses; revitalizing cities and older suburbs with new growth; and protecting open space, farms, and sensitive environments. These communities rely less on automobiles for transportation and more on walking, biking, and transit.



**36. Federal TEA-21 encourages considering land use alternatives when conducting corridor studies, but such analyses are currently rare. WSDOT could work with local governments to incorporate land use alternatives as standard practice when conducting corridor studies.**

## Permitting

**37. Permitting requirements are too complex.**

Laws passed to address a range of environmental problems, provide for citizen involvement in decision making, and manage growth and land use have created a complex array of separate federal, state, and local permitting requirements. These requirements can strain permitting agency resources and lead to increased costs and delays for transportation projects.

**38. WSDOT's efforts to reform the planning and permitting process tend to take steps to meet the desirable objectives of: reducing permitting costs, shortening the time for the permitting process, lessening environmental impacts through better decision making, and helping make decisions that stick.**

WSDOT's efforts recognize the fundamental importance of environmental quality to our state. The reforms include the SR104 pilot effort, designed to achieve buy-in by stakeholders at an earlier stage in the decision making, and the development of programmatic permitting and a more holistic, watershed-based strategy for environmental mitigation, rather than a project-by-project approach. Unless steps are taken to simplify the substantive and procedural complexity of the permit process, however, these incremental adjustments will not go far enough.

**39. The foundation exists for a thorough reform of the permitting process on the state and local level.**

The Washington Legislature's efforts over the past decade to streamline the permit process, together with recommendations from the Legislative Transportation Committee's Environmental Cost Savings and Permit Coordination Study, the Land Use Study Commission, and other studies, could be used as the foundation for more thorough permit reform. A similar review at the federal level could also be useful.

## Project Delivery Efficiencies

**40. Transportation project delivery is increasingly time-consuming and expensive.**

Difficulties in permitting and decision making, coupled with the long time frame associated with the conventional design-bid-build process on transportation construction projects, have led many states, including Washington, to seek project delivery efficiencies.

**41. Some project delivery efficiencies can take place within the traditional design-bid-build framework.**

Examples include enhanced team planning and commitment, work schedule acceleration, and working on transportation projects at night. The completion of the Interstate 5 South DuPont Interchange within 26 rather than 48 months included such efforts and contains lessons that can be applied to future projects. The DuPont project was privately funded, however, and key to its success was the willingness of the private sector to take risks that allowed WSDOT to alter its standard process for managing publicly funded transportation projects.

**42. The traditional transportation delivery process does not reward innovation.**

The standard process used by WSDOT and other public agencies avoids risk and concentrates on completing one task at a time, to try to ensure that no mistakes are made and revisions are avoided. Innovation often requires risk-taking, however. For example, proceeding with several phases of a transportation project concurrently, which can shorten the time frame considerably, may mean some processes have to be redone or revised. In the private sector, the benefit of taking risks is the associated reward when the risks prove successful. Some way of managing the risk when public dollars are involved needs to be found, to take full advantage of proven ways to make transportation project delivery more efficient.

**43. The two-year transportation budget cycle hinders project delivery.**

When transportation projects are authorized with two-year increments in funding, whether a project can continue depends on the next budget cycle. This stop-and-go approach adds time, expense, and uncertainty to project delivery.

**44. Alternative project delivery (APD), which represents changes from the conventional way transportation projects have been designed, constructed, and financed, has demonstrated project delivery efficiencies in other jurisdictions.**

APD mechanisms include design-build, design-build-operate, and design-build-own-operate. Design-build, hiring a single entity for project design and construction, shows significant time savings, in the range of 35 percent faster delivery.

**45. The Washington State Legislature has been innovative in authorizing APD, but public opposition has led to retrenchment.**

Although Washington State has laws on public contracting that require the traditional design-bid-build approach, the Legislature has authorized APD in recent years. Under 1998 legislation authorizing design-build transportation pilots, WSDOT has begun two projects. Legislation in 1993 authorizing public-private initiatives (PPI) to finance transportation improvements has encountered public opposition, however, and subsequent legislation imposing addi-

tional requirements on potential projects, including an advisory election, has undermined the efficacy of the original law. The only PPI project moving forward is the SR-16 project over the Tacoma Narrows. Examination of the SR-16 project and the two design-build pilots, as well as APD in other states, will help determine the value of project delivery efficiencies to Washington state.

## Operation and Maintenance Efficiencies

### **46. Governments are using a variety of strategies to achieve greater efficiencies in operation and maintenance.**

Given that the total annual transportation investment in operation and maintenance is greater than \$1 billion in Washington State and that significant savings have been found across the country, careful examination of potential efficiencies is warranted.

### **47. Cost and service improvements can be achieved through workplace re-engineering.**

Such changes include forming project teams, goal-setting, and encouraging employees, especially those on the front line, to generate ideas for reforms and innovative approaches. The quality improvement teams formed at WSDOT are one example.

### **48. Managed competition represents one possible way to unleash creative ideas from the workforce and lead to improvements.**

Under managed competition, private sector bids are sought for a service and then compared to a bid prepared by the public staff that currently performs the service, with the possibility of the award going to either the public or private sector. Pilot programs in managed competition for highway maintenance elsewhere have found service improvements and cost savings, with public employees often winning the bid.

### **49. Managed competition of public services has proven most successful when attention is given to these issues: (a) the availability of adequate financial and performance data; (b) the importance of a level playing field, including clear ground rules on cost comparison methodology agreed to by labor and management; and (c) the presence of a 'safety net' if changes or reductions of positions result.**

Mediated negotiations between labor and management can help achieve the full potential of managed competition.

### **50. Authorizing legislation would be needed for managed competition in Washington.**

State agencies are prohibited from contracting with a private contractor for work traditionally performed by civil service employees. A 1998 audit by the Joint Legislative Audit and Review

Committee recommended legislation authorizing a pilot program for highway maintenance and estimated costs savings of 10 percent or more, as well as improved service levels.

### **51. Establishing performance goals for efficiencies in transportation agencies can lead to reduced costs and enhanced service, as long as the goals are measurable and are used for continuous improvement.**

Effective financial accounting systems are essential to understand and assess the costs of agency operations. Lack of access to comparative metrics that accurately measure the cost and quality of services impedes tracking of performance and comparison of alternative ways to deliver projects and services.

## THE TRANSPORTATION FUNDING STRUCTURE

### Transportation Revenues in Washington

In population and economic activity, factors which strongly influence transportation use, Washington is experiencing a period of accelerated growth, and can expect more growth in the coming decades.

As these growth pressures have been placing increasing demands on the transportation system at the state, regional and local levels, the revenue structure has increasingly lagged in its ability to keep pace with the growth and investment needs. The Revenue Committee found that both the structure itself and the level of revenues it generates have become inadequate.

The funding structure organizes funds into numerous categories that tend to be fairly limited in the kinds of transportation uses to which each can be applied. The categories are restricted by federal law, the state Constitution and state law. Jurisdictional responsibility also restricts how funds are spent. The existing funding framework is based on historical conditions that were once appropriate, but may not reflect the needs of the system in the future.

Some of the characteristics of the current funding structure include:

- A large number of funding categories or 'buckets' at each level of government
- A high degree of fund dedication and numerous restrictions on uses
- Funds distributed by and often restricted to jurisdiction, mode and program
- Different economic characteristics of the various fund sources available to jurisdictions, modes and programs

### Existing Revenue Sources

The state, counties, cities and public transit districts each have a different mix of transportation revenue sources available to them.

#### State Sources:

Until November 1999, the State of Washington had four major sources of transportation

revenue: the gas tax; the motor vehicle excise tax (MVET); licenses, permits, and fees; and transportation bonds. In the November 1999 election, Initiative 695 abolished the MVET and replaced it with a \$30 annual license fee, leaving a \$750 million annual gap in state funding. Although I-695 was subsequently declared unconstitutional by the Washington State Supreme Court, the abolition of the MVET and its replacement with a \$30 annual fee were fixed in statute by the Legislature. The remaining state sources are:

### Gas Tax

The state gas tax in Washington is levied at 23 cents per gallon<sup>16</sup>. Each cent generates \$33 million in revenues annually, or a total of about \$760 million per year. The 18th amendment to the State Constitution provides that gas tax revenue can only be used for highways, ferries and local streets and roads. The gas tax is projected to grow at about 2.3% per year in the next few years, while the state's economy is growing at faster than 7% annually. At the current rate, the gas tax fails to keep pace with inflation and the cost of needed transportation investments. Gas tax revenues also depend on fuel consumption, which has declined from 12 miles per gallon in 1968 to 18 mpg in 1998.

### Licenses, permits and fees

This category represents over 40 revenue sources that together generate about \$250 million per year. The three largest fees in this category are: the combined licensing fee, for trucks with gross weight of 4,000 pounds or more; the motor vehicle registration fee (license fee), paid by passenger car owners, motorcycles, motor homes, and others; and ferry fares. These sources are also restricted by the 18th Amendment.

### Bonding

The state of Washington has bonded between 10% and 20% of state transportation revenues since 1970. These are generally issued as "double-barreled" bonds that are backed by the full faith and taxing authority of the state. The passage of R-49 in November 1998 dramatically increased the state's use of transportation bonding, however the revenue source backing the bonds was eliminated by I-695. Bond authorizations are passed by the Legislature and require a 60% vote.

### County Sources

County governments in Washington are responsible for some 40,000 miles of county roads. In addition to gas tax revenues that are distributed to counties, their primary transportation funding source is a dedicated property tax or road levy of \$2.25 per \$1,000 of property value. In 1999 the road levy was projected to generate about \$280 million. The property tax has been a strong revenue generator in counties that have experienced economic growth, however,

<sup>16</sup> Gas tax revenue do not all flow to WSDOT, but are distributed to the state, counties and cities as well as to specific programs.

it is not a popular tax and many citizens have been opposed to further increases. Counties also have a local option vehicle license fee of \$15 per vehicle per year. This local option is in use in four counties.

### City Sources

Cities receive a state gas tax allocation based on their population, but otherwise have no dedicated transportation funding source and fund their city street investments out of their general funds. City general sources include the property tax, sales tax, business & occupation tax and utility tax, all of which track economic growth and have grown significantly in recent years. Cities use up to 40% of their general funds for transportation purposes. Cities also use federal and state competitive grants to augment their local funds.

### Public Transit Sources

Prior to the passage of I-695, transit relied on two major funding sources: the sales tax and the MVET. Voter approved sales tax rates range from 0.1% to the maximum of 0.6% (used by King County Metro and by Snohomish County's Community Transit). Other funding sources for public transit include farebox revenues, federal grants and bond proceeds. Transit districts in Washington lost some \$200 million in annual revenues as a result of I-695. The remaining sales tax generates a total of \$425 million for transit each year. The 2000 Legislature authorized an additional 0.3% local sales tax for use by transit districts with a vote of their citizens.

In addition to the revenue sources outlined above, Washington receives \$500 million annually in federal funds. The funds flow to all levels of government and all modes based on a combination of federal law and agreements reached by the legislature and transportation entities in the state.

## REVENUE FINDINGS

### 52. Gas tax revenues do not keep pace with inflation.

In recent years, gas tax revenues have increased at only 2% annually, despite the fact that vehicle miles traveled have increased and the proportion of vehicles with higher fuel consumption (pickup trucks and sport utility vehicles) has increased. Simultaneously, the cost of preserving and building highways has gone up much faster due to increasing land costs, new environmental requirements and stricter design standards.

### 53. A high degree of fund dedication has created many restrictions on how transportation funds can be used and a system that is not very flexible or responsive to changing conditions.

The current transportation funding framework organizes funds into numerous categories that are dedicated to specific purposes. Funds are currently dedicated by the main organizing



principles of jurisdiction, transportation mode and program. This structure has served the state's goals well in the past.

Of the \$3.7 billion spent annually on transportation, 25% goes to state highways and bridges, 17% goes to county roads, 15% goes to city streets and 23% goes to public transit.<sup>17</sup> The remainder is spent on other modes such as ferries and rail, on licensing and traffic enforcement and on administration and general government. Fund sources include federal, state and local taxes including the gas tax, the motor vehicle excise tax, sales tax, property tax, licenses and fees, and farebox revenues.

**54. The existing funding framework is based on historical conditions that were once appropriate, but may not reflect the needs of the system in the future.**

Once in place, fund distributions become an essential part of a jurisdiction's budget and are difficult to change even when conditions change and the mechanisms have outlived their original intent. For example, fully 45% of the state's transportation funds are statutorily dedicated before the budget process even begins. Distributions are not regularly evaluated to determine if they still meet the needs of the state's transportation system.

**55. An insufficient level of funding in the transportation system has led to the layering of narrow categories, to program restrictions and to jurisdictional and modal competition for funds.**

**56. The combination of insufficient funding, restrictive categories and differing priorities limits the transportation system's ability to use available funds in the most efficient ways or in the highest priority areas of need.**

Current transportation funding is frequently based upon historical conditions, and does not always reflect shifts in the population base or changing priorities.

**57. Federal funding, at about 13% of total state transportation spending, is an important part of the overall funding structure.**

Federal guidelines have encouraged broad, flexible funding categories and promoted trip reduction and multimodal partnerships as well as capacity expansion in congested areas. Federal law, by requiring regional planning, has also encouraged jurisdictions and modes to increase their cooperation with each other on a wide range of projects.

<sup>17</sup> Total transportation spending estimate from documents provided by the Washington State Department of Transportation and the Washington Transportation Alliance. See BRCT paper "Overview of Transportation Funding System in Washington."

**58. Different fund sources have differing restrictions and track the economy in different ways, resulting in inequities in access to funds among levels of government and modes.**

While inflation has increased 3.4% per year in recent years, gas tax revenues had increased 2% per year, motor vehicle excise tax revenues have increased 7.9% per year, property tax revenues 6.8% per year, and sales tax revenues 5.3% per year. Gas taxes are constitutionally restricted to highway and ferry purposes; MVET were widely dedicated to for ferries, transit and rail; property taxes are dedicated county roads; and sales taxes are used primarily for transit and city streets.

**59. Selective changes to the current funding system could improve the flexibility, equity and accountability of transportation funding.**

Some federal and state funding programs have created new models that overcome some of the existing limitations. They include investment principles and incentives to fund projects that are multi-modal and multi-jurisdictional, resulting in enhanced partnerships, more coordinated planning, and better regional priority-setting. While government at all levels has done a good job of leveraging partnerships and working within the categorical restrictions, increasing flexibility in funding could lead to improved outcomes in transportation programming.

### The Distribution of State Gas Tax to the State, Cities and Counties

**60. The state gas tax is the only dedicated statewide transportation source that is available to the entire roadway system at all levels.**

While gas tax revenues may, under Washington's Constitution, be used for highways, bridges and ferries, they may not be used for transit or rail services.

The state gas tax is currently set at 23 cents per gallon. For every one cent of gas tax, about \$33 million is generated per year in revenues. The state, counties and cities rely on the gas tax for a significant portion of their transportation budgets. Because it is dedicated, the gas tax does not compete with general government programs.

**61. Gas tax levels allocated to the state, to cities and to counties do not reflect actual roadway responsibilities.**

The state, cities and counties have different levels of roadway responsibility. While the state has just 16% of the road miles, state highways carry 57% of the traffic. Counties, on the other hand, have responsibility for 53% of road miles, but only 18% of the state's traffic. Cities own 31% of road miles and carry 25% of all traffic. The level of gas taxes allocated to the state, counties and cities is not regularly evaluated to determine if factors such as capacity, utilization or road conditions are changing and if funding levels are still meeting the needs of the system.

**62. Gas tax levels allocated to special purpose programs are not based on objective measures of need such as miles of roadway or utilization.**

There are four major special purpose programs that received dedicated gas tax allocations totaling almost 18% of the state's gas tax funds. These programs significantly supplement the monies distributed to cities and counties. However, the amounts dedicated to each program do not reflect eligible road miles, road capacity or road conditions.

**63. Gas tax allocation levels do not reflect changing demographics and have not kept pace with changing system needs.**

Formerly rural roads have in many places become significant regional arterials carrying large numbers of urbanizing commuters. The state's population has been shifting from unincorporated areas to cities. Yet these patterns of growth and change are not well reflected in gas tax distributions.

**64. The per capita gas tax distribution to cities appears to penalize cities.**

Statutes mandate that a fixed amount of gas tax is allocated to cities and funds are distributed on a per capita basis. As new cities have become incorporated, the amount available to cities has remained fixed, leading to a decrease in funding per capita. As rapidly growing parts of the state respond to the Growth Management Act by continuing to incorporate, this problem is exacerbated.

### Local Transportation Funding

**65. The three levels of government are treated differently with respect to their access to dedicated transportation sources and their need to fund transportation out of their general funds.**

The state has a separate transportation budget that does not compete with general government for funding. Transportation is funded largely by dedicated fund sources. Counties have a dedicated property tax road levy and additionally rely on dedicated gas taxes for about one-third of their transportation revenues. Cities are able to rely on the dedicated gas tax for only 17% of their transportation budgets and must allocate significant transportation funding through competition with other city functions including police, fire, parks and human services.

**66. Cities and counties are unable to fully meet even basic maintenance and preservation needs.**

Cities and counties have inadequate local revenue authority for transportation, as the most widely used local sources, the sales tax and the property tax, are statutorily capped.

Existing local option transportation taxes have proven difficult to implement and have not been widely used.

Local governments subject to the Growth Management Act often must use available transportation dollars to meet concurrency requirements related to growth. This is a worthwhile use of funds, but sometimes constrains their ability to fund the needs of existing infrastructure.

### Non-Traditional Funding Mechanisms

**67. Non-traditional funding mechanisms exist that can leverage the capital and development techniques of the private sector for public purposes.**

Sometimes non-traditional funding strategies can considerably speed the implementation of locally desirable projects and thus reduce their costs. They can provide benefits such as new funding streams, localized project benefits within a defined area, and direct payment by those who enjoy the benefits.

**68. Funding mechanisms such as the local improvement district (LID), road improvement district (RID), and the transportation benefit district (TBD) are not widely used because implementation costs, restrictive statutes and public opposition have limited their usefulness.**

The LID, RID and TBD are all property tax mechanisms and, as property values have risen, have become increasingly unpopular with property owners and elected officials.

**69. While tax increment financing is widely used throughout the country, including use for transportation infrastructure, and remains in statute in Washington, it is considered to violate the Washington State Constitution and is therefore unusable in its current form.**

Three attempts have been made in the last twenty years to loosen restrictions on the use of tax increment financing by asking the state's voters to amend the Constitution. All three attempts failed.

### Market Mechanisms and User Fees

**70. There is a lack of balance between our physical infrastructure needs and available financial capacity, resulting in a classic market imbalance.**

Market pricing mechanisms such as fuel fees, parking charges and road pricing are tools that could be effective in redressing this imbalance.

**71. Market-oriented transportation programs have helped close the funding gap in other congested parts of the country.**

Programs that charge transportation users the costs of using a particular road or bridge can influence the demand for travel and increase the supply of transportation capacity.

**72. There is anecdotal evidence of public support for user fees as a concept, yet specific pricing or parking fee proposals in Washington have met with strong opposition from affected communities and businesses.**

A number of parking cash-out efforts by King County employers have been tried and considered a success.

**73. Careful use of market mechanisms could reduce demand for transportation capacity while generating significant new revenues that could be used to add capacity or develop alternative solutions to congestion.**

Mileage-based fees are an example of a mechanism that could provide a strong link between the amount paid and use of the roadway system.

**Public Opinion on Transportation Funding**

**74. Many members of the public are confused about transportation funding generally and are skeptical that there are large unfunded needs.**

Some members of the public believe that existing money is not being spent wisely by government.

**75. Public opinion generally supports transportation investments directed toward the basics: maintaining the existing infrastructure, reducing accidents, relieving congestion and improving air quality.**

**76. Polling suggests that a majority of the state's voters believe spending needs to be increased over the next five years to maintain and improve the state's transportation system.**

Voters are most likely to support increased taxes if they believe it will result in improvements to the transportation system, most specifically reducing congestion.

**77. No specific tax option is supported by a majority of the voters, but gasoline taxes are considered more acceptable than other options.**

**ACCORDS TO GUIDE RECOMMENDATIONS  
ADOPTED BY BRCT ON MAY 18, 2000**

"BUSINESS AS USUAL" NO LONGER WORKS. WE MUST RESPOND AGGRESSIVELY AND INNOVATIVELY TO GROWTH AND TRANSPORTATION DEMAND.

WASHINGTON'S TRANSPORTATION SYSTEM SHOULD BE GUIDED BY A PLAN THAT IS SUPPORTED BY THE PUBLIC AND BASED ON GOALS THAT ARE SIMPLE, UNDERSTANDABLE, PRACTICAL, AND MEASURABLE.

THE PUBLIC DESERVES A SPECIFIC SET OF INVESTMENTS THAT WILL ACHIEVE THE GOALS FOR AN EFFICIENT AND EFFECTIVE TRANSPORTATION SYSTEM.

WE MUST MAKE OUR ROADS AND HIGHWAYS SAFER, PROVIDE MORE TRANSPORTATION CHOICES, AND ADDRESS CONGESTION.

THE PUBLIC REQUIRES ACCOUNTABILITY – THEY WANT TO KNOW WHAT THEIR TRANSPORTATION DOLLARS ARE BUYING. THIS INCLUDES THE ASSURANCE THAT PROJECTS WILL BE BUILT ON TIME AND WITHIN BUDGET.

WE MUST PRESERVE AND MAINTAIN OUR DIVERSE TRANSPORTATION ASSETS AND ENSURE AN INTEGRATED AND FUNCTIONAL STATEWIDE SYSTEM. IN ADDITION, REGIONS MUST BE GIVEN THE FLEXIBILITY AND TOOLS TO SOLVE THEIR OWN TRANSPORTATION PROBLEMS.

PUBLIC OFFICIALS AND TRANSPORTATION AGENCIES MUST MAKE THE MOST EFFICIENT USE OF PUBLIC FUNDS. BUT, EFFICIENCIES ALONE WILL NOT PROVIDE SUFFICIENT FUNDING TO ADDRESS FUTURE DEMANDS.

WE MUST STREAMLINE THE PERMITTING PROCESS FOR TRANSPORTATION PROJECTS WHILE PROTECTING THE ENVIRONMENT.



PUGET SOUND REGIONAL COUNCIL

# RECOMMENDATIONS



## FINAL RECOMMENDATIONS

Adopted November 29, 2000

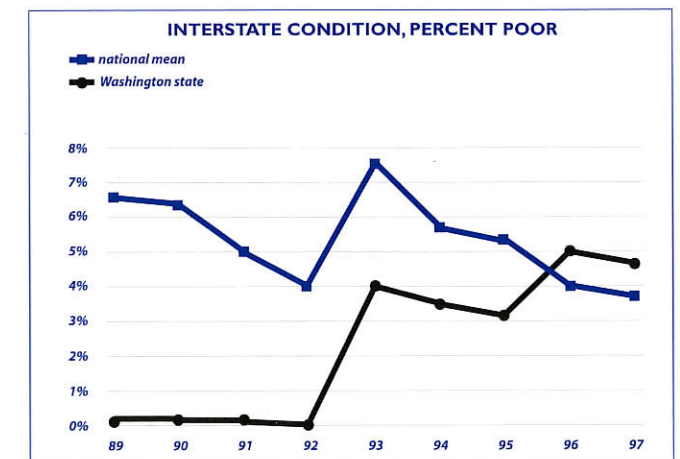
**Recommendation 1:**  
 Adopt transportation benchmarks as a cornerstone of government accountability at the state, city, county, and transit district levels.

These benchmarks should measure results and monitor performance of the system. Transportation funding should be tied to progress in achieving the benchmarks. With a focus on goals and results, benchmarks accurately quantify where Washington stands in comparison to other states. By giving a 'baseline' of current status, these measures can then be assessed for future action, and used as performance goals.

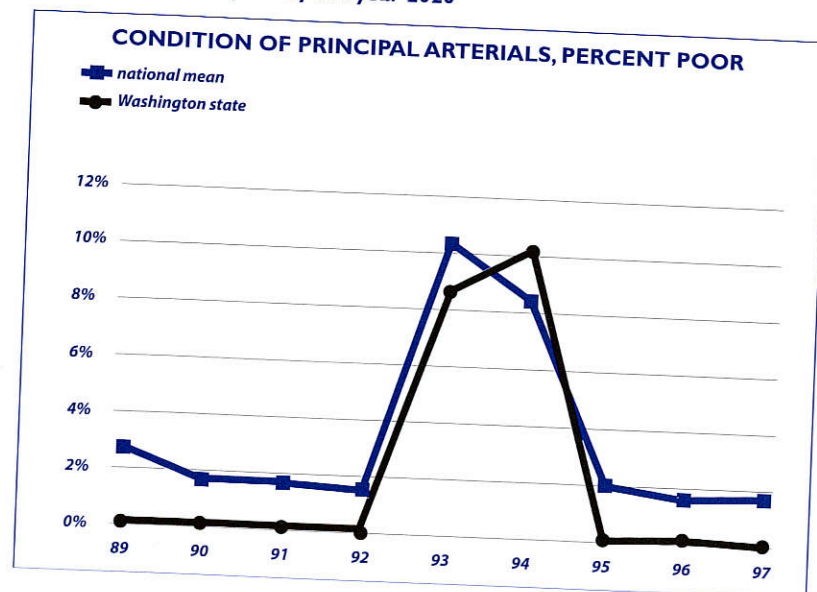
**Benchmark 1: Zero percent of interstate highways in poor condition.**

The benchmark committee found that slightly under five percent of the interstate highway was in poor condition in 1997.

**Benchmark 1: Physical Condition**  
 Target: Zero percent poor by the year 2020



**Benchmark 2: Physical Condition**  
Target: Zero percent poor by the year 2020



**Benchmark 2: Zero percent of major state routes in poor condition.**

The benchmark committee found that less than one percent of major state routes were in poor condition in 1997.

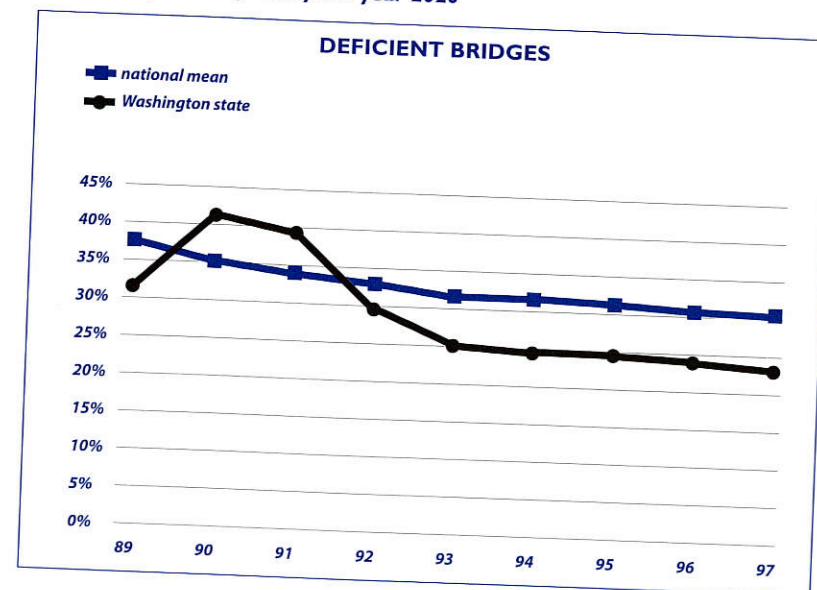
**Benchmark 3: Zero percent of local arterials in poor condition.**

Data were unavailable for current conditions of local arterials in Washington. A pilot project under the auspices of the Legislative Evaluation and Accountability Program (LEAP) is compiling the available data.

**Benchmark 4: Zero percent of bridges structurally deficient.**

The benchmark committee found that slightly fewer than twenty-five percent of bridges in Washington were in deficient condition in 1997. The benchmark applies to all bridges over 20 feet in length recorded in the State of Washington Inventory of Bridges (SWIBs).

**Benchmark 4: Physical Condition**  
Target: Zero percent poor by the year 2020

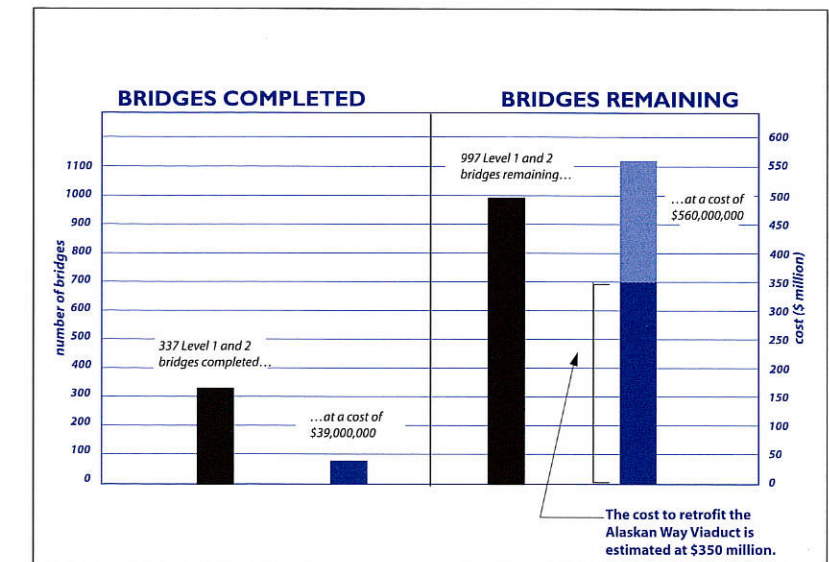


**Benchmark 5: Complete seismic safety retrofits of all Level 1 and Level 2 bridges.**

The benchmark committee found that the state has been pursuing a program to retrofit bridges and structures identified by risk level. Levels 1 and 2 are the two highest risk levels. Over 300 bridges have been retrofitted to date at a cost of about \$40 million. However, almost 1,000 bridges remain to be repaired in the two highest risk levels at a cost of \$560 million, \$350 million of which is contained in a single structure, the Alaskan Way viaduct in Seattle.

**Benchmark 5: Safety**

Target: Complete seismic safety retrofits of all level 1 and 2 bridges by 2020



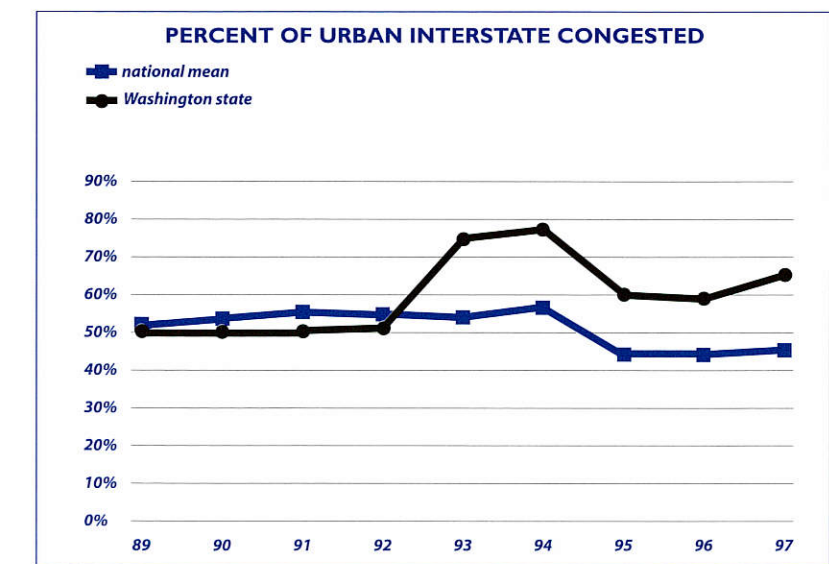
**Benchmark 6: Traffic congestion on urban interstate highways will be significantly reduced and be no worse than the national mean.**

The benchmark committee found that between sixty and eighty percent of urban interstate highways are congested in Washington. The national mean is about forty-five percent urban interstate miles congested.

Members knew that this was an aggressive target but felt that in order to communicate a real vision of a first-class transportation system, a target would have to stretch the limits of what might be achievable. Members discussed the concern that the benchmark not be used to convey the impression that congestion could be "fixed" with investments in capacity. They agreed that achieving the target would require a mix of various strategies.

**Benchmark 6: Traffic Congestion**

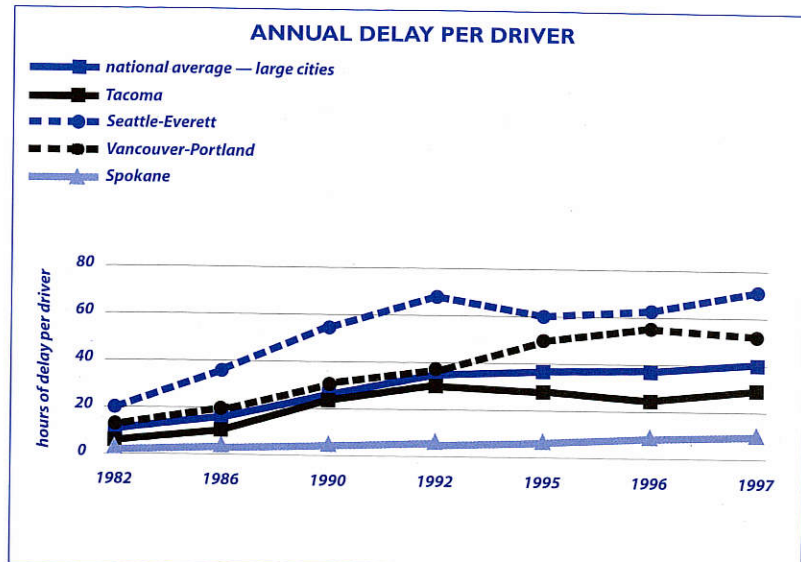
Target: Congestion no worse than the national mean by 2020



**Benchmark 7: Delay per driver will be significantly reduced and be no worse than the national mean.**

**Benchmark 7: Traffic Congestion**

Target: Delay no worse than the national mean by 2020



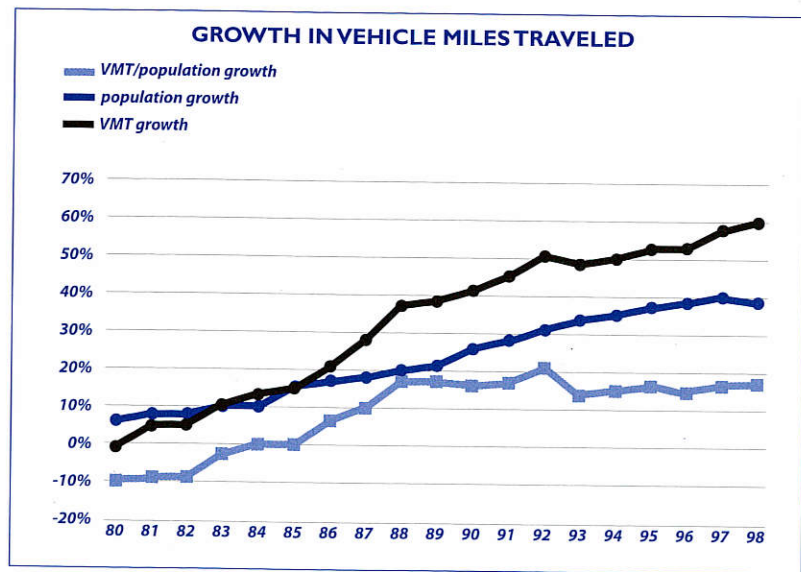
This benchmark calculates delay per driver by metropolitan region. Delay per driver is a calculated average based on the number of licensed drivers in a region. It does not attempt to distinguish between individuals actually experiencing delay and those traveling on non-congested roads or not traveling at all. The benchmark committee found the national mean to be about forty hours of average delay per driver annually. Data show that the Seattle-Everett metropolitan area experienced seventy hours of average delay per driver annually; Vancouver-Portland experienced over fifty hours of average delay per driver annually; Individual regions of the state may

choose to track more detailed data such as person delay on specific corridors.

**Benchmark 8: Maintain vehicle miles traveled (VMT) per capita at 2000 levels.**

**Benchmark 8: Traffic Congestion**

Target: Maintain VMT per capita at 2000 levels



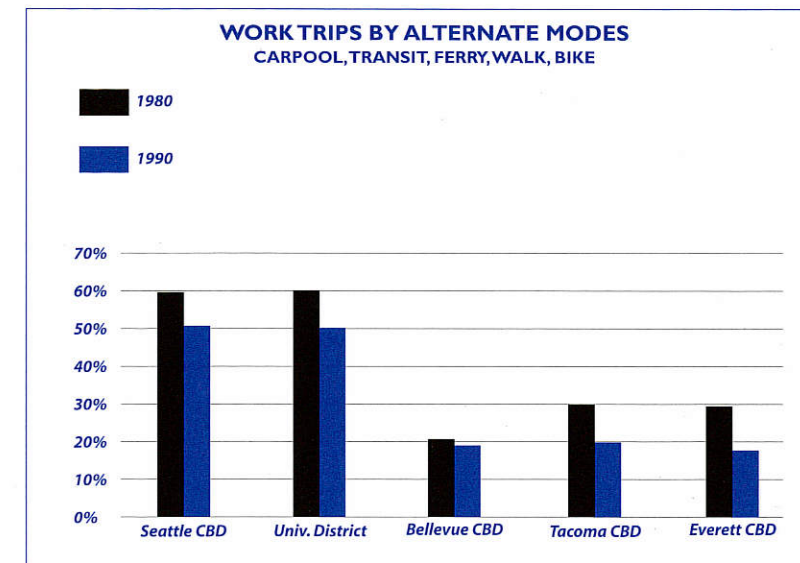
The benchmark committee found that VMT in Washington were about 9,000 miles per person per year in 1998. While Washington's population has grown about forty percent over the past twenty years, VMT have grown sixty percent, or about half again as fast. VMT have been growing faster than population since the mid-1980s. However, VMT per capita have leveled off at about 1990 levels. The proposed transportation accountability commission will review this benchmark and raise the standard if necessary to reach other benchmarks.

**Benchmark 9: Increase non-auto share of work trips in urban centers or reverse the downward trend of non-auto share of work trips in urban centers.**

The benchmark committee found that the only reliable data for this benchmark was the U.S. Census Bureau's journey-to-work surveys, the most recent of which showed a declining share of non-auto trips in the 1980-90 timeframe. Year 2000 census data will be available early next year, 2001. The proposed transportation accountability commission should set a target for this benchmark when the data are available. Non-auto travel includes ferry, transit, walking and bicycling; commuter and light rail should be added when data become available.

**Benchmark 9**

Target: Increase non-auto share of work trips or reverse downward trend by 2020

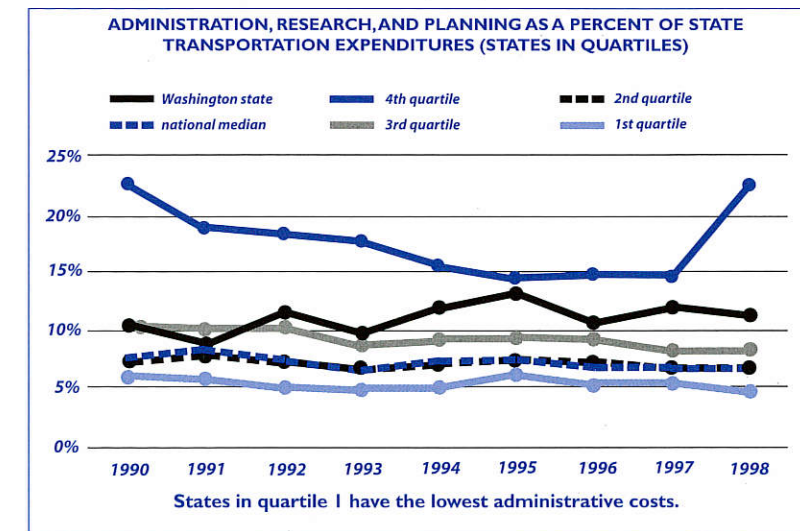


**Benchmark 10: Administrative costs as a percent of transportation spending at the state, county and city levels should improve to the median in the short-term and to the most efficient quartile nationally in the longer term.**

The benchmark committee found that the state transportation agency's administrative costs fell between the third and fourth quartile nationally, (the first quartile being the lowest), or at roughly ten to twelve percent of spending. The committee added that these costs were not all due to inefficiency, but also to Washington's environmental ethic, culture of planning, neighborhood activism, and citizen involvement. The benchmark applies to all transportation agencies in the state.

**Benchmark 10: Cost Efficiency**

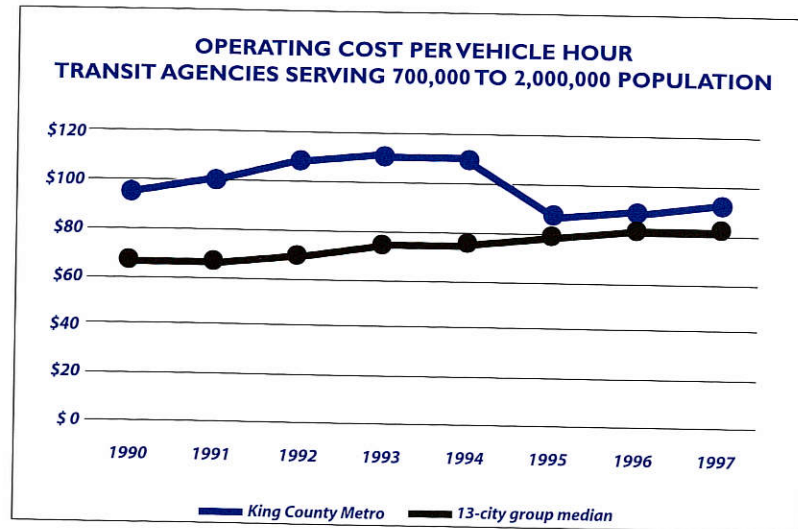
Target: National median in administrative efficiency in the next biennium (2003) and the top quartile within three biennia (2007).



**Benchmark 11: Washington's public transit agencies will achieve the median cost per vehicle revenue hour of peer group transit agencies, adjusting for regional cost of living.**

**Benchmark 11: Cost Efficiency**

Target: Median cost per vehicle revenue hour of comparable size transit agencies nationwide by 2005.



The benchmark committee found that King County Metro and Pierce Transit's cost per vehicle hour were thirteen percent and fourteen percent respectively, above their peer group transit agencies nationwide. The committee also found that transit-operating costs are highly dependent on wages of transit personnel, which in turn are related to the economy and cost of living in the region. To compare like-size agencies only, the committee chose not to use a national mean or median as the target, but rather suggested for Benchmark 11 to use a peer group of like size agencies for comparison purposes. Two examples follow for illustrative purposes.

King County Metro is compared to a group of 12 other transit agencies that have large urbanized service areas of 0.7 to 2.0 million population. In 1997, Metro's cost per vehicle hour was \$92.45 while the median of the 13-city peer group was \$81.61. This is a 13% premium.

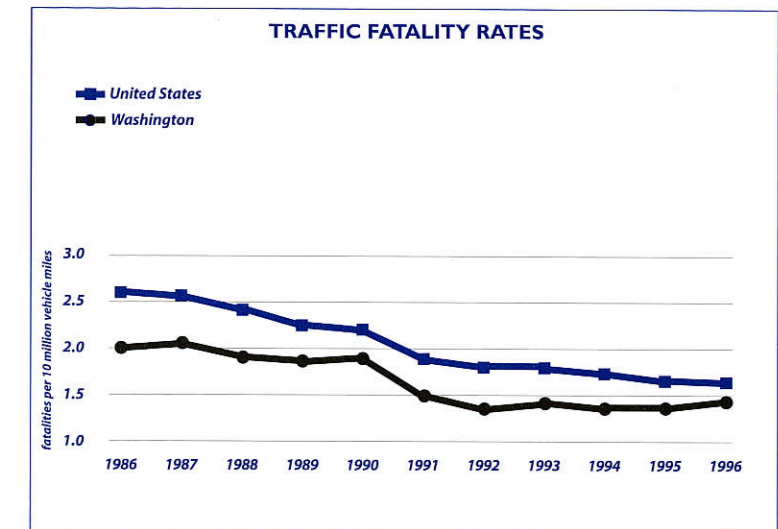
Pierce Transit is compared to an 8-city peer group serving regions with a population of 0.5 to 0.7 million. The median cost per vehicle hour in this group was \$64.43 in 1997, while Pierce Transit's cost was \$73.45, a 14% premium.

**BENCHMARKS TO BE DEVELOPED**

The following benchmarks are recommended for further development by the proposed transportation accountability commission that monitors and tracks benchmark progress. The accountability commission should develop metrics and identify targets and responsibility for these benchmarks.

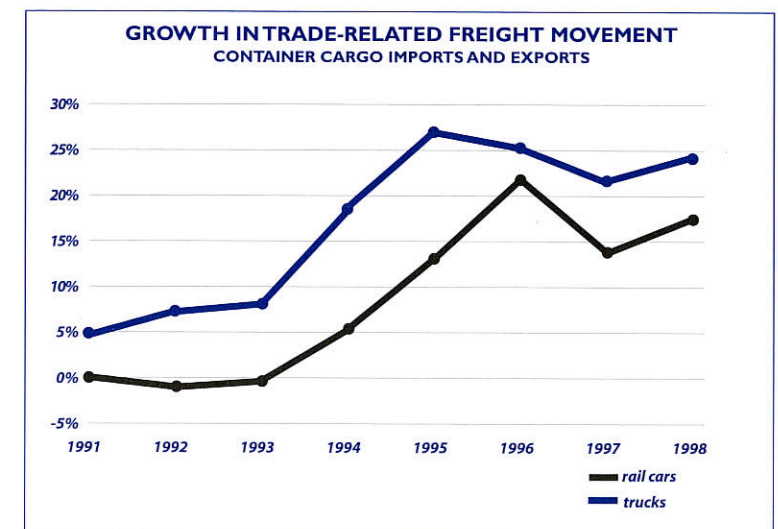
**Traffic Safety Benchmark: Traffic accidents will continue to decline.**

The committee found that Washington has slightly less than 1.5 fatalities per 100 million vehicle miles, which is less than the national average of about 1.7. All accidents, including those involving bicyclists and pedestrians, should decline.



**Freight Mobility Benchmark: Freight movement and growth in trade-related freight movement should be accommodated on the transportation system.**

The benchmark committee found that growth in trade-related freight movements by truck (up over seventeen percent annually in the 1991-98 timeframe) and by railcars (up about nine percent annually in the 1991-98 timeframe) exceeded other economic growth rates. The Freight Mobility Strategic Investment Board (FMSIB) should be involved in developing additional benchmarks of freight movement and the supporting data to monitor progress.

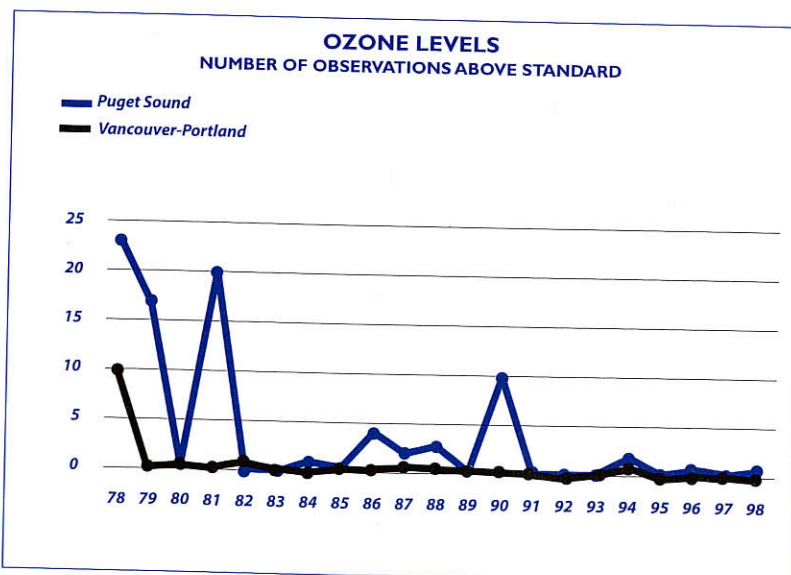
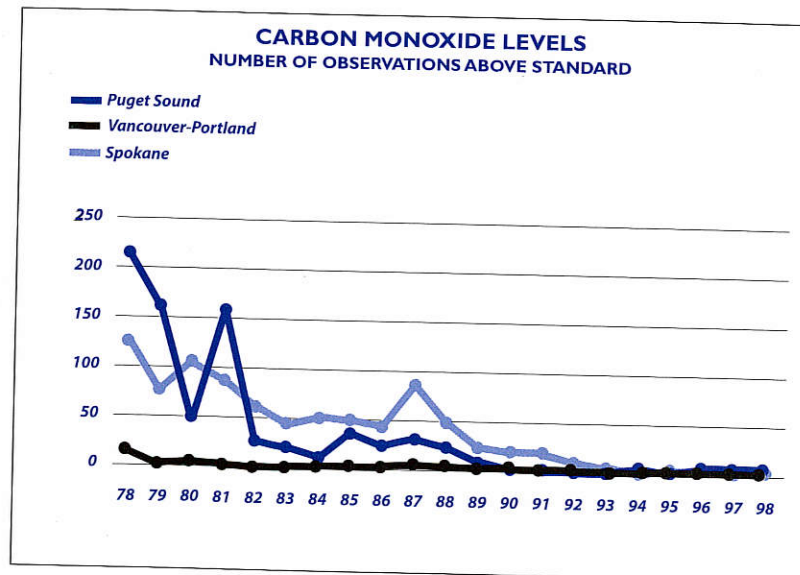


The committee chose to use the data on truck and rail car numbers as an indicator to communicate to the public information about the growth of freight movement on the state's transportation system. A general target was adopted: Freight movement and growth in trade-related freight should be accommodated on the transportation system.

However, stakeholders from the freight industry felt that a true benchmark of freight movement should be based on travel time or travel delay and should be developed with the help of the truck carriers and railroads. The Freight Mobility Strategic Investment Board has committed to working on development of such a benchmark.

**Air Quality Benchmark: Maintain air quality (carbon monoxide and ozone) at federally required levels.**

The benchmark committee found a declining incidence of carbon monoxide and ozone (the components of smog) in the state's urban areas since the 1970's. However, recently our air quality has come close to exceeding allowable levels on several occasions. Federal law requires that regions be sanctioned by loss of federal funds if this happens. The transportation accountability commission should consider measuring greenhouse gases, particulates, and visibility when data and appropriate standards are available.



requires that regions be sanctioned by loss of federal funds if this happens. The transportation accountability commission should consider measuring greenhouse gases, particulates, and visibility when data and appropriate standards are available.

**Project Cost Benchmark: Improve operations, maintenance, and project delivery costs.**

Create benchmarks for the operations and maintenance and capital project delivery functions of transportation agencies, parallel to that suggested for their administrative costs. The new accountability commission should develop metrics to compare Washington's project development, design, permitting and construction costs with best practices nationally.

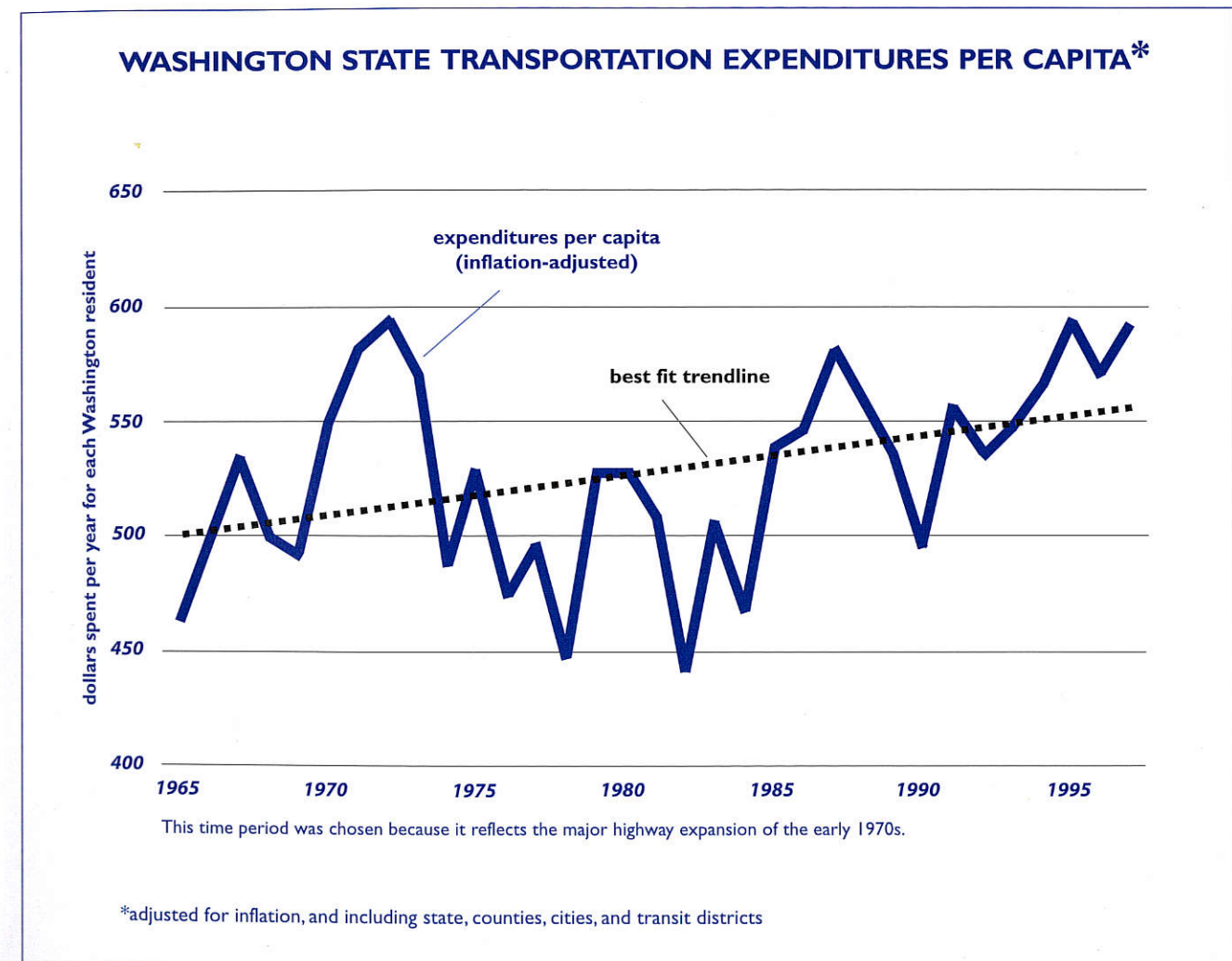
**Person Delay Benchmark: Reduce overall hours of travel delay per person in congested corridors.**

The new transportation accountability commission should develop and track a benchmark of person delay that can be used across all modes of travel.

**Transportation Revenue Benchmark: Ensure that transportation spending keeps pace with growth.**

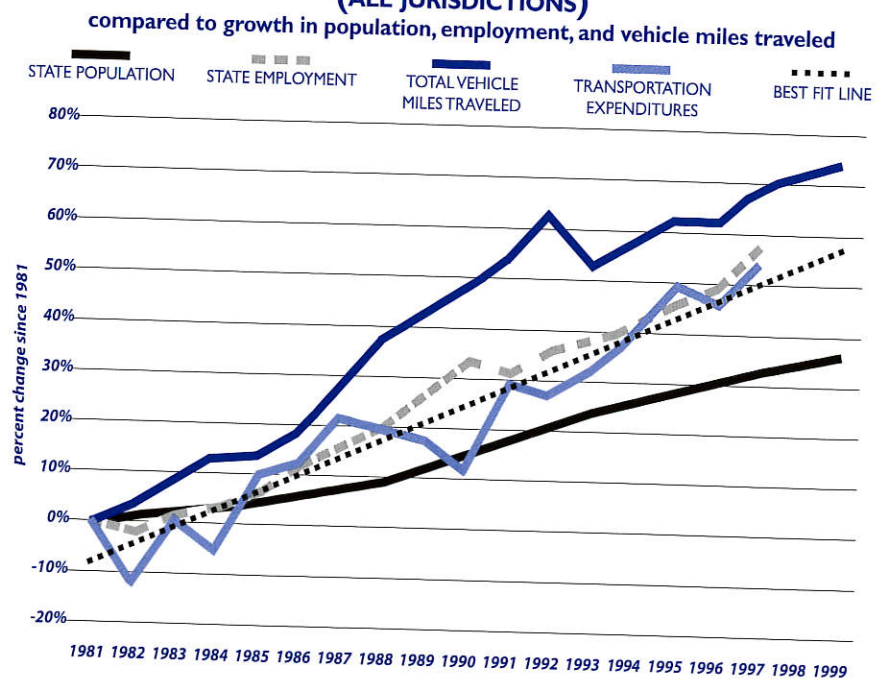
Washington's transportation system must not be allowed to fall behind the pace of its population and economic growth. The transportation accountability commission should develop a benchmark that monitors transportation revenues and how they track transportation needs.

The following charts show components of Washington's transportation expenditures relative to economic indicators.



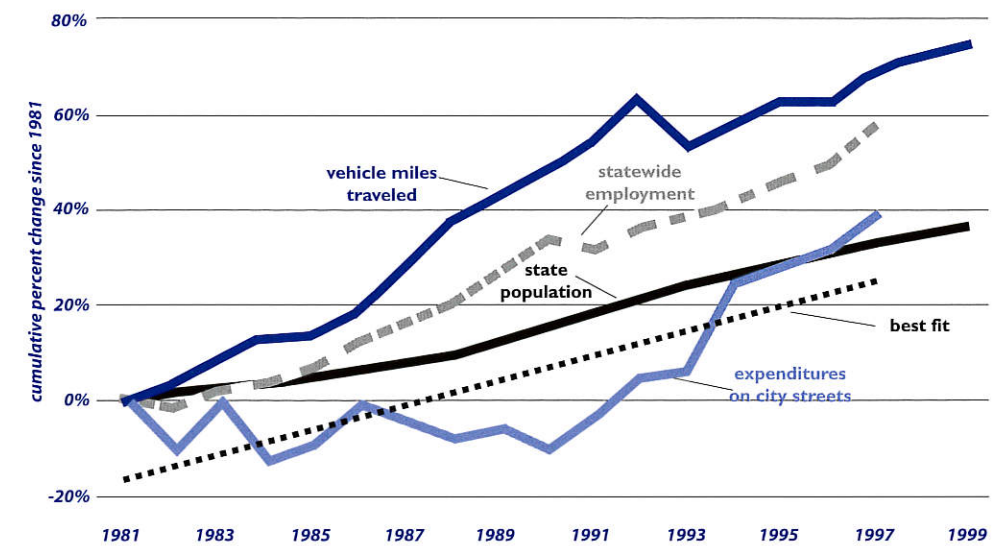


### GROWTH IN ANNUAL TRANSPORTATION EXPENDITURES IN WASHINGTON STATE\* (ALL JURISDICTIONS)



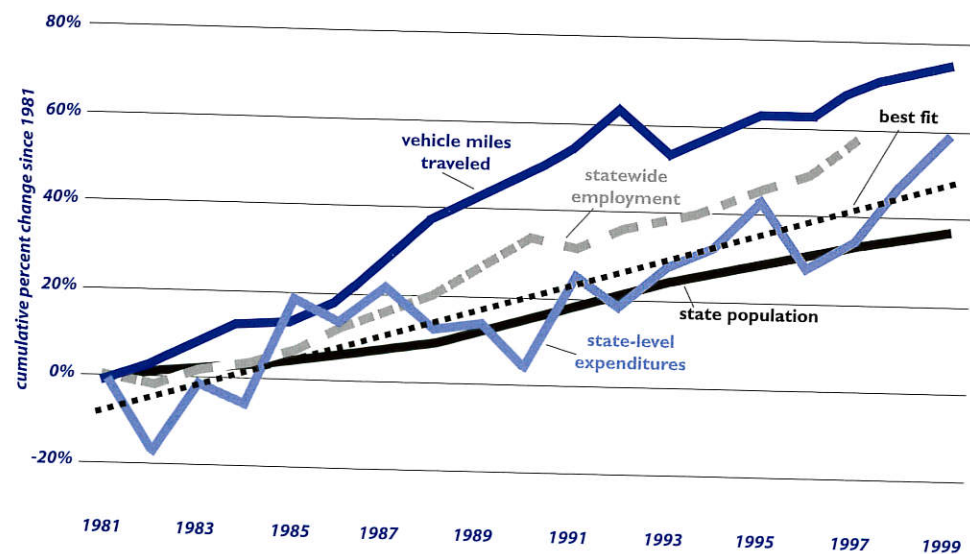
\*since 1981, adjusted for inflation, and including state, counties, cities, and transit districts

### GROWTH IN ANNUAL CITY TRANSPORTATION EXPENDITURES compared to growth in population, employment, and vehicle miles traveled\*



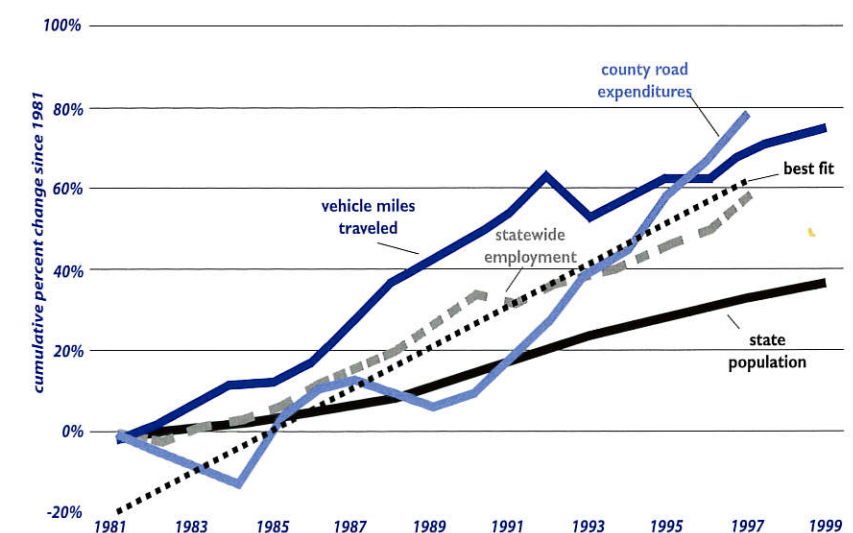
\*since 1981, adjusted for inflation

### GROWTH IN ANNUAL STATE-LEVEL TRANSPORTATION EXPENDITURES, POPULATION, EMPLOYMENT, AND VEHICLE MILES TRAVELED\* (1981-1999)

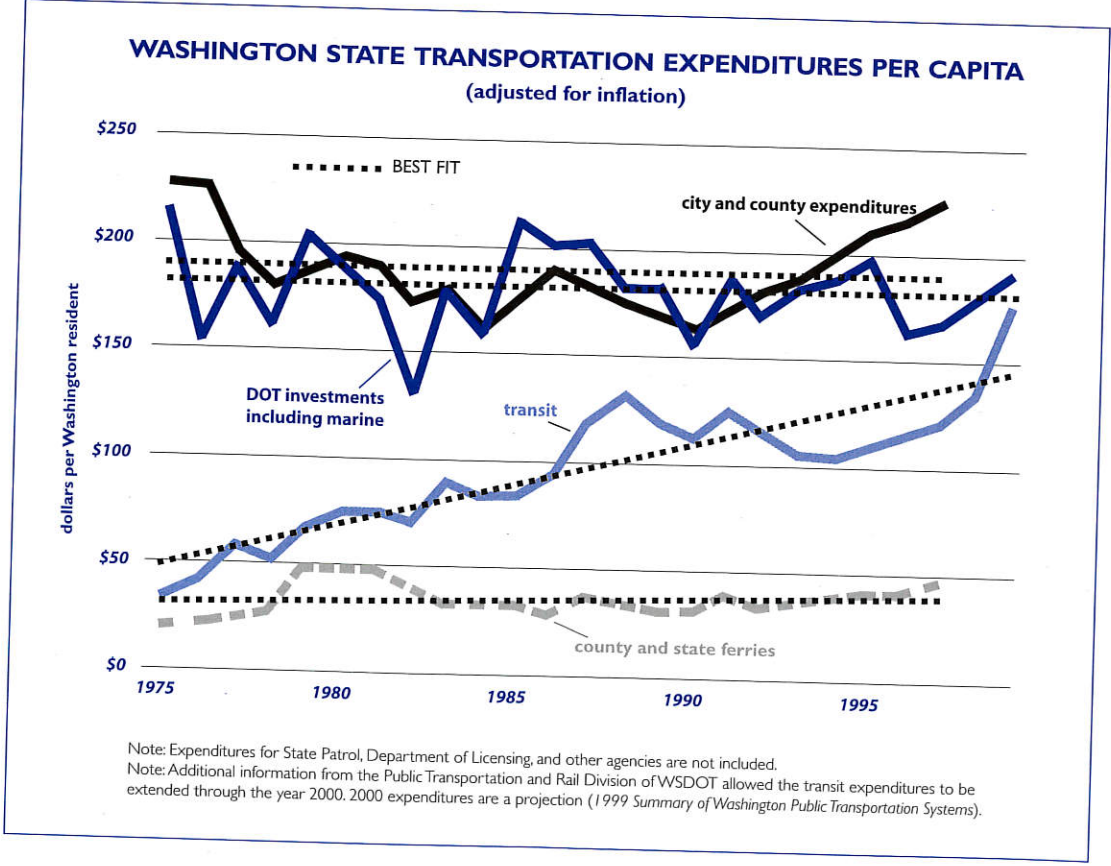
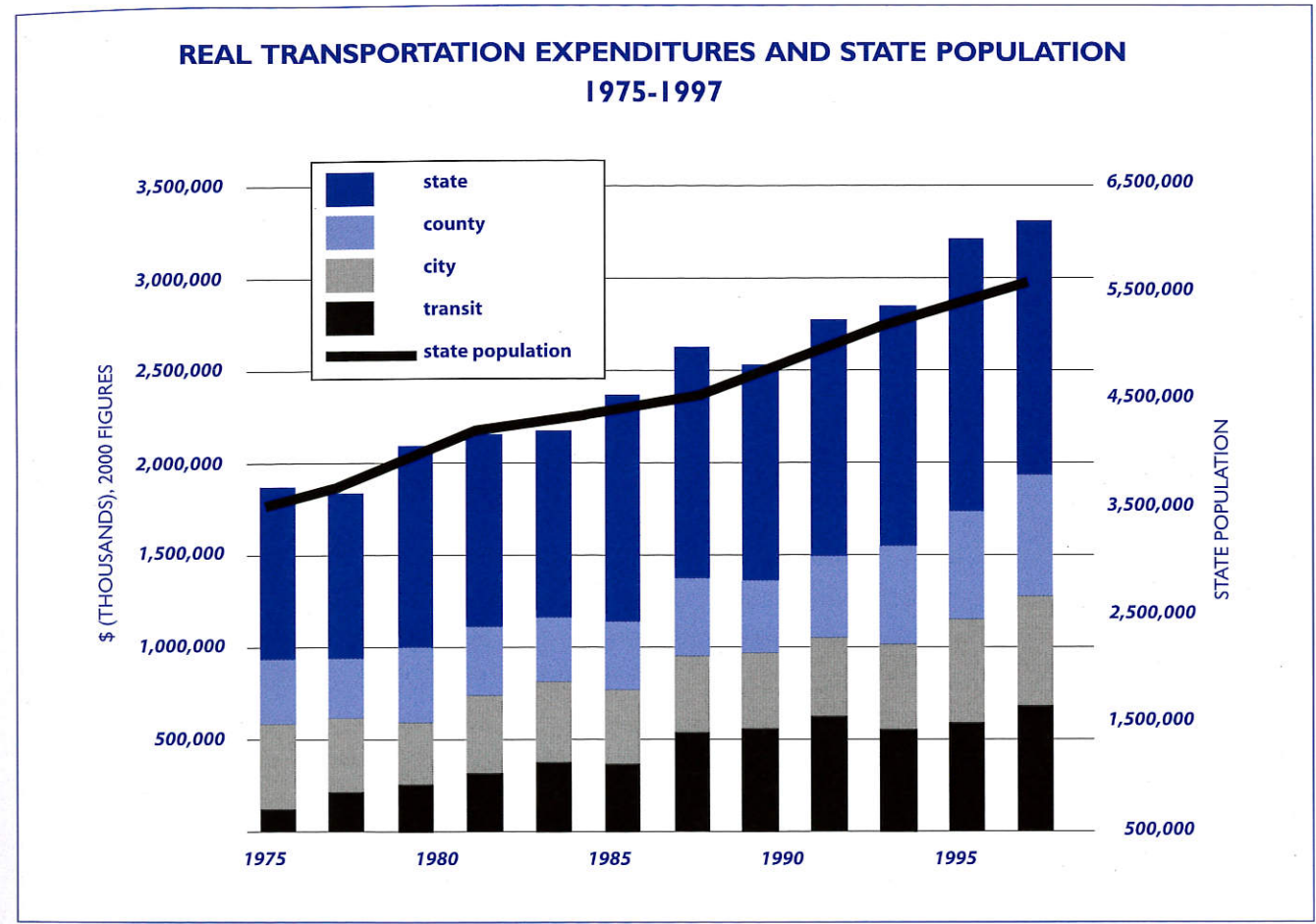
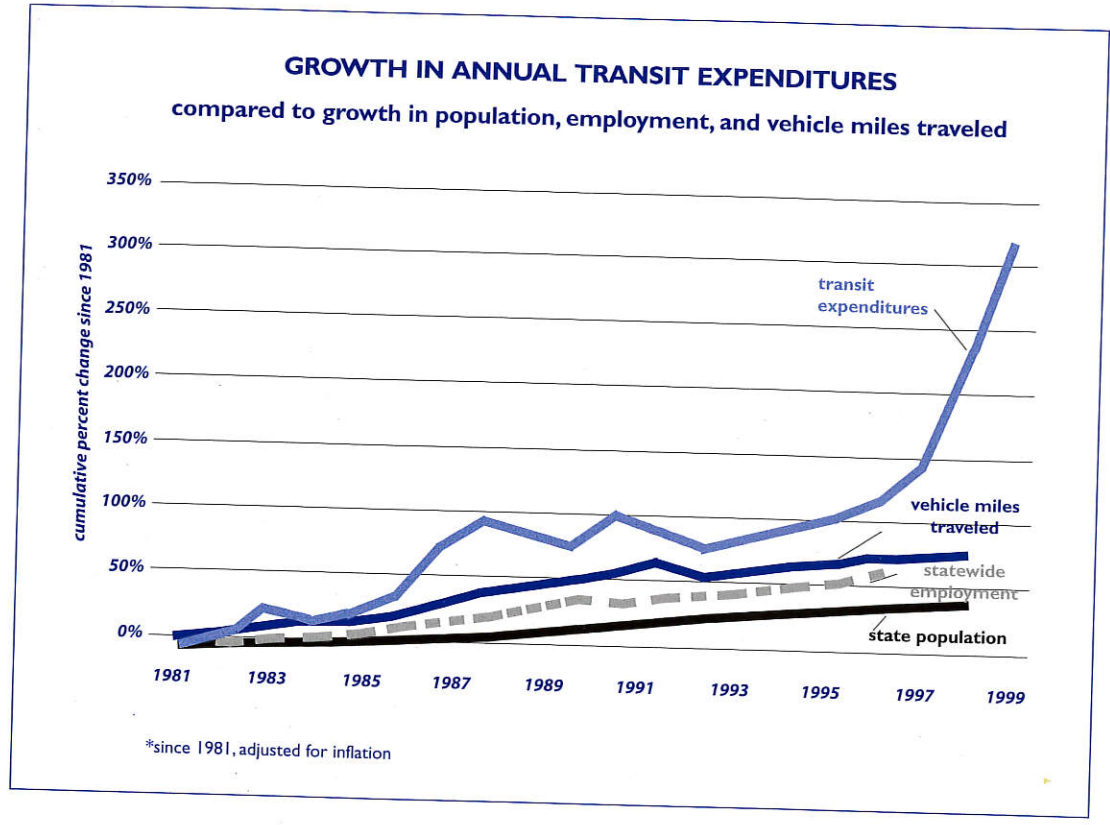


\*adjusted for inflation

### GROWTH IN ANNUAL COUNTY ROAD AND FERRY TRANSPORTATION EXPENDITURES\* compared to growth in population, employment, and vehicle miles traveled



\*since 1981, adjusted for inflation



Charts based on information provided by a series of documents from the Washington State Department of Transportation. Compiled October 2000.

**Recommendation 2:****Establish a single point of accountability at the state level strengthening the role of the state in ensuring accountability of the statewide transportation system.**

- a. The Washington Transportation Commission should negotiate a protocol with the Governor on the procedures for the appointment of the replacement for the current Secretary of the Department of Transportation.
- b. The Washington Transportation Commission should maintain its current authority until the effective date of implementing legislation. At that time, the Commission should transition into the proposed transportation accountability commission (TAC), a single, independent, statewide point of accountability for reporting and monitoring the performance of the integrated state transportation system at all levels. The TAC should:
  - i. Take responsibility for overseeing attainment of the benchmarks addressed in Recommendation 1.
  - ii. Provide a report card annually to the Governor and Legislature on:
    - Progress toward achieving reform and efficiencies
    - Progress toward accomplishment of the BRCT's and the Legislature's adopted investment strategies
    - Policy suggestions for furthering progress toward benchmarks and related transportation policies
  - iii. The TAC should also review and advise on regional and integrated statewide transportation plans and budgets and should advise the Governor in his or her exercise of plan certification responsibilities on whether plans are making adequate progress toward achieving benchmarks. Such reports should also be made to the Legislature.
  - iv. The TAC should be expected and encouraged to serve as an active "bully pulpit" for continuing insistence on progress toward both adopting leading edge transportation strategies and achieving benchmarks. The TAC should report both successes and deficiencies.
- c. From the effective date of implementing legislation forward, the Secretary shall serve at the pleasure of the Governor, and subsequently, the Governor shall have appointment authority over the Secretary, with confirmation by the Senate. The authority of the Transportation Commission with respect to budget and policy will become advisory and the Governor will assume responsibility for the performance of the statewide transportation system, including proposing policies, plans and budgets to the Legislature and executing the policies, plans and budgets enacted by the Legislature.
- d. The TAC membership should transition from the current Transportation Commission membership in order to take advantage of its considerable expertise. In that transition, it should expand from seven to nine members, with no more than five out of the nine affiliated with a single political party. Three members shall be from Eastern Washington and six from Western Washington. Members should be appointed by the Governor and confirmed by the Sen-

ate. Terms of office should be six years, with terms staggered so three members are appointed every two years.

**Recommendation 3:****Direct a thorough and independent performance review of WSDOT administration practices and staffing levels.**

This review should address the following:

- a. Scale and size of accounting and management information systems division staffs.
- b. Possible duplication of functions among regions.
- c. Possible application of computer and Internet technology for administration purposes.
- d. Scale and size of other WSDOT support programs, including program D, S, T, and U functions.

**Recommendation 4:****Remove the barriers to achieving the transportation benchmarks for efficiency and system performance. Provide funding for a strong state and strong regional transportation system.**

Findings 37 through 51 describe efficiency barriers. Findings 52 through 73 describe funding barriers. Please refer to the summary of twenty-year needs at the end of this report for a description of the funding needed for a strong transportation system.

**Recommendation 5:****Invest in maintenance, preservation, and improvement of the entire transportation system so that the transportation benchmarks can be achieved.**

- a. Preserve the transportation system.

The roads, streets, bridges, and highways in Washington represent public assets worth over \$100 billion. These investments require regular maintenance and preservation, or rehabilitation, to provide cost-effective transportation services. While the state's highways are generally in good condition, many urban arterials, county roads, and streets are not. As noted in finding 18, a conservative estimate of the total annual cost to drivers in the state of Washington for poorly maintained roads is \$156 million, and the average cost per vehicle is \$542 over the life of the car.<sup>18</sup>

<sup>18</sup> Data from the American Automobile Association's 1998 edition of "Your Driving Costs" and the Federal Highway Administration's report "Vehicle Operating Costs, Fuel Consumption, and Pavement Type and Condition Factors," as cited in "Surface Transportation Policy Project, Potholes & Politics 1998," November 1998. The report uses a base cost-per-mile of 10.7 cents and an inflation factor of 0.24 for poorly maintained roads.

- i. Prioritize and fund all maintenance, preservation, and safety needs of the existing transportation infrastructure in the state, including operating and maintenance costs of rail, transit, and ferries. All agencies and jurisdictions should be required to demonstrate the use of maintenance management systems and, for roadways, pavement management systems, as a condition of receiving a baseline allocation of funding.

Because the total revenues received from the gas tax have declined in real dollars over the past decade, money available to fund maintenance projects is dwindling. As a result, counties and cities have had to rely more heavily on property taxes to build or maintain roads. Non-discretionary funds are also an unstable source of income since they are tied to specific projects. Fully funding maintenance and preservation needs throughout the state would significantly improve the condition of roads and allow agencies to maximize their investments in road capacity.

The 20-year needs outlined in the State Highway System Plan are intended to achieve a "C+" maintenance service level, as defined in WSDOT's Maintenance Accountability Process (MAP). For state highways alone, \$2.78 billion (\$1997) would be projected to maintain a service level of C+; \$3.24 would be necessary for service level B and better.<sup>19</sup>

For preservation and to reach the preservation Benchmarks one through four – zero percent of interstate highways, major state routes, and local arterials in poor condition and zero percent bridges structurally deficient by 2020 – the state and counties should continue to use pavement management systems and the lowest life cycle cost methodology.<sup>20</sup> For city streets, however, an inventory and pavement management systems with lowest life cycle cost principles must be put in place to continue to receive state funding and to reach the stated benchmarks. Maintenance management systems, like WSDOT's Maintenance Accountability Program, should be in place in all jurisdictions.

The Investment Committee notes that while there are accepted definitions of 'maintenance' and 'preservation' for roads, maintenance and preservation have different meanings in the other modes. Therefore, they recommend that the state and the modal entities work toward common definitions of maintenance and preservation.

<sup>19</sup> According to WSDOT, Service Level C is defined as "a medium maintenance service level in which the roadway and associated features are in fair condition. Systems may occasionally be inoperable and not available to users. Short-term delays may be experienced when repairs are being made, but would not be excessive. At this maintenance service level, very few deficiencies are present in safety related activities, but moderate deficiencies exist for investment protection activities and significant aesthetic related deficiencies. Preventative maintenance is deferred for most activities except safety-critical work. More emphasis is placed on routine maintenance activities, and corrective maintenance occurs as necessary. A backlog of deficiencies begins to build up that will have to be dealt with eventually, at a higher cost. Some roadway structural problems begin to appear due to the long-term deterioration of the system. There is a noticeable decrease in appearance." - "Maintenance Accountability Process Manual" (Olympia, Wash.: WSDOT, July 1999)

<sup>20</sup> Lowest life cycle cost methodology matches the annual cost of maintenance with the preservation cycle to locate the year with the lowest cost to preserve or rehabilitate a roadway.

- ii. Use the most cost-effective pavement surfaces available based on durability.

Another key to well-maintained roads is to invest in the most durable pavement surfaces thereby reducing pavement damage, extending pavement life, and driving down maintenance costs. Pavement surface selection should be based on a number of factors—the number of heavy vehicle loads, current and projected traffic volumes, climate conditions, and existing soil types.<sup>21</sup> Within this framework, the most cost-effective and durable pavement surfaces should be chosen.<sup>22</sup>

The Investment Strategies Committee recognized that pavement surface decisions are often based on available funding. The Committee noted that many rural county gravel roads need not be paved. The Committee recommended that the legislature take into account the cost of upgrading pavement surfaces where it is based on the listed factors above (the number of heavy vehicle loads, etc.) and based on lowest life cycle costs approaches. The goal is to achieve a more durable level on at least the most heavily traveled transportation corridors.

- iii. Phase out studded tires or establish a surcharge to recognize the cost of studded tire damage to the roadways.

Compared to other issues in transportation, the literature on studded tire use is slim. Much of the research comes from Finland and Sweden where studded tire use is heavy in the winter months. U.S. studies concentrate on states like Alaska, where lightweight studs have been advocated, and Minnesota and Michigan where they have been banned since the early 1970's. The studies all agree on one finding, however: pavement wear and rutting due to studded tire use is substantial and costly.<sup>23</sup>

To reduce the substantial pavement damage caused by studded tire use and thereby reduce pavement maintenance and preservation costs, the state legislature should change policy directives and either:

- phase out studded tire use by residents over five years, or
- establish a surcharge for studded tire use to recognize the cost of studded tire damage to the roadways.

<sup>21</sup> Washington State Department of Transportation, "Pavement Surface Selection Manual."

<sup>22</sup> Portland Cement concrete (PCC) is usually considered the most durable pavement type, but also the most expensive – a rough estimate is \$1 million per mile – and therefore not appropriate or possible for all types of roadway. Asphalt concrete pavement (ACP) is considered the next most durable pavement type, and during the period of this commission's work, a new method of extending the life and durability of asphalt concrete called "Superpave" has been introduced. (Another newer pavement type called Stone Mastic Asphalt or SMA, supposedly more rut resistant, has also been tested in Washington in the past few years). A less durable and less expensive pavement type, which is widely used, is called bituminous coal treatment (BCT).

<sup>23</sup> See, for example, "More Durable Than One Would Expect," Finnish Tekniikan Maaailma Magazine, August 31, 1994; Professors Lundy and Hicks, "Wheel Track Rutting Due to Studded Tire Use," paper presented to the Annual Meeting of the Transportation Research Board, Washington, DC, July 1991.

The state legislature has had a long and difficult debate over the use of studded tires in our state. In 1999, Washington banned the use of older type studded tires in favor of lightweight studs that are estimated to reduce wear by between fifteen and fifty percent.<sup>24</sup>

Twenty-four states allow studded tire use for at least part of the year while other states, most notable snowy climate states Minnesota and Michigan, have banned studded tires since 1972 and 1974 respectively. Both states banned studded tires due to pavement wear. Studies indicate that the accident rate in Michigan and Minnesota compared favorably after the ban went into effect. Neither state has reintroduced studded tires.<sup>25</sup>

- iv. Develop a utility cut ordinance for use throughout the state, or require jurisdictions to adopt a utility accommodation ordinance that must include a section on utility cuts.

Cutting pavement is frequently required to repair water, gas, power, and telephone lines as well as for new service installation. While necessary to maintaining utility service, open cuts in pavement compromise the structural integrity of roads. WSDOT has reviewed studies that indicate that regardless of how well a utility cut is restored, the pavement area on each side of the trench is permanently damaged.<sup>26</sup> Furthermore, utility cuts are a major cause of congestion, funneling traffic into a few lanes (or one lane) and rendering other traffic system management techniques, such as signal synchronization, less effective.

Each jurisdiction has its own set of standards for handling open cuts in pavement by utility companies. Better and more consistent management of utility cuts could lower maintenance and preservation costs, improve road conditions, and minimize the disruption to traffic.

Major elements of the model ordinance or the required 'utility accommodation' ordinance (based on best management practices) should include:

- A joint trenching policy (i.e., it is the intent of the jurisdiction that all companies wishing to lay cable or otherwise require access to ground under the roadway, do so at one time to minimize the disruption to traffic and damage to the roadway)<sup>27</sup>

<sup>24</sup> The literature is inconsistent on the reduced pavement wear caused by the use of lightweight studs. Alaska has estimated that the reduced pavement wear approaches fifty percent. (See Memorandum to Rep. Ron Larson, Chairman, Alaska House Finance Committee, April 6, 1994.) WSDOT has estimated the reduced damage to be more on the order of fifteen percent. (Telephone conversation with Charlie Howard, WSDOT Planning Director, spring 2000).

<sup>25</sup> See "After Studs in Minnesota," Minnesota Department of Highways, 1975.

<sup>26</sup> Letter from Larry Messmer, utilities engineer, Washington State Department of Transportation, May 26, 1999.

<sup>27</sup> While the Committee would like to recommend a 'no-cut' policy on the roadways for a period of years following a joint trenching to minimize traffic disruptions, it seems clear that at least the federal Telecommunications Act of 1996 has been interpreted as finding such 'no-cut' policies as barriers to competition or a prohibition of entry into the market. Nevertheless, the state or local jurisdictions should be within the current law by applying strict conditions to any future roadway cuts such as: requiring partial pavement restorations, and time limits both in length and hours of the day or night.

- Construction standards, pavement restoration requirements, and expediting of permit processing for joint trenching
- Charges to utility providers responsible for trenching work not completed within a contractual period and to compensate for the loss of the useful pavement life caused by trenching

b. Optimize the transportation system.

Increasing the productivity of your existing assets is a basic investment strategy. Optimizing the system is often the quickest, most cost-effective, and least environmental damaging strategy for increasing the system's capacity to reliably move people and goods.

- i. Transportation system management (TSM) and intelligent transportation systems (ITS) policies should be implemented where cost-effective.

Systems (ITS) are designed to add capacity without requiring major new infrastructure additions. Implementation of these policies can significantly increase the flow of traffic at a fraction of the cost of new capacity.

Structural modifications can increase highway traffic flow and move high occupancy vehicles (HOVs) more quickly through traffic. Providing drivers with real-time information allows them to avoid highway incidents and event-related delays. Highway 'incidents'—accidents, stalled vehicles—are a major cause of congested highways. Incident response is most helpful in urban areas where volumes are heavy, and advance notice of incidents can effectively reroute large numbers of vehicles and passengers.

According to WSDOT, a significant cause of the congestion on our highways is vehicle collisions or incidents. Simple, low-cost investments in 'roving tow truck patrols' can significantly reduce congestion-related delays.

- ii. Transportation demand management (TDM) policies should be used to reduce demand on the highway system.

Traffic System Management (TSM) and Transportation Demand Management (TDM) policies are designed to manage trip-making decisions by correcting the understanding of transportation pricing through public policy. Trip-reduction policies are designed to reduce demand on the highway system by removing vehicles, especially during peak driving hours.

The 1999 Commute Trip Reduction (CTR) Task Force Report states that the CTR program removes 18,500 vehicles from the state's roadways each morning—12,600 vehicles in the central Puget Sound region alone.

- iii. Jurisdictions should integrate transportation and land use planning.

A long term and effective strategy to reduce both traffic and investment costs is to focus new commercial and multi-family growth in existing downtowns and pedestrian and transit-friendly neighborhoods.

- iv. Congestion pricing should be made a policy option for congested urban areas.

The Investment Committee's issue paper Traffic Congestion in Washington, defines congestion

as "...an excess travel time or delay due to traffic interference above an agreed to norm." In short, congestion is too many people trying to use the available supply of goods or services. Many goods and services besides transportation are affected by congestion, and various schemes are used to handle that congestion. For example, state parks regulate congestion in camping grounds by using a reservation system. Communications companies and electric utilities charge premium rates during periods of high demand, and lower rates off-peak, in an attempt to adjust use to capacity. In general, the goods and services in our economy do not get severely congested because use (consumption) is rationed by price.

There is general agreement among transportation economists and planners that drivers perceive the price of an automobile trip to be less than its full costs to society. In particular, drivers do not perceive the full costs of their trips—especially the costs they impose on other drivers in terms of time (extra travel time—delay—because of congestion). Because they do not pay those extra costs as drivers,<sup>28</sup> they perceive the trip as costing less than it really does, and they make more trips than they would otherwise. The result is congestion: too many people want to use the highway capacity in one place at the same time.

That problem is at the heart of highway transportation problems. If one accepts the proposition that many highways, especially in urban areas, are under priced at peak periods, then solving congestion on these highways by building more capacity may miss the point. For example, most businesses that have excess demand for a product because they sell those products below average cost would go bankrupt if they tried to solve the problem by increasing volume and selling yet more products below cost.

For transportation, as with other products, the solution is to charge more for product. "Congesting pricing" tries to get drivers to pay not only for the length of a trip (as a gas tax does), but also for its location and time, which are critical to congestion. A toll is a simple example of paying for a trip by location. Bridge tolls on the Golden Gate Bridge in San Francisco are adjusted by day (weekday, weekend); they could also be adjusted by time of day. In a more sophisticated application, a freeway in San Diego has a lane that drivers can use for a charge that is posted electronically and depends on the amount of congestion in the non-priced lanes.

c. Make cost-effective system expansions in heavily traveled corridors.

The heavily traveled corridors are where the state's worst traffic chokepoints exist. Those chokepoints are called out and identified in the final report of the Investment Strategies Committee, Appendix A, Critical Needs: "Chokepoints Analysis." The state should direct new investment to the worst chokepoints and congested areas first.

- i. Look to congestion. Congestion and accidents are key indicators of transportation dysfunction.

<sup>28</sup> Ultimately, somebody, one way or another pays the costs. The problem is that the traveler does not perceive those costs when making a trip decision.

- ii. Look to corridors. Corridors are where congestion is likely to be, and congestion cannot be effectively treated by isolated spot improvements.
  - iii. Use benefit-cost analysis to the extent possible, to analyze and communicate the value of investment alternatives.
- d. Improve the decision-making process for transportation investments.
- i. Use cost-benefit analysis in selecting the most effective transportation investments. Multi-modal benefit-cost analysis should be used to the extent possible as it develops. There is currently no institutionalized analytical approach to cost-benefit analysis across modes and regions. The method used for transportation projects necessarily differs from that used in private industry, taking into account societal costs and benefits. The state should encourage the development of the analytic tools to measure benefits and costs for all modes with a common methodology.
  - ii. Travel demand modeling tools should be enhanced and used by the state to evaluate investments.
  - iii. Use a corridor approach in transportation planning and investing so the most heavily traveled corridors are the highest investment priorities. The most effective mix of strategies in each corridor should be the goal.

Transportation revenue is limited, and all the transportation needs in Washington will never be fully met. Therefore, the committee recommended that the state legislature and local transportation agencies should concentrate their investments in the most-heavily traveled corridors.

A 'transportation corridor' can be identified based on state and regionally significant destinations and travel patterns of people. The state has numerous transportation corridors including highway, freight rail, high capacity rail, ferry, and transit. Transportation decision-makers should look to congestion and look to corridors when deciding where to invest.

The agencies should also conduct corridor analyses in the most heavily traveled corridors so that the most effective mix of investments can be achieved. The 'most effective mix principle' idea is that all transportation strategies (e.g., transit, rail, and ferry, increased road capacity, non-motorized improvements, smart growth, traffic demand management, traffic system management and intelligent transportation systems, and congestion pricing) should be considered when investing in such corridors. While presently there is no standardized analytical approach to determining the most effective mix of modes in a corridor, each region of the state would best know its transportation needs and what the populace desires in its transportation choices.

The goal should be to invest in the most effective mix of strategies, bolstered by benefit-cost analysis, so that the investment benefits are quantifiable and achievable, the public knows what they are buying, and the outcomes will increase mobility and choices for the traveling public.

- iv. The state and local transportation authorities should invest in the human resources necessary to supply the technical workforce capable of maintaining, preserving, and improving the transportation system.

Funding and incentives should be provided for programs that foster a strong industry in transportation planning and engineering, such as:

- Establish technical apprenticeship opportunities specific to the needs of transportation
- Establish a "human resource skills bank" of transportation professionals, and develop a program allowing all transportation authorities to draw from the skills bank during periods of need
- Enhance skills of the existing technical transportation workforce

The legislature should explore the establishment of transportation technical training programs within the community college system, through vocational/technical schools, and in the state four-year higher education institutions.

The Investment Strategies Committee found that the state and local transportation agencies are already showing signs of an insufficiently skilled workforce to operate the transportation system at its highest level.

### Recommendation 6:

**Provide regions with the ability to plan, select, fund, and implement (or contract for implementation of) projects identified to meet the region's transportation and land use goals.**

- a. The regional authority would have responsibility to program and prioritize, with selected state and federal matching funds, state and regional roadway projects and regionally significant transit projects within the region.
  - i. A revenue package would be developed to implement a regional transportation plan, and the authority would have increased funding for the transportation system improvements through an improved allocation of state and new revenues, using a regional equity principal.
  - ii. The authority would be able to contract with state, regional, and local jurisdictions for construction and, where necessary, become the implementing agency. Other cost-effective and project delivery tools would be utilized, such as design/build and streamlined decision making.
- b. Merged functions of any new authority may also include air pollution control. A regional authority may be responsible for monitoring this commission's indicator on air quality (among other things) to assess progress.
- c. The governing board for the authority should include local and region-wide perspectives and may have a directly elected or a federated membership. The authority would set goals, objectives, and standards, and monitor achievement and performance as part of its planning and funding responsibilities. With the principle of "no new bureaucracy," however, our intention is to simplify and minimize structural redundancy rather than add new layers of government.

- d. The size of the project or investment to be undertaken by the regional authority should depend upon its significance to the region. Standards for regional significance should be established for facilities; existing models are available via WSDOT's defined facilities of 'statewide significance,' and those facilities defined in the Puget Sound Regional Council's Metropolitan Transportation Plan.

The Commission's findings report noted that governance for transportation seems to work best when authority for planning, funding and implementing projects rests with a given body. The findings also showed that roadways frequently traverse several local jurisdictions, and a lack of governmental coordination in these corridors takes us further away from the goal of an integrated statewide transportation system. Further, the Commission found that existing forms of government, such as regional planning organizations, and other forms of regional governance already in place elsewhere, offer potential models for integrated decision-making.

A regional model of governance is actually a principle that allows decision-making and funding to occur closer to home, where the problems are understood best and the solutions can be implemented.

Coordinated decision making and funding can permit regions to break through planning and funding barriers, and tackle immediate transportation problems, such as traffic congestion. The regional principle seems to be most applicable to the state's larger metropolitan areas, where the transportation issues are complex, transportation congestion is the worst, and the impetus for immediate action is present.

However, in our reading of public comments and in travels throughout the state, we noted that in parts of the state, particularly non-metropolitan areas, the problems are simpler and the existing governance structures function well. In these portions of Washington, the basic transportation needs transcend any need for governance changes. In order to maintain the integrity of the statewide transportation system, these regions simply need more money to fund transportation.

The Commission recognizes that it is of paramount importance to maintain the integrity of the system, and that strong regions within a strong state system of transportation governance will help to maintain that system. They also recognized that different solutions will be necessary for different regions of the state — in some areas, governance changes will enable regions to tackle long-standing problems, in other areas, more money for maintenance and basic capital projects will solve the most critical problems.

There are already fourteen regional transportation planning organizations (RTPOs) across the state providing planning services, so the beginnings of a system are already in place. However, the funding and implementation tools are not available to these organizations. We have seen the result: there is a huge disconnect between planning that goes on at the RTPO level and actual funding for transportation, for which these organizations have no authority. Only the legislature can solve the funding problem, either by direct appropriation, and/or by granting

regions different funding capacities.

When the state's economy was based largely on agriculture and timber, a centralized form of statewide government was adopted. This has served us well, but as the state has urbanized, the transportation system built a half-century ago has not kept up with the complex growth of our state's urban areas.

Two key points emerge:

- Simple planning and decision making in urban areas need to be strengthened
- There is no reason to expect that the state's urban areas will receive large quantities of transportation funding from the rural areas; they will need to raise these funds themselves

Therefore, we need to augment a strong state system with strong regional systems in those areas where it makes sense to do so. We propose that regions be empowered with regional funding sources, not only for high capacity transit, as exists today, but for general transportation needs.

Having regional money available to supplement state and federal money would allow a far more rapid response to growing congestion, and since money is a powerful magnet, would bring authority to regional planning and decision-making, which all too often ends at the theoretical level.

With a principle of "no new net bureaucracy," however, the Commission's intention is to simplify and minimize structural redundancy rather than to add new layers of government. A new regional entity would not be an existing organization in reconstituted form bringing "more of the same," but would bring fresh change to the way local and regional transportation projects are delivered. Establishing a regional authority could also create a logical and direct connection between planning and revenue, and could result in more realistic planning, fewer 'wish lists' of projects, and less 'peanut buttering.' Instead, a single entity would set priorities and fund projects across a region, directing efforts toward major chokepoints and regionally significant facilities.

The most effective regional agency will be truly multi-modal, responsible for roads, transit, and trip reduction strategies. The essence of a regional system is flexibility in use, better planning, funding, coordination, and implementation in project delivery, and regional revenue options to make the strategy viable.

Other areas around the country are beginning to move toward this model. If crafted with care and foresight, it appears to hold the promise that the most urbanized areas of the state can move ahead in a more coordinated and expeditious manner with transportation investments that would otherwise take decades to achieve, if at all. Other areas of the state could use a regional model when and if it suits their purposes.

## Recommendation 7:

### Achieve construction and project delivery efficiencies.

The overall goal is to restore faith in the ability of government to 'get the job done.' By fostering a 'culture of action' in administration, operations and maintenance, and project delivery, government will be able to set and meet its priority goals as established by the benchmarks, and regain the confidence of the general public.

- a. Reduce engineering/construction cost ratio. WSDOT's preliminary engineering and construction engineering costs have recently been reduced from 26% to 20% of overall ('hard') construction costs. We recommend that cost savings such as these continue at all levels of government statewide.

- b. Save money on materials and methods.

There are incentives to use innovative materials and methods, particularly when the private sector is involved in construction and operation of public rights-of-way. Examples include:

- At the beginning of a project, develop a construction strategy, including lifecycle costing. Use value engineering when costing the project and its components — 80% of a project's cost can be found in 20% of the functional items
- To the extent possible, do simultaneous instead of sequential project phasing. Also, include utility work as part of the construction contract, or coordinate roadway projects with necessary utility work, enabling some costs to be shared
- Pre-purchase of some materials may be possible early in project development. This can save costs later. Also, the use of standardized project design for similar capital facilities can reduce overall costs

- c. Use right-of-way 'banking.'

- d. Continue to assess prevailing wage survey techniques.

- e. Make mitigation more cost-effective.

Document the amount spent on mitigation both for the permit process and for the actual mitigation required (measured as a percentage of overall cost); seek permit reform to reduce costs caused by process rather than substantive environmental protection.

- f. Provide incentives to encourage efficiencies.

- g. Efficiencies will be realized by having predictable revenue sources to fully fund projects, thereby eliminating starts and stops in design and construction which result in delays and increased project costs.

## Recommendation 8:

### Incorporate the design-build process and its variations into construction projects to achieve the goals of time savings and avoidance of costly change orders.

In design-build projects, a single entity is hired to carry out all phases of a project, from initial



design to final construction. The advantages of design-build are derived from the collaborative effects of the designer-builder relationship, the potential for innovation and greater cost control. Examples in other states have shown modest savings in total project cost but even greater savings in the time of project delivery, which can be reduced by as much as one-third. For all transportation agencies to use design-build and its variations, greater authorization is required from the Legislature.

- a. Grant statutory authority to transportation agencies to use design-build techniques and their variations, including design-build-operate, design-build-operate-own, design-build-own-operate-transfer, and general contractor/construction management.
- b. Provide methods by which public employees may participate in the design-build process.
- c. Provide increased education and training in alternative project delivery (ADP) concepts.

### **Recommendation 9:**

#### **Use the private sector to deliver projects and transportation services.**

There is already private sector involvement in transportation capital construction costs, as WSDOT contracts with private construction companies to construct the state highway system. Greater involvement by the private sector would also allow private financing of capital projects. Some pilot projects allowing the private sector to provide expertise and financing in developing transportation projects have been attempted in Washington. Using private funding, these projects can provide cost-effective transportation facilities, and the possibility of getting large-scale projects built when public funds are lacking. The public has demonstrated some distrust of for-profit operators of public facilities.

- a. Continue pilot projects allowing the private sector to provide expertise and financing in developing cost-effective transportation facilities.
- b. Examine removing barriers preventing the private sector from providing transportation services in light of some public expressed interest in alternative services, which could include ferry, bus, or monorail.
- c. A level playing field should be maintained between the public and private sectors. It is essential to take into account issues such as wages, health care and other benefits.

### **Recommendation 10:**

#### **Reengineer the workplace to achieve greater efficiency, and consider the use of managed competition for operations and maintenance functions.**

- a. Place an emphasis on excellence in the workplace, through service, customer satisfaction, and a focus on results. Incorporate elements of total quality management into business practices.
- b. Form partnerships with employer-employee organizations to develop apprenticeships and training programs to ensure the availability of a skilled workforce to deliver projects and services.

- c. Under managed competition, private sector bids are sought for operations and maintenance activities, and then compared to a bid from the public sector staff currently performing the service. Legislative authorization would be required to permit managed competition. Alternately, because managed competition is very restricted under current state law, it may be best to introduce a pilot program, perhaps through negotiation between labor and management.
- d. A level playing field should be maintained between the public and private sectors. It is essential to take into account issues such as wages, health care and other benefits.

### **Recommendation 11:**

#### **Streamline permitting for transportation projects.**

- a. Delegate 404 wetlands permit authority to the state. Section 404 of the Federal Clean Water Act regulates the placement of fill in waters of the United States, including wetlands. In parts of Washington, the average time to acquire a permit from the federal government under this process is 1 to 2.2 years. Two states, Michigan (since 1984) and New Jersey (since 1994), have been authorized to administer the Federal Section 404 program in parts of their states.

The Michigan and New Jersey experience:

**Time savings** — State delegation has saved significant time in the 404 permit process: Michigan has a 90-day turnaround time for 404 permits, and New Jersey 180 days. In both states, the turnaround time is statutorily mandated. In Michigan, if the state has not acted by the 90-day deadline, a permit is automatically issued. In New Jersey, there is no automatic permit allowed if the 180-day deadline is not met. In both states, the 'clock' starts when a permit application is considered complete.

**Staff** — Both states have more staff people in more locations to review 404 permit applications than existed when the Corps had direct control over the program.

**Impact** — The delegation has positively affected the states' programs through greater flexibility, more local decision-making, a higher degree of predictability, and more accountability. In both states, state control has allowed shorter permit turnaround times, as well as closer review of projects, and further delineation (mapping) of wetlands.

**Fees** — Both states charge permit fees for the 404 wetlands permit, though in neither state was the permit fee instituted to cover costs related to the delegation of authority since both states already had permit fees for a similar state program (which Washington does not have). In Michigan there are flat fees from \$50 to \$2,000, depending on the size and scope of the project. In New Jersey, the fee is dependent on the acreage of wetland to be filled, and for major projects is typically several thousand dollars.

- b. Write and apply substantive standards for transportation (road) projects to streamline

permit approvals thereby reducing process review delays. Based on the results of the pilot project, work toward a goal of one-stop permitting, using a single permit application. Use existing models to create an agency with powers to consolidate permit review for major transportation capital projects.

- i. Identify highway projects of statewide significance to be eligible for review under this option.
- ii. Select a significant highway project as a pilot to plan and permit with an integrated steering committee that includes project proponents, elected officials, agency staff, and public representatives (like the Trans-Lake Washington Project process). The ability to complete the project within two years of commencement should be a criterion in project selection.
- iii. Evaluate the use of planning and permitting standards that encourage lower impact alternatives, such as Smart Growth, transportation demand management (TDM), transportation system management (TSM), pricing, and transit, along with the HOV and general purpose roads proposed in the project.
- iv. Accelerate the permit process for a project that uses low-impact development standards.

### Recommendation 12:

#### Link transportation funding to efficiencies.

- a. Require WSDOT, counties, cities, and transit to demonstrate progress toward achieving benchmark efficiencies as a condition of receiving some portion of new baseline funding.
- b. Require cities, counties and transit to demonstrate that they are not supplanting existing transportation funds as a condition of receiving new funding.

Please see efficiency benchmarks 10 and 11, as well as efficiency findings 40 through 51.

### Recommendation 13:

#### Link maintenance and preservation funds to best practices.

- a. Direct a baseline allocation of adequate funding to operations, maintenance, preservation and safety functions for state highways, county roads, city streets, transit, ferries, and alternate modes.
- b. As a condition of receiving their baseline allocation of funding, require all agencies and jurisdictions to demonstrate the use of maintenance management systems and pavement management systems.
- c. As a condition of receiving funding, require WSDOT, cities, and counties to demonstrate, after an initial period of three years, that their preservation investments are based on lowest life cycle cost principles.

- d. Require that available grant programs do not fund preservation projects that are already funded out of baseline fund allocations.

### Recommendation 14:

#### Simplify funding distributions for best results.

- a. Distribute pass-through funds according to a new formula that directs funds on a geographic basis to counties and cities within counties, and takes into account lane miles, classification and pavement type, population, and utilization (for example, VMT), and is adjusted for changes in road jurisdiction at least once every five years.

Future distributions of gas tax and other highway funds to counties and cities are assumed to be determined not by county and city category, but geographically. Funds would be distributed according to a new formula to counties based on a combination of road miles and other factors, then to cities within each county. As incorporations and annexations occur, the allocation between a county and the cities within it would shift.

Gas tax distributions to cities are assumed to be based on a combination of factors, including street miles, arterial miles, population, employment, pavement type and usage, not on population alone as it was done in the past.

- b. Develop a new method for joint regional programming of federal funds, with the state, local jurisdictions, transit agencies and other stakeholders participating in a regional prioritization process that directs federal funds to major corridors and facility clusters.

To reduce costs associated with grant preparation and selection processes, and to ensure more stable funding of city and county road maintenance and preservation, some funds that have been previously distributed through the Small City Account and the Urban Arterial Trust Account could be shifted to a pass-through format. Any other grant funds previously used to fund preservation projects could be freed up for other kinds of investments.

Federal dollars previously allocated to the state, regions and local jurisdictions would be pooled and prioritized by region. Entities within a region would develop agreements on how federal dollars should be used.

- The shift will meet the BRCT goal of focus on facility clusters and major corridors. Federal dollars could be concentrated on fewer and larger projects and would no longer flow to smaller jurisdictions.
- Consolidation would allow flexible mixing and matching of funds for various purposes and modes.
- To offset funds that small jurisdictions previously received, there would need to be an increase in direct distributions (see option on gas tax distribution above).
- Federally funded projects would be managed by only the largest jurisdictions, e.g. those that are CA designated ("certification accepted"). Administration of federal funds would continue to be located at WSDOT, as required by federal law.

Federal and state grant programs should be coordinated such that any given project need

apply only once to all programs. A single application form and process would gather project information and allow projects within a region to be compared and prioritized on a comprehensive set of criteria. One-stop grant funding centers could evaluate projects, award funds, and disburse and manage funds under regional priority programming agreements.

- c. Require that federal funds be managed only by jurisdictions and agencies that are "certification accepted."
- d. Create one-stop grant funding centers where all competitive funds, whether federal or state, are disbursed under regional priority programming agreements and administered using a single application process.

**Recommendation 15:**

**Allow regions to retain funds they raise.**

- a. Adopt a regional equity principle for distribution of new funds to regions of the state, based on the following three-tiers:
  - i. allocate sufficient funds statewide to all regions for basic operations, maintenance, preservation and safety at a minimum agreed upon level;
  - ii. allocate all other new funds such that each region is guaranteed a minimum return of 85% of funds generated in that region, and allocate remaining funds to a statewide equalization fund to be distributed to negative equity regions; and
  - iii. allocate all funds regionally authorized directly to the region in which they are generated.

A three-tiered regional equity principle was proposed and recommended by the Revenue Committee: Scenarios were analyzed under which, at the second tier, a minimum return of 90%, 85%, 80% or 75% would be guaranteed to each region. Attachment 3 to the final Revenue Committee report shows these scenarios. In the Puget Sound region, which in the past has been the largest donor region, an 85% return scenario would guarantee \$6.0 billion in funds for spending in that region over 20 years, unlike the current Highway System Plan which would allocate about \$4.8 billion to the region. The unallocated remaining statewide funds could be deposited into an "equalization" fund and distributed to regions which would otherwise have a negative return. Under the 85% return scenario, \$614 million would be available to the equalization fund.

**Recommendation 16:**

**Seek a 90% farebox recovery for ferry system operational costs within 20 years.**

- a. Adopt the Ferry Tariff Policy Committee's recommendation on a new ferry tariff policy, including a new time-based route equity structure, premium pricing for passenger-only service, and 80% farebox recovery, phased in over the next six years. Seek to achieve a 20-year goal of 90% to 100% farebox recovery.
- b. The Blue Ribbon Commission on Transportation recognizes ferries are an important part of

the highway system and recommends the Legislature give serious consideration to the Ferry Task Force's findings on the needs of the ferry system.

Parallel to the work of the Blue Ribbon Commission, a Joint Ferry Task Force has been developing funding and service strategies to replace the Washington State Ferries funding lost under Initiative 695. The work of a sub-group, the Ferry Tariff Policy Committee has recommended a three-part restructuring of ferry fares to meet a portion of the shortfall. The tariff changes include: a new time-based route equity structure, premium pricing for passenger-only service and a new, more aggressive 80% farebox recovery policy (80% of ferry operations funded by fares), phased in over six years. A longer-term strategy could seek to achieve a 20-year goal of 90% to 100% farebox recovery. A 90% farebox recovery policy would mean an aggressive program of fare increases over 20 years and would yield over \$1 billion in new operating revenues for WSF. The Revenue Committee endorsed this restructuring proposal and recommended it to be part of its package of recommendations.

**Recommendation 17:**

**Develop a package of new revenues to fund a comprehensive multi-modal set of investments, which, taken together with the recommended efficiency measures and reforms, will ensure a 20-year program of preserving, optimizing, and expanding the state's transportation system.**

**a. Efficiency measures at the state, county, city, and transit agency levels.**

The Administration Committee determined that savings could be achieved in at least three areas: administrative overhead, operation and maintenance functions and project delivery. Estimates of potential savings at the state, county, city and transit agency levels range from 5% to 10% in each area, based on pre-I695 spending levels (estimates in 2000 \$).

	<u>ADMINISTRATION</u>		<u>O&amp;M</u>		<u>PROJECT DELIVERY</u>	
	10%	5%	10%	5%	10%	5%
State	\$12 M	\$6 M	\$36 M	\$18 M	\$60 M	\$30 M
County	\$10 M	\$5 M	\$24 M	\$12 M	\$22 M	\$11 M
City	\$6 M	\$3 M	\$18 M	\$9 M	\$26 M	\$13 M
Transit dists.*	\$10 M	\$5 M	\$100 M	\$50 M	N/A	N/A

\* Transit efficiencies already achieved post-695.

Potential savings in administrative costs range from \$19 to \$38 million in the first year; additional savings should be achieved incrementally in subsequent years until the benchmark of top quartile in administrative efficiency has been achieved. Potential efficiency savings in operating and maintenance spending range from \$89 to \$178 million, staged over several

years. Similarly, potential savings range from \$54 to \$108 million over several years in project delivery efficiencies derived from permitting reform, design/build contracting techniques and other reform measures. Total potential savings could thus yield up to \$324 million in freed up funds across the major jurisdictions.

**b. Transfer from the state general fund transportation-related sales taxes, within the capacity determined to be available.**

Given the strong recent growth in the economy, the Revenue Committee considered a possible shift of some surplus General Fund revenues to transportation without cutting into education or other important general programs. To alleviate concerns that these funds would be needed in the future if the economy slows, an annual re-authorization of these funds based on revenue forecasts under the 601 spending limit could be included as part of the proposal. At a given growth rate threshold, the funds would revert to the General Fund. In the November 7, 2000 election three statewide initiatives passed that have the effect of reducing or eliminating the General Fund surplus, one an initiative reducing the property tax growth rate and two requiring additional spending for education. The committee chose to place a General Fund transfer "within available capacity" on its list of recommendations anyway to urge the Legislature to consider use of existing funds for transportation.

In 1999, estimates of transportation-related sales tax revenues included taxes paid on construction in the following areas:

State highway and ferry construction	\$30 million
City and county street and road construction	\$34 million
Transit construction	\$21 million

It is assumed that if transferred to transportation purposes, this source could generate some \$85 million per year in new revenue, increasing as new construction is authorized and funded. Over 20 years this amount could grow to \$1.7 billion or more and could be bonded. A much more aggressive approach that tapped General Fund sales taxes from the sale of new and used vehicles, accessories and parts could generate as much as \$16 billion over 20 years.

This revenue source has a number of clear advantages: it is an existing source (not a new tax) already directly linked to transportation-related purposes. Additionally, as a general purpose tax it would most likely not be subject to the 18th Amendment and could thus be used across all modes. The sales tax is based on the underlying price of goods sold so carries the additional benefit of growing with the economy and with inflation.

**c. Authorize the extension of the existing gross weight fee to all vehicles that use the roadway system, including passenger cars, sport utility vehicles and recreation vehicles.**

A new weight-based user fee was proposed for consideration that would replace a portion of the MVET lost under Initiative 695. At its last meeting, the Committee proposed and added to its list of recommended sources a new variant on the weight-based fee, namely the extension to all passenger vehicles of the existing gross weight fee on trucks. This option carried the benefit of avoiding duplicative gross weight fees on trucks and commercial vehicles, and offered the simplicity of extending an existing mechanism. The additional revenue generated by extending the gross weight fee was estimated to be about \$3.8 billion over 20 years in year 2000 dollars.

**d. Authorize a surcharge to the existing gross weight fee for trucks, the proceeds to be dedicated to freight mobility improvements.**

**e. Increase the motor fuel tax.**

High, medium and low scenarios were generated to illustrate varying levels and phasing strategies for fuel tax increases. Expressed in 2000 dollars, the scenarios would rise at the following increments and generate revenues as follows:

	<u>2001</u>	<u>2005</u>	<u>2009</u>	<u>2013</u>	<u>Total revenue</u>
High—14 cents	5 cents	3 cents	3 cents	3 cents	\$5.1 billion
Medium—10 cents	4 cents	2 cents	2 cents	2 cents	\$3.7 billion
Low—6 cents	3 cents	1 cent	1 cent	1 cent	\$2.4 billion

Indexing the gas tax:

Some public feedback was received by the Commission opposing the automatic indexing of the gas tax. Many felt that legislative policy makers should retain control over the decision to raise taxes. Thus, as a more conservative alternative, a scenario was developed that assumed the legislature, at its discretion, would authorize inflationary adjustments. If carried out consistently each biennium and rounded to the nearest half cent, this scenario would generate slightly less revenue at \$4.9 billion over 20 years. The Revenue Committee at its last meeting did not recommend indexing the gas tax as it preferred to place greater emphasis on other sources. However, it did urge the Legislature to examine all transportation revenue sources at least biennially and ensure that they are keeping pace with inflation and with growth according to benchmarked trends.

**f. Extend the sales tax to motor fuels. The commission adopted a sales tax on gas to be imposed on the wholesale commodity price of the fuel up to a set cap. The proceeds would be dedicated to all transportation purposes. The purpose of the price cap is to meet the commission's goal of predictability in revenues and to reduce the**

**potential for disruptive price swings. The choice of commodity price as the revenue basis is intended to avoid imposing the new tax on top of the existing motor fuel taxes. The tax would be collected at the 'rack' and paid by the distributor, like other fuel taxes.**

The full price of a gallon of gasoline already includes state and federal motor fuel taxes. Thus a sales tax on the full price of gas would represent double taxation, which was considered objectionable by a number of Committee members. This proposal assumes that the sales tax would be imposed on the base commodity price and the proceeds dedicated to all transportation purposes.

The sales tax on gas would have the benefits of most likely not being subject to the 18th Amendment and thus producing a flexible new funding source. It would grow with the economy and would not have the drawback of being eroded by inflation. Yet it would have the characteristic of being linked directly to fuel consumption and thus be considered a user fee similar to existing fuel taxes.

**g. Authorize a new surcharge on the wholesale sale of new and used vehicles, auto parts, and accessories, the proceeds to be dedicated to transportation.**

An option was proposed for Committee consideration that involved a one-time excise tax on transportation-related goods, including new and used vehicles, auto parts and accessories, tires, batteries and similar products. Two versions of the surcharge were considered, one at the retail level, the other at wholesale. The Washington State Department of Revenue provided data on the retail tax base for these products, which was estimated at \$13.3 billion statewide in fiscal year 2002. Adjusted for year 2000 dollars, a 1% surcharge on this tax base would generate \$125 million at the retail level or \$106 million at the wholesale level.

An objection to imposing the surcharge at the retail level was the possibility of errors and difficulty at the point of sale at locations that sell both products subject to the surcharge and those not subject to it. For that reason, the Committee opted to recommend the surcharge at the wholesale level.

**h. Adopt a new ferry tariff policy that includes premium pricing for passenger-only ferry service, regional route equity pricing; adopt a new farebox recovery policy of 80% within six years and 90% within 20 years.**

See recommendation 16.

**i. Authorize a local option vehicle mile traveled (VMT) charge to be used by regional entities in congested regions of the state, and to be imposed on all vehicles registered in such a region.**

This option assumes the development of a program to impose a charge based on vehicle miles

traveled (VMT) within a congested region. The amount authorized could be up to 2 cents per mile and collection would be on the honor system the first year or so and subject to odometer checks in subsequent years.

Each vehicle owner would be required to estimate annual miles traveled within the region imposing the charge, but no more than 10% less than the number of miles reported to the vehicle owner's insurance company. The mileage fee could be paid once a year at the time of vehicle license renewal or it could be collected on monthly billings under agreement with a telephone or other utility company.

At one-cent per mile, it was calculated that \$4.4 billion could be generated in the 4-county Puget Sound region over 20 years. At that level, a user traveling 10,000 miles per year in the region would pay \$100 per year. If collected on utility bills, a charge of \$8.33 would be added to monthly light or heat bills. This type of fee introduces a strong incentive to vehicle owners to reduce the number of miles traveled each year and could have a demand management effect as well as generate substantial new revenues.

There would be a number of implementation issues and equity issues to resolve to make this kind of a fee workable. The impact on commercial trucking and freight movement would need to be examined as would the effect on lower income individuals who must travel longer distances to find affordable housing. It is likely that the Puget Sound region with its high degree of congestion would be the standard bearer for any demonstrations of this new mechanism.

**j. Authorize new multi-modal transportation taxing authority for counties or regions that have not been previously granted high capacity transportation taxing authority.**

At its last meeting, the Revenue Committee added a new option that had not been previously considered. The proposal was to take the existing high capacity transportation taxes (sales tax at 1%, MVET at 0.8% and employer tax of \$2 per employee) and authorize them to all regions of the state that had not previously been granted high capacity transportation taxing authority. Both sources have the benefit of being flexible for use on all modes of transportation and could create significant new local capacity in addition to existing local option taxes already in place, thus enhancing the toolkit available to regions.

**k. Expand the authority of counties to impose the local option motor vehicle license fee; repeal the referendum provision; and authorize cities to impose the fee if the county in which they are located has not imposed the fee within two years of enactment.**

The VLF is a local option currently authorized to counties at \$15 per vehicle per year. Revenues are shared based on a population formula between the county and cities within the county. Only four counties have imposed this fee, Snohomish, King, Pierce, and Douglas. Several counties have imposed it only to have it repealed by referendum of the voters in the affected county.

This proposal authorizes increases in the existing VLF up to \$100 per vehicle per year. If imposed to its maximum authorized level, it could generate more than \$100 million per year in King County or up to \$400 million annually if imposed by all counties. If imposed by all counties, this fee could generate up to \$8 billion in new revenues over 20 years.

The recommendation adopted by the Committee urged the Legislature to amend the existing VLF statute to repeal the referendum provision and to allow cities to use the mechanism if the county in which the city is located has not done so within five years of enactment.

**l. Authorize bonding programs at the state and regional levels to achieve the funding levels determined to be needed.**

The Committee assumed that at the state and regional levels, major improvements would be funded in part by proceeds from bonds. One of the principles of transportation funding adopted by the Committee early on was that long-term financing should be used to pay for facilities that have a long-term useful life. Thus a facility can be built when needed and paid for over time by several generations of users who will benefit from the facility's existence.

Bonds would be backed by revenue streams as described under individual sources. Attachment 9 describes the State's general obligation (GO) bonding program as well as a state-administered local government bonding pool. Due to the state's strong and increasingly well-diversified economy, Washington enjoys historically low interest rates of about 5.6% on its GO debt.

A new regional authority, if created in the Puget Sound region or other parts of the state, could issue one of two kinds of debt: Limited Tax General Obligation (LTGO) bonds or revenue bonds. These would likely carry a slightly higher interest rate. Local governments are able to issue GO debt based on their local taxing authority and on constitutionally established debt limits. Many local governments, however, have been historically averse to debt and have not taken full advantage of its potential.

**m. Authorize a local option regional sales tax dedicated to all transportation purposes.**

A regional sales tax option, authorized to new regional entities, could supplement the three-tenths already authorized by the Legislature to transit districts in the 2000 session. A general one-tenth sales tax increase in the 4-county Puget Sound Regional Council region would generate \$1.3 billion over 20 years (2000 dollars) and in the two-county Spokane Regional Transportation Council region \$147 million.

This source would not work well for some regions that border adjacent states that do not impose a sales tax (Clark County would be a prominent example). However, it could be a useful element in a "tool kit" of options that might be implemented in some parts of the state.

**n. Authorize to the state and to regional entities the implementation of all forms of value pricing, including region-wide pricing and pricing on individual facilities.**

Congestion pricing was understood to mean a range of pricing mechanisms including electronically imposed, variable charges for use of congested facilities. It could include any of the following: tolls on individual facilities; HOT lanes that are reserved for high occupancy vehicles but allow SOVs to travel for a fee; or regional, electronically monitored pricing of major corridors. It is assumed that probably only one or two congested urban areas of the state would attempt to implement any of these variants, but inclusion in a tool kit of options might spur experiments and demonstrations around the state.

A recent study by the Puget Sound Regional Council found that a comprehensive congestion pricing network based on the principle arterials of the four-county region could generate up to \$1.5 billion in new revenues per year or \$30 billion over 20 years. The power of pricing to reduce demand as well as to generate revenue is believed to be enormous, but numerous implementation strategies would need to be developed to make this a viable technique. The Committee recommended that the Legislature authorize the development of congestion pricing pilot projects and programs at the state, regional and local levels.

**o. Examine and, if appropriate, authorize the bonding of federal funds.**

**p. Examine and authorize the expansion of tax increment financing as a tool for transportation and other development projects.**

New tax increment financing authority based on the sales tax, the B&O tax or other sources should be authorized. Revenue assumptions would be highly variable and depend on the nature of the local improvement being developed. Please see Attachment 4 to the Revenue Committee final report that describes recent legislative proposals to introduce bills and amend existing authority, and provides descriptions of the use of this mechanism around the country.

**q. Examine all transportation revenue sources at least biennially and ensure that they are keeping pace with inflation and with growth according to benchmarked trends.**

**r. Extend the \$30 license fee to all vehicles including trailers.**

**s. Authorize a flat \$20 traffic mitigation fee on all passenger vehicles and non-commercial trucks.**

The existing \$30 license fee would be increased to \$50. It should be a non-eighteenth-amendment restricted tax to ensure that it can be used for all transportation purposes.

## Recommendation 18:

### Begin action now to improve the transportation system, guided by the BRCT Early Action Plan.

- a. Act on accountability, efficiency, and governance recommendations.
- b. Begin the first stage of investment in the 2001-2003 biennium by investing in actions that will help the state reach the BRCT benchmarks.
  - i. Fund system maintenance and preservation throughout the state, ensuring continuation of efficient ferry and transit services.
  - ii. Optimize the current system using technology, and the most cost-effective demand management techniques such as telecommuting and commute trip reduction tax credits.
  - iii. Fund cost-effective system expansions in all modes.
- c. Set the stage for future investments by getting systems in place that will encourage best practices, technical analysis to solve the toughest problems, and evaluation of performance by transportation agencies in delivering on the expected investments.

The early action plan is presented in the next section of this report.

## TOOL BOX OF ADDITIONAL EFFICIENCY RECOMMENDATIONS

### 1. Improve data collection for best decisions.

Once benchmarks are established, it will be necessary to ensure that accurate data is collected and consistent measurements are used. The Joint Legislative Audit Review Committee (JLARC) audit was concerned that it is difficult to assess actual costs of WSDOT operations. The audit recommended changes to WSDOT's management and financial accounting systems to enable better review of project histories throughout all phases. WSDOT's performance could then be compared accurately to other states and other jurisdictions, and consistently analyzed against benchmark targets. The findings state that comparative figures are also difficult to come by at the local (city and county) levels. Without access to comparative data, it is not possible to measure accurately the cost and quality of services. Refining budget accounting and record system codes and guidelines can result in better analysis and reporting of operations and maintenance costs at city and county levels.

- a. All transportation agencies should improve data collection and cost allocation.
- b. Implement the management and financial accounting system changes recommended by the Joint Legislative Audit Review Committee (JLARC).
- c. Refine budget accounting and record systems (BARS) codes at the state, city, county, and transit districts into a consistent format for cost comparison purposes.
- d. Requires data collection and reporting at the city level, consistent with data collected at

- state, county, and transit district level, and reported to a single repository for simpler access.
- e. Define consistent terminology for — administration, construction, maintenance, operations, and preservation — across all levels of government in order to make correct comparisons.

### 2. Improve management practices.

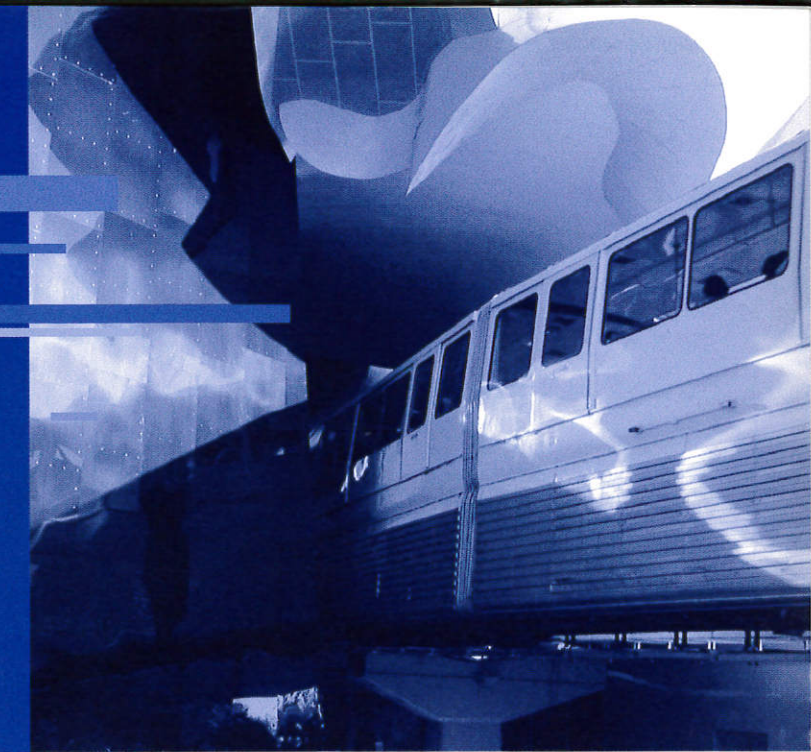
- a. Improve project management.
- b. Take measured (appropriate) risks.
- c. Use enhanced team planning/partnering.

### 3. Improve the permit process.

- a. Develop an environmental cost model to document and monitor the costs of environmental review, permitting, and mitigation on projects.
- b. Do environmental review early.
  - i. Require early agreements including interagency agreements early in decision-making process.
  - ii. Provide early involvement by stakeholders.
- c. Establish standards for environmental reviews that are consistent across jurisdictions.
  - i. Work with local agencies and state agencies to coordinate review efforts.
  - ii. Coordinate environmental mitigation strategies with other agencies.
  - iii. Coordinate with other federal, state and local agencies, and with non-governmental organizations to develop comprehensive strategies.
  - iv. Coordinate mitigation across jurisdictions.
- d. Use watershed based planning.
- e. Make better use of current environmental processes and available resources.
  - i. Better integrate NEPA/SEPA: to the extent possible, coordinate reviews at the federal, state and local levels.
  - ii. Fund staff in resource agencies to review permits: Staff shortages are a principal cause of delay in issuing environmental permits. Funding staff positions for specific projects or on an ad hoc basis will facilitate earlier project review.
  - iii. Set and honor timelines.
  - iv. Use project teams.



# EARLY ACTION



## STARTING ON TOMORROW TODAY

It has taken Washington state 30 years of population and economic growth to get to this transportation crisis. It will take time to get out of it. But we don't have to wait years to see progress. Nor should the public be asked to wait. One thing is for sure: Business as usual will not fix our transportation problems. We need efficiencies from administrative overhead to highway construction and transit investments.

The diversity of Washington state dictates that transportation needs will vary greatly throughout the state, from road-dependent rural areas to Puget Sound's complex multi-modal network. We must recognize these regional priorities in funding programs. Our recommendations call for a new way of doing business that will require both legislative and institutional change — both of which the public deserves and demands.

This state cannot afford to wait until all of the commission's recommended changes and efficiencies are in place. We must take action now.



### SUMMARY OF 20-YEAR NEEDS AND INVESTMENTS

DESCRIPTION	20-YEAR ESTIMATED NEED**	CURRENTLY FUNDED	EARLY ACTION ITEMS	AVOIDED COSTS	YEAR 2008-2020 COSTS
<b>Total statewide transportation needs</b>	<b>\$150 billion</b>	<b>\$55 billion</b>	<b>\$9-13 billion</b>	<b>\$40-50 billion</b>	<b>\$30-40 billion</b>
<b>Maintenance, preservation, safety, and retrofit</b> <ul style="list-style-type: none"> <li>State maintenance, preservation, safety and retrofit – all modes.</li> <li>Local and regional transit maintenance and preservation.</li> <li>Cities and counties maintenance, preservation and safety.</li> </ul>	\$19,278 (million) \$20,286 \$27,832	<ul style="list-style-type: none"> <li>Funded portion of preservation and maintenance current system.</li> </ul>	<ul style="list-style-type: none"> <li>Unfunded portion of maintenance preservation, and safety</li> <li>Restoration of transit and ferry service</li> <li>Optimization</li> <li>Expansion: roadway, transit, choices</li> <li>Cities and counties</li> </ul>	<ul style="list-style-type: none"> <li>De-prioritize projects</li> <li>Permit reform</li> <li>Efficiencies</li> <li>Unused local and transit district revenue authority</li> <li>Cost-benefit analysis</li> <li>Optimization planning</li> <li>Private sector provision of services</li> <li>Technology improvement</li> <li>Reduce demand</li> </ul>	<ul style="list-style-type: none"> <li>Unfunded portion of maintenance preservation, and safety</li> <li>Optimization</li> <li>Expansion</li> <li>Cities and counties</li> </ul>
<b>Optimization</b> State Optimization and TDM	\$1,984				
<b>Expansion and mobility</b> State – all modes Local and regional transit expansion Cities and counties mobility	\$54,799 \$15,359 \$10,713				

\*\* As noted in the BRCT findings, more than 468 governmental entities have authority for transportation planning, funding, management, and construction in Washington state. Different jurisdictions and agencies do not share common definitions of needs and services objectives. The needs cited here were derived through a multi-year effort by many different data collection agencies. Dollars were converted to year 2000 dollars. The BRCT is recommending that consistent and improved data collection methods be put in place. This twenty-year need cost is therefore an estimate that should be updated and revised as improved data become available.

The detailed assumptions for this compilation of need are found in the investment strategies committee final report (Appendix B). To date, comments received from agencies are that their needs are under-reported. Given that the claimed need is subjective the BRCT has chosen to focus investments on effectiveness in meeting benchmark targets where results can be measured.

### EARLY ACTION INVESTMENT GUIDELINES, 2001-2007 (SIX-YEAR PLAN)

This list provides direction for an early action investment strategy. Detailed budgets and cash flows to implement this direction should be developed by the legislature prior to authorizing funds.

The needs listed below are for new revenues. Existing federal, state, and local funding was already factored into the total six-year needs.

ACTION	DESCRIPTION	NEW STATE & REGIONAL REVENUE NEEDED (in millions)
<b>Start efficiency measures.</b>	Administration, operations, maintenance and project delivery savings. Pilot permit reforms; project delivery approaches.	<b>Efficiency savings</b>
<b>Authorize governance changes.</b>	Authorize regional transportation entities and funding tools.	<b>Authorize regional revenue</b>
<b>Start fixing the worst chokepoints and make real progress on what was started.</b>	Finish projects with complete and approved plans. Start on toughest problems.	<b>\$3,000 - 4,000</b>
<b>Construct HOV lanes.</b>	Finish projects with complete and approved plans.	<b>\$750 - 1,000</b>
<b>Start now on the toughest problems.</b>	Fund multi-modal corridor studies to make best investment choices.	<b>\$225 - 300</b>
<b>Keep the ferries afloat.</b>	Restore auto and passenger ferry service. Replace 4 auto ferries to meet Coast Guard regulations.	<b>\$375 - 500</b>
<b>Expand choices, and start projects now to avoid future investment costs.</b>	Restore and expand transit, passenger and freight rail, TDM, park & rides, smart growth, vanpools, bikes, pedestrian services and improvements, and special needs transit and rural mobility.	<b>\$3,000 - 4,000</b>
<b>Use technology to do more with what we have.</b>	Expand use of traffic service patrols. Synchronize traffic lights. Expand use of intelligent transportation systems.	<b>\$40 - 50</b>
<b>Keep freight moving.</b>	Provide partnership funding to solve freight delays on strategic corridors.	<b>\$300- 400</b>
<b>Start now to make more informed choices at the local level.</b>	Tie funding to efficiencies.	<b>\$1,875 - 2,500</b>
<b>TOTAL INVESTMENT PACKAGE</b>		<b>\$9,565 - 12,750</b>

NOTE: These investments should be subject to a proportionality principle: any reductions in the total package should be proportional by category as above, and by state/regional split.

### REVENUE RECOMMENDATIONS — SIX-YEAR SCENARIO STATEWIDE AND REGIONAL SOURCES (NUMBERS ARE ESTIMATES AND SUBJECT TO CHANGE)

SOURCES	6-YEAR REVENUES (\$ MILLIONS)	YEAR-1 COST TO USER
<b>STATEWIDE FLEXIBLE</b>		
sales tax on commodity price of gas (up to price cap @ 6.5% on 80¢ 'rack' price)	1,100	29
surcharge on wholesale value of transportation goods @ 2%	1,266	
\$20 transportation mitigation fee on passenger vehicles and non-commercial trucks	445	20
general fund transfer of sales tax on transportation construction	510	
<b>SUBTOTAL ALL POTENTIAL STATEWIDE FLEXIBLE SOURCES</b>	<b>\$3,321</b>	<b>\$49</b>
<b>STATEWIDE RESTRICTED BY 18<sup>TH</sup> AMENDMENT</b>		
gas tax increase of ~6 cents	1,100	33
gross weight fee on all vehicles	1,330	40
truck surcharge (FMSIB)	150	
extend \$30 license fee to all vehicles	31	
ferry farebox recovery @ 80% in six years	95	
<b>SUBTOTAL ALL POTENTIAL STATEWIDE RESTRICTED FUNDS</b>	<b>\$2,706</b>	<b>\$73</b>
statewide bond proceeds (25-year bonds, 5.6% interest rate)	1,800	
(less debt service)	(271)	
efficiency savings (10%)	214	
<b>STATEWIDE SUBTOTAL</b>	<b>\$7,770</b>	<b>\$122</b>
<b>REGIONAL AND LOCAL FLEXIBLE (illustration using Puget Sound as example)</b>		
regional sales tax @ 0.2%	687	
VMT charge @ 2 cents	1,340	
local option vehicle license fee @ \$50	373	
regional bond proceeds (25-year bonds, 5.7% interest rate)	1,500	
(less debt service)	(226)	
<b>REGIONAL AND LOCAL FLEXIBLE (outside Puget Sound)</b>		
local option vehicle license fee @ \$50	TBD	
local option high capacity transit sales tax @ 1%	TBD	
local option high capacity transit MVET @ 0.8%	TBD	
<b>REGIONAL AND LOCAL SUBTOTAL</b>	<b>\$3,674</b>	
<b>TOTAL ALL SOURCES</b>	<b>\$11,444</b>	

USE	COST (\$ MILLIONS)
Fix chokepoints, make progress on work started	\$3,000 - 4,000
Construct HOV lanes	\$750 - 1,000
Start on tough problems	\$225 - 300
Keep the ferries afloat	\$375 - 500
Expand choices, avoid future costs	\$3,000 - 4,000
Use technology	\$40 - 50
Keep freight moving	\$300- 400
Make more choices at local level	\$1,875 - 2,500
<b>TOTAL</b>	<b>\$9,565 - 12,750</b>

### Begin with fixing the worst congestion chokepoints in the state and make real progress on what was started.

We know that each region of the state has highways and roads that we try to avoid during rush hour. Instead of hiding from the problem we recommend that we focus on it. Using work that



WSDOT has already done to study these 'congestion chokepoints,' let's fund and begin building projects that are ready to go on the most congested highways of the state. These traffic solutions have already been through the cost-benefit analysis and priority listing review. The state began work on some of these projects in 1998 – then funding was cut with Initiative 695. The 2000 legislature began to fund some of these projects and the BRCT encourages the state to complete construction of those ready-to-go projects while we plan for more complex projects.

Following are some examples of chokepoints that should be fixed. The list below is for illustrative purposes only. These are the types of projects that could be done in the next six

years. (A complete list of chokepoints in the state is included in the investment strategies committee final report, appendix A.)

Projects set for completion before end of 2007:

Examples to complete HOV lanes on congested corridors in Puget Sound

- Expand and improve HOV lanes on I-5 from Tukwila to the Pierce County line
- Build direct HOV to HOV connections between I-90 and I-405
- Extend HOV lanes on SR 167 to Auburn
- Add HOV lanes to SR 99 in Shoreline
- Reconstruct the I-5/SR 16 and I-5/38th Street interchanges in Tacoma and add HOV lanes to improve traffic flow
- Improve SR 304 between the Bremerton Ferry Terminal and SR 3, including the addition of HOV lanes
- Add HOV lanes on SR 16 between I-5 and the Tacoma Narrows Bridge
- Widen and add HOV lanes to SR 900 from SE 78th Street to the I-90 interchange in Issaquah

Examples of congestion relief for all vehicles in Puget Sound

- Complete congestion relief improvements on I-5 and SR 524 near Alderwood Mall
- Provide congestion relief and interchange improvements at the junction of US 2 and SR 9 north of Snohomish

- Connect SR 509 to I-5 in the SeaTac area to improve access to the airport and provide alternative access to south Seattle industrial areas
- Convert SR 522 to a four-lane freeway from Paradise Lake Road to the Snohomish River
- Continue the widening of Bothell-Everett Highway (SR 527) north from 132nd Street SE to 112th Street SE
- Widen SR 9 to five lanes from 228th Street SE to 212th Street SE near Clearview
- Widen SR 161 to five lanes from Jovita Boulevard to S 360th Street in the Milton-Federal Way area
- Widen SR 524 to five lanes from 24th Avenue SW to SR 527 in the Lynnwood area
- Construct an interchange on SR 167 in North Sumner
- Construct a new interchange at SR 16 and Olympic Drive in Gig Harbor

Examples that could improve traffic flow in western Washington (outside of Puget Sound)

- Add additional lane to I-5 between Salmon Creek and I-205 north of Vancouver
- Widen SR 539 from two lanes to five from Tenmile Road to the Canadian border between Bellingham and Lynden
- Improve SR 542 from Orleans Road to Hannegan Road in Bellingham
- Construct truck climbing lanes and passing lanes on US 101 near Sequim, Blyn and Gardiner
- Build a passing lane on SR 19 near SR 104 in the Hood Canal area
- Add a lane to I-5 between Grand Mound (exit 88) and Maytown (exit 95), between Centralia and Tumwater



Examples that could improve traffic flow in eastern Washington

- Improve north-south flow in East Wenatchee by improving the SR 28 from the US2/97 junction to 9th Street
- Improve capacity on US 2 from the SR 28 intersection to Rocky Reach dam, north of Wenatchee
- Add an additional lane to I-90 through the Spokane Valley from Argonne Road to the Idaho border
- Construct an auxiliary lane on I-90 westbound from Vantage to Ryegrass Summit
- Improve US 395 from the Spokane River to Francis Avenue in Spokane, and to the north
- Widen SR 17 to four lanes from Pioneer Way to Stratford Road in Moses Lake
- Widen US 12 to four lanes in the Attalia area east of Pasco
- Construct additional lanes on SR 240 between I-182 and Columbia Center Boulevard interchange in the Tri-Cities

### Start now on the toughest problems.

Some of our most difficult problems will take more than six years time to resolve. The sooner we start, the sooner the fix. Place a spotlight on the tough decisions and complex issues to reduce traffic congestion. Provide funding for new technical tools such as multi-modal modeling to use in the analysis needed for making wise investment decisions. These tools will aid the ability of the state to have solutions ready for phase two investments beginning in the 2007-2009 biennium.

- Finish multi-modal corridor planning that has been started to make the best decisions on Trans-Lake Washington Project — SR 520 and I-405
- Begin using most effective mix analysis and other investment strategy tools to screen all transportation investments in all modes, as soon as possible
- Get multi-modal corridor planning started on SR 2 from Everett to Stevens Pass, SR 9 through Snohomish, Skagit, and Whatcom counties, SR 395 in Spokane, and SR 101 on the Olympic Peninsula, to name a few examples

### Keep the ferries afloat.

Restore auto and passenger service and replace four deficient auto ferries to meet Coast Guard requirements.

### Expand choices and assure our transportation system continues to serve those who need it.

Offer travel options for the commuter, bus rider, and driver that can be put in place quickly:

- Build park and ride lots and get at least 15,000 new stalls in place by 2006
- Provide transit service through state match of local sales tax for transit, to achieve a combination of restoring funds lost from Initiative 695, and expanding service to meet demand. Link matching funds to benchmarks and productivity
- Ensure special needs and rural populations have transportation services
- Restore the commute trip reduction (CTR) tax credit and expand the CTR program
- Prioritize and fund vanpools
- Provide incentive funds to encourage trip reduction
- Encourage smart growth land use planning
- Encourage flexible hours, telecommuting, car sharing and creative ways to reduce demand during peak hours

- Bring rail service on line to meet commuter demand
- Implement state rail plan recommendations to meet inter-city service goals

### Use technology to do more with what we have.

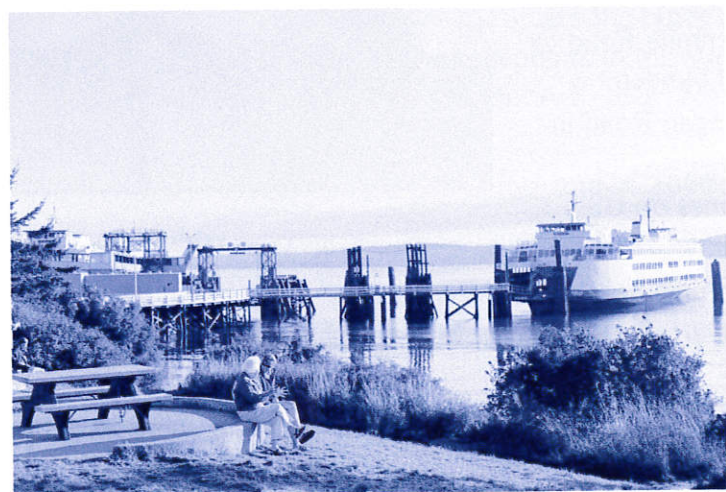
Fixing traffic jams is more than building new facilities – it also means being smarter with what we have: making greater use of traffic service patrols to clear accidents and prevent traffic jams. We recommend immediately synchronizing traffic lights on key routes to keep traffic flowing and using intelligent information systems such as real-time video, the internet, computer updates and electronic signage to alert drivers to conditions so they can alter routes and avoid delays.

- Improve traveler information systems, including cameras and traffic sensors, on I-5 from Everett to Bellingham
- Service Patrols can be added: I-5; I-90; SR 522 and SR 405
- Improve signals:
  - Bremerton SR303
  - Central Puget Sound: SR522; SR169; SR2; SR524; SR527
  - Centralia SR507
  - Mount Vernon SR20
  - Oak Harbor SR20
  - Pierce County SR 7 and SR 161
  - Spokane SR 27, I-90 Sullivan Road, SR 2

### Keep freight moving.

Moving freight is critical to the health of the state. Building overpasses and underpasses to separate rail lines from roads could make a huge difference. These projects reduce conflicts between general traffic and trucks and trains. These projects have met the cost-benefit analysis test and have funding partners to spread the cost and many can be underway in six years. Some examples are:

- South 228th Street near Kent
- East Marginal Way ramps in Seattle
- Spokane Street Viaduct Improvements in Seattle
- SR 519 Intermodal Access – Royal Brougham/Alaskan Way near the sports stadiums in Seattle
- I-90 Cascade crossing additional lanes and snow sheds from Hyak to Easton



- Widening last section of SR 20 to I-5 near Mount Vernon
- Elimination of at-grade crossings in Yakima
- Columbia Center Boulevard in Kennewick

#### **Start now to make more informed choices.**

We need to be smarter about spending money at the local level. Right now there is no common way to track or evaluate investment, problems, or progress. Funding should be used to make progress in meeting BRCT goals and benchmarks. New funding for local governments should be used for the basic transportation infrastructure and should be tied to:

- Demonstrated progress in achieving efficiencies
- Sharing of resources to reduce duplication and save money
- Improved cost reporting systems
- Best use of pavement management system
- Greater use of cost-benefit analysis by all transportation agencies

#### **Start projects now to avoid future investment costs.**

Estimates of our current transportation funding revenues show a significant shortage of funds, \$100 billion, if we want to meet our goals for 2020. The BRCT has identified some options that can help avoid future costs of up to \$50 billion but these options require further testing before they can be recommended for broad implementation. It is critical we conduct further analysis in the next biennium to help the state meet this shortfall. We recommend that the following studies start right away:

- Incentives to reduce SOV trips through smart growth in high growth corridors
- Expansion of TDM tools for most congested corridors. Target demonstration projects for SR 520 and I-405 to help meet demand forecasts
- Substantive permit reform
- Pilot project for managed competition
- Congestion pricing for new facilities and value pricing experiments
- Look to the private sector to help meet demand for transportation services

#### **Continuously prioritize to get best results.**

This package of recommendations is the first phase of a twenty-year plan. The BRCT recommends new transportation revenues be authorized for the next six years ranging from \$9-\$13 billion. Authorization for the second phase of transportation investment should take place in conjunction with a review of the progress in achieving this first stage. To ensure this money is spent wisely, the BRCT recommends these criteria to select projects for inclusion in the early action phase.

Priority should be given to:

1. Projects that meet BRCT investment strategies and benchmarks
2. Continued maintenance and preservation of the state-wide system
3. Projects in the most congested corridors
4. Projects that are in transportation plans approved by April 2001
5. Projects showing measurable results within six years
6. Projects with permit approvals in place
7. Ensuring the total package achieves a most effective mix of investments

#### **Expected Results**

Ensure that progress is made toward reaching benchmarks and that results are evaluated for effectiveness before second phase funds are expended.

Interim results to be expected are:

- Demonstrated efficiencies in administration, operation, maintenance and project delivery.
- Meet air quality benchmark continuously
- Prevent deterioration of existing transportation system
- Assure continuous operation of ferry service beginning in 2001
- Improve traffic flow on interstate system by removing accidents promptly
- Improve traffic flow on 15 major arterials throughout the state by synchronizing traffic lights by end of year 2002
- Double vanpool service to 3,000 vanpools by adding 1,500 vanpools in congested corridors by 2007
- Open park and ride stalls in high-demand locations by end of year 2002
- Construct approved HOV lanes in the most congested areas by end of 2007
- Construct new lane miles of approved highways by end 2007
- Construct 15 grade separations to improve freight mobility
- Expand the CTR program coverage from 500,000 to 800,000 employees by June 30, 2003
- Double to 37,500 the number of cars taken off the roads each weekday morning through trip reduction and smart growth programs, by 2007
- Meet demand for transit trips in the most congested corridors by June 30, 2005
- Increase passenger rail service between Vancouver, BC and Portland
- Keep the public informed of delays and work schedules using all available technologies to provide real-time alerts about construction delays

**Set target dates to take action on the BRCT recommendations.**Act on efficiency and governance recommendations

- Immediate Adopt benchmarks and create Accountability Board
- Immediate Transportation Commission and Governor negotiate procedure to fill the vacancy for the Secretary of Transportation
- Immediate Direct a thorough and independent performance review of WSDOT administrative practices and staffing levels
- Immediate Begin substantive permit reforms for transportation projects
- Immediate Provide incentives to achieve construction and project delivery efficiencies
- Immediate Adopt incentives for all transportation agencies to reach benchmarks
- Immediate Authorize regional transportation authorities, including regional revenue measures
- 2001-2003 Provide statewide revenue to regions for multi-modal regional priority setting using a regional equity principle
- Immediate Adopt new formula for distribution of new roadway funds

Invest to hold steady on system condition benchmarks

- Immediate Continue priority funding of highway maintenance, preservation, and safety
- Immediate Restore funding for auto and passenger ferry service and transit
- Immediate Continue current public transportation funding
- Immediate Provide funding to cities, counties, and transit to ensure preservation and maintenance of existing system
- Immediate Phase-out the use of studded tires or institute a surcharge to recognize cost of studded tire damage

Invest to optimize the system

- Immediate Make use of highway service patrols
- Immediate Synchronize & update traffic lights on key corridors
- 2001-2003 Restore the commute trip reduction (CTR) tax credit and expand the CTR program
- 2001-2007 Establish incentives for smart growth in key corridors
- 2001-2007 Establish incentives for innovative trip reduction programs
- 2001-2007 Increase use of intelligent information systems
- 2001-2003 Provide incentives to get park and ride lots to be sited and built
- 2001-2007 Build 15,000 new park and ride stalls in most congested areas

Invest to make cost effective system expansions

- Immediate Fund further planning to reduce congestion in key corridors

- Immediate Create a multi-modal planning model for best decision-making
- 2001-2007 Finish the HOV system
- 2001-2007 Finish highway projects already started and approved
- 2001-2007 Finish pedestrian & bicycle improvements started and approved
- 2001-2007 Construct freight mobility projects and continue corridor improvement plans
- 2001-2007 Conduct engineering for projects in congested corridors
- 2001-2007 Bring additional cost-effective multi-modal transportation services on-line, vanpools, transit, rail, and other choices

Adopt a revenue package

- Immediate Adopt a package of revenue measures to fund a comprehensive multi-modal set of investments, which, taken together with the recommended efficiency measures and reforms, will ensure a 20-year program of preserving, optimizing, and expanding the state's transportation system

## TWENTY-YEAR TIMELINE

	2001-2007	2007-2013	2013-2020	BENCHMARK RESULTS
<b>EFFICIENCIES</b>	<ul style="list-style-type: none"> <li>• Establish benchmarks &amp; accountability board.</li> <li>• Make governance changes: appointment of Secretary; regional authorities.</li> <li>• Direct performance review of WSDOT.</li> <li>• Permit reform.</li> <li>• Provide incentives for construction, operations, and maintenance efficiencies.</li> <li>• Allow innovative project delivery methods.</li> <li>• Achieve administrative savings.</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor benchmarks.</li> <li>• Evaluate performance of all transportation agencies in progress on benchmarks.</li> <li>• Continuous efficiency improvements.</li> <li>• Phase 2 permit reforms based on pilot program results.</li> <li>• Phase 2 construction, operations, maintenance efficiencies based on phase 1 results.</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor benchmarks.</li> <li>• Evaluate performance of all transportation agencies in progress on benchmarks.</li> <li>• Continuous efficiency improvements.</li> <li>• Phase 3 permit reforms based on pilot program results.</li> <li>• Phase 3 construction, operations, maintenance efficiencies based on phase 2 results.</li> </ul>	<ul style="list-style-type: none"> <li>• Administrative costs as a percent of transportation spending at the state, county and city levels should improve to the median in the short-term and to the most efficient quartile nationally in the longer term.</li> <li>• Washington's public transit agencies will achieve the median cost per vehicle revenue hour of peer group transit agencies.</li> <li>• Improve operations, maintenance, and project delivery costs.</li> </ul>
<b>INVESTMENTS</b>	<ul style="list-style-type: none"> <li>• Restore auto and passenger ferry service.</li> <li>• Replace 4 auto ferries to meet Coast Guard requirements.</li> <li>• Restore transit service.</li> <li>• Use technology to optimize the system; traffic lights, ITS, patrols.</li> <li>• Finish projects that are ready to go.</li> <li>• Expand choices for TDM, transit, rail, bikes, pedestrians, smart growth, vanpools, park and ride stalls.</li> <li>• Construct HOV lanes.</li> <li>• Keep freight moving.</li> <li>• Improve effectiveness of local government transportation investments.</li> <li>• Start on toughest problems.</li> <li>• Plan for phase 2 investments.</li> </ul>	<ul style="list-style-type: none"> <li>• Phase 2 investments to meet benchmarks.</li> </ul>	<ul style="list-style-type: none"> <li>• Phase 3 investments to meet benchmarks.</li> <li>• Evaluate progress meeting benchmarks.</li> <li>• Authorize next increment of phased investments.</li> </ul>	<ul style="list-style-type: none"> <li>• Zero percent of interstate highways, state routes, and local arterials in poor condition.</li> <li>• Zero percent of bridges structurally deficient.</li> <li>• Complete seismic safety retrofits of all Level 1 and Level 2 bridges.</li> <li>• Reduce traffic congestion on urban interstate highways to be no worse than the national mean.</li> <li>• Reduce delay per driver to be no worse than the national mean.</li> <li>• Reduce overall hours of travel delay per person in congested corridors.</li> <li>• Maintain vehicle miles traveled (VMT) per capita at 2000 levels.</li> <li>• Increase non-auto share of work trips in urban centers or reverse the downward trend of non-auto share of work trips in urban centers.</li> <li>• Reduce traffic accidents.</li> <li>• Freight movement and growth in trade-related freight movement should be accommodated on the transportation system.</li> <li>• Maintain air quality at federally required levels.</li> </ul>
<b>NEW REVENUE</b>	<ul style="list-style-type: none"> <li>• Link funding to efficiencies.</li> <li>• Link funding to best practices.</li> <li>• Simplify funding distributions.</li> <li>• Seek fare box recovery target for ferries.</li> <li>• Adopt regional equity principle.</li> <li>• Authorize revenue package: \$9-13 billion.</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate progress meeting benchmarks.</li> <li>• Authorize next increment of phased investments.</li> </ul>		<ul style="list-style-type: none"> <li>• Ensure that transportation spending keeps pace with growth.</li> <li>• Twenty-year revenue: \$50 billion.</li> <li>• Twenty-year avoided costs: \$50 billion.</li> </ul>

PROJECT CONSULTANT TEAM

**Lund Consulting, Inc.**, project management

**Cocker Fennessy**, communications

**CSE Group**, meeting facilitation

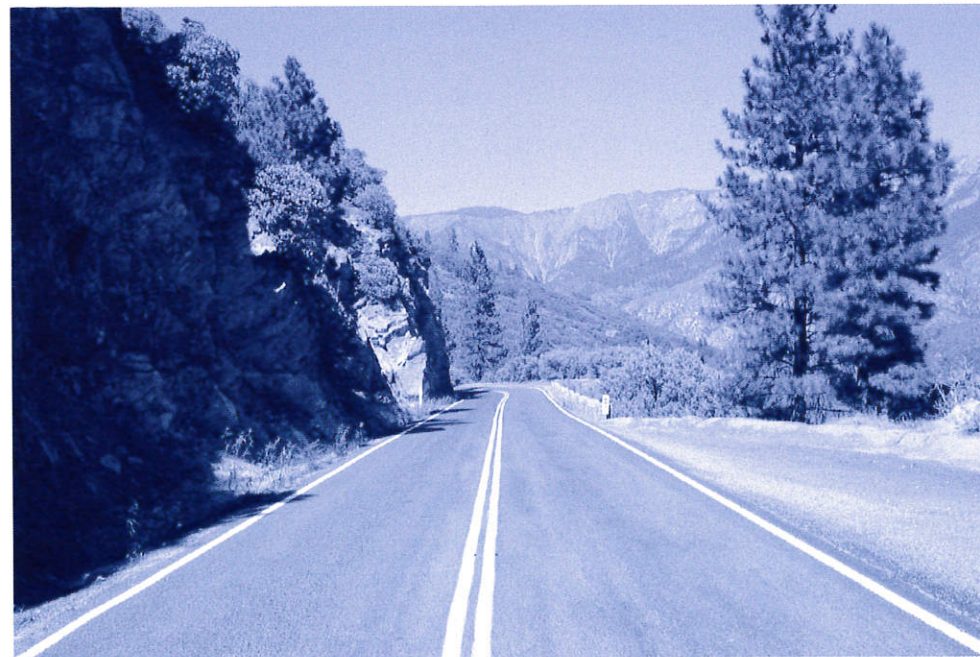
**Design Analysis**, newsletters, printed reports, administration options and recommendations

**ECONorthwest**, investment strategies

**Michael Doubleday**, investment strategies

**Paladino Consulting**, administration findings and options

**Prospect Delta**, benchmarks and revenue findings, options, and recommendations



Unless otherwise noted, all photographs contributed by Dawson R. Murchison and Dennis Sellin, and taken in Washington state between March 2000 and September 2000.



## TIMELINE

2013-2020	BENCHMARK RESULTS
<ul style="list-style-type: none"> <li>• Monitor benchmarks.</li> <li>• Evaluate performance of all transportation agencies in progress on benchmarks.</li> <li>• Continuous efficiency improvements.</li> <li>• Phase 3 permit reforms based on pilot program results.</li> <li>• Phase 3 construction, operations, maintenance efficiencies based on phase 2 results.</li> </ul>	<ul style="list-style-type: none"> <li>• Administrative costs as a percent of transportation spending at the state, county and city levels should improve to the median in the short-term and to the most efficient quartile nationally in the longer term.</li> <li>• Washington's public transit agencies will achieve the median cost per vehicle revenue hour of peer group transit agencies.</li> <li>• Improve operations, maintenance, and project delivery costs.</li> </ul>
<ul style="list-style-type: none"> <li>• Phase 3 investments to meet benchmarks.</li> <li>• Evaluate progress meeting benchmarks.</li> <li>• Authorize next increment of phased investments.</li> </ul>	<ul style="list-style-type: none"> <li>• Zero percent of interstate highways, state routes, and local arterials in poor condition.</li> <li>• Zero percent of bridges structurally deficient.</li> <li>• Complete seismic safety retrofits of all Level 1 and Level 2 bridges.</li> <li>• Reduce traffic congestion on urban interstate highways to be no worse than the national mean.</li> <li>• Reduce delay per driver to be no worse than the national mean.</li> <li>• Reduce overall hours of travel delay per person in congested corridors.</li> <li>• Maintain vehicle miles traveled (VMT) per capita at 2000 levels.</li> <li>• Increase non-auto share of work trips in urban centers or reverse the downward trend of non-auto share of work trips in urban centers.</li> <li>• Reduce traffic accidents.</li> <li>• Freight movement and growth in trade-related freight movement should be accommodated on the transportation system.</li> <li>• Maintain air quality at federally required levels.</li> </ul>
	<ul style="list-style-type: none"> <li>• Ensure that transportation spending keeps pace with growth.</li> <li>• Twenty-year revenue: \$50 billion.</li> <li>• Twenty-year avoided costs: \$50 billion.</li> </ul>

PROJECT CONSULTANT TEAM

**Lund Consulting, Inc.**, project management

**Cocker Fennessy**, communications

**CSE Group**, meeting facilitation

**Design Analysis**, newsletters, printed reports, administration options and recommendations

**ECONorthwest**, investment strategies

**Michael Doubleday**, investment strategies

**Paladino Consulting**, administration findings and options

**Prospect Delta**, benchmarks and revenue findings, options, and recommendations



Unless otherwise noted, all photographs contributed by Dawson R. Murchison and Dennis Sellin, and taken in Washington state between March 2000 and September 2000.