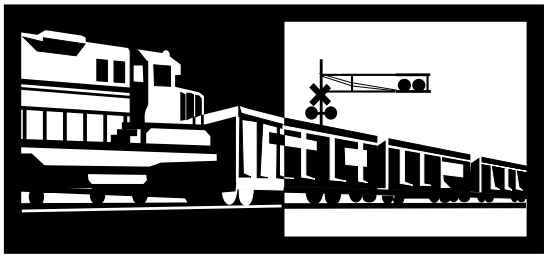
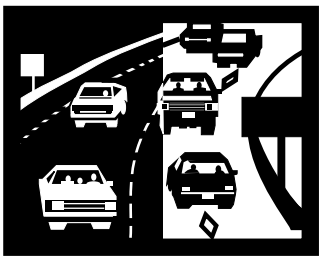
Washington's Transportation Plan

1997-2016





Washington State
Department of Transportation

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Introduction

Transportation affects everyone. Whether we are going to work, delivering products, or taking a vacation, all of us depend on a safe, efficient, reliable transportation system. It is a matter of life and livelihood. Our state's population has continued to grow — and so has the need to move people and freight. We need to make decisions about how we are going to improve our transportation system to cope with these demands. What will our state's transportation system look like in 20 years? This plan provides for our basic transportation needs.

Washington is moving forward into an era of new challenges and opportunities. With these challenges have come new directions and new ways to deal with increasing demands for governmental services, including transportation.

For example, several recently enacted state and federal laws directly affect the future of transportation in Washington:

- The state's Growth Management Act provides new tools for local governments to plan for growth and the transportation facilities to support that growth.
- The Clean Air Act mandates transportation efforts to ensure healthy air.
- The federal Intermodal Surface Transportation Efficiency Act (ISTEA) changes the way transportation decisions are made, giving state and local governments more flexibility to respond to their individual needs.

The Washington State Transportation Commission is meeting these future challenges by developing Washington's Transportation Plan 1997-2016. This plan addresses transportation facilities owned and operated by the state, including state highways, the Washington State Ferries, and state-owned airports. It also addresses facilities and services that the state does not own, but has an interest in, as they are vital to the entire transportation system. These include public transportation, freight rail, intercity passenger rail, marine ports and navigation, nonmotorized transportation, and aviation. This planning is being carried out in cooperation with local governments, regional agencies, and private transportation providers to ensure that Washington's transportation system provides convenient, reliable, safe, efficient, and seamless connections and services for all citizens.

What's In the Plan?

Washington's Transportation Plan (WTP) presents a sensible, 20-year vision for the state-owned and state-interest modes of transportation. In this introduction, you will find a summary of the following:

1. The needs identified in the plan,
2. Financially realistic targets set by the Transportation Commission, and
3. Responsibility for plan implementation.

1. The Plan Identifies Significant Needs

Taken together, the following chapters provide a comprehensive view of the transportation investments that are needed over the next 20 years to maintain our current systems, improve safety, provide mobility to a growing population, and keep our economy moving. These transportation "needs" are defined by "service objectives," or specific, desired outcomes for each mode of transportation. Each service objective is supported by one or more action strategies, or specific steps to be taken to achieve the service objectives. The action strategies can be state actions or actions by others. Further, the state action strategies can be either "investment" actions or "advocacy" actions. This structure of WTP is shown graphically in Figure 1 below.

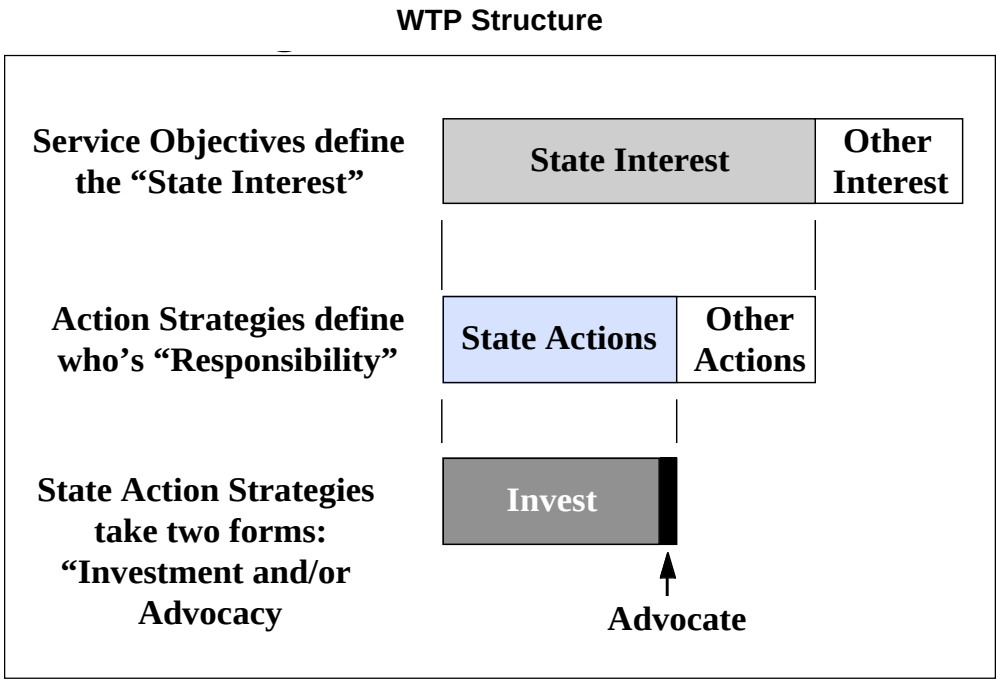


Figure 1

The cost to deliver the service objectives and action strategies over the next 20 years has been calculated. While the total needs identified would cost nearly $104 billion (see Table 1 and Figures 2a and 2b), transportation revenues over the same time period, at current rates, will generate only $46 billion. Meeting all identified needs would require transportation revenues to more than double. However, leaving transportation revenues at current rates would mean not having enough revenue over the next 20 years to preserve even current facilities and services.

TABLE 1

Washington's Transportation Plan (1997 - 2016)

(1995 Million Dollars)

Note: All figures rounded to the nearest million dollars

	Service Objective Needs	WTP Target	Funding the WTP Targets: State	Federal	Local	Private and Other
State Highways						
Maintenance	2,440	2,440		Current state, federal, and local amounts not determined for individual program areas.		
Traffic Operations	410	410				
Preservation	4,000	4,000				
Imp - Safety	2,000	2,000				
Imp - Econ Init	1,360	1,360				
Imp - Env Retro	790	790				
Imp - Mobility	14,490	6,140				
Total	25,490	17,140	11,540	5,600	0	0
County Roads	23,000	Needs are shown for comparative purposes only. The Commission did not establish WTP Targets for these areas.				
City Streets	12,300					
Private Vehicle Operations	Represents private costs of owning and operating motor vehicles					210,000
Ferries	Service objective costs under development.					
Maintenance and Operations		2,300				
Preservation		1,010				
Improvement		540				
Total	3,850	3,850	3,750	100		
State Airports						
Maintenance	1	1	1			
Preservation	Costs included in Maintenance above.					
Improvement	2	2	2			
Total	3	3	3			
Public Transportation						
Preservation	20,080	20,080	1,578	2,579	15,923	
Local Public Transit	16,939	16,939		1,016	15,923	
Paratransit	3,126	3,126	1,563	1,563		
State Public Transp. Program	15	15	15			
Education / Tech. Support	9	9	9			
Build. Partnerships / Plan.	11	11	11			
Improvement	9,157	5,848	879	166	4,803	
High Capacity Transit	4,595	4,595	400		4,195	
Local Public Transit	3,871	562		31	531	
Paratransit	347	347	135	135	77	
State Public Transp. Program	344	344	344			
Totals						
Local Public Transit	20,810	17,501	0	1,047	16,454	0
Paratransit	3,473	3,473	1,698	1,698	77	0
High Capacity Transit	4,595	4,595	400	0	4,195	0
State Public Transp. Program	379	379	379	0	0	0
Total	29,257	25,948	2,477	2,745	20,726	0
Intercity Passenger Rail						
Preserve Existing Service	507	507	193	135	20	159
System Completion	2,400	2,400	1,071	60	60	1,209
Total	2,907	2,907	1,263	195	80	1,368
Freight Rail						
Mainlines and Terminals	2,646	2,646	282	0	364	2,000
Branchline Preservation	501	501	201	0	0	300
Corridor Preservation	15	15	14	0	1	0
Total	3,162	3,162	497	0	365	2,300
Non-motorized						
Local Needs	1,600	1,600	0	0	1,600	0
State Advocacy	5	5	5	0	0	0
Total	1,605	1,605	5	0	1,600	0
Aviation						
General Aviation	267	267	96	131	40	0
Air Carrier	1,168	1,168	1	916	251	0
Aviation Safety	4	4	4	0		
Emergency Response	6	6	6	0	0	0
Regulation	4	4	4	0	0	0
Total	1,449	1,449	110	1,047	291	0
Marine Ports and Navigation						
Port and Other Costs	827	827		580	247	Unknown
State Advocacy	20	20	20			
Total	847	847	20	580	247	
Grand Total	103,870	56,911	19,666	10,267	23,309	213,668

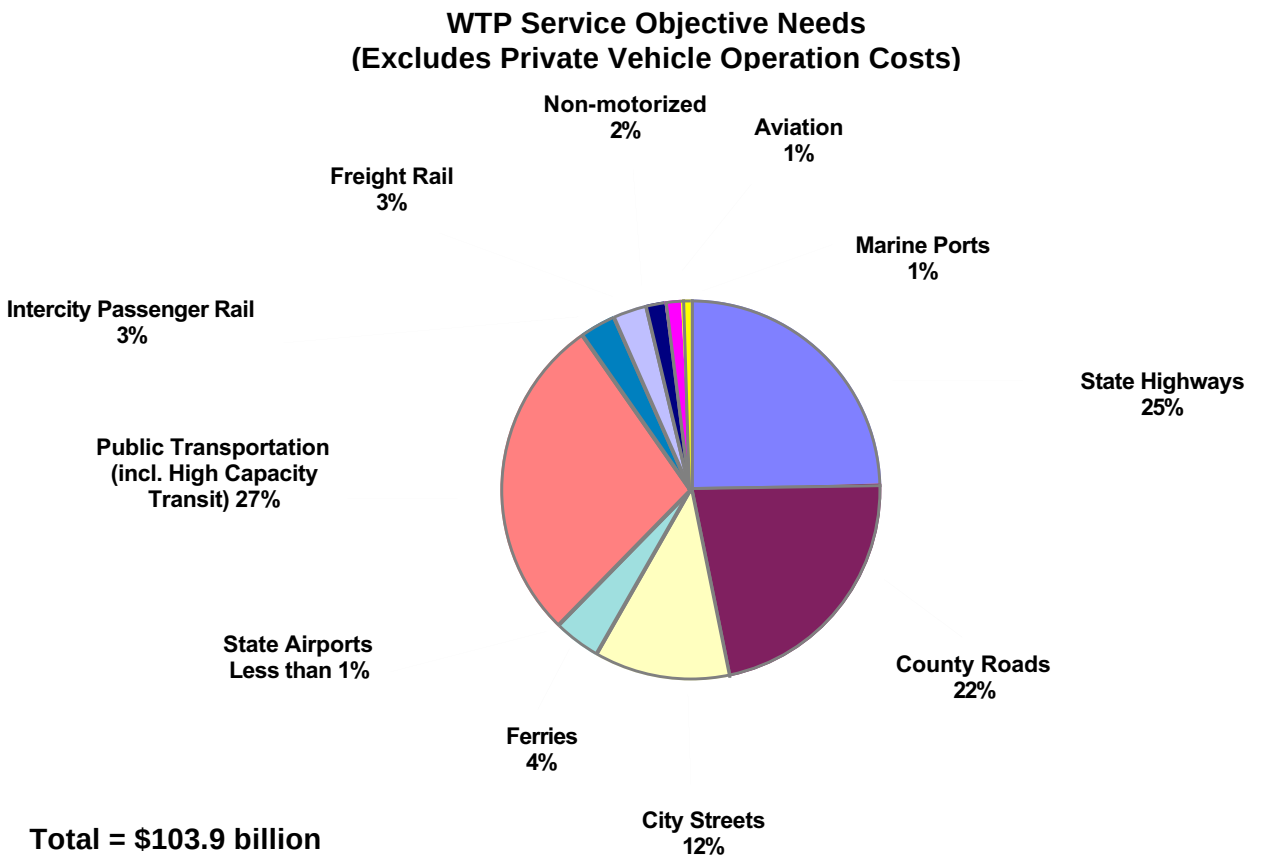


Figure 2a

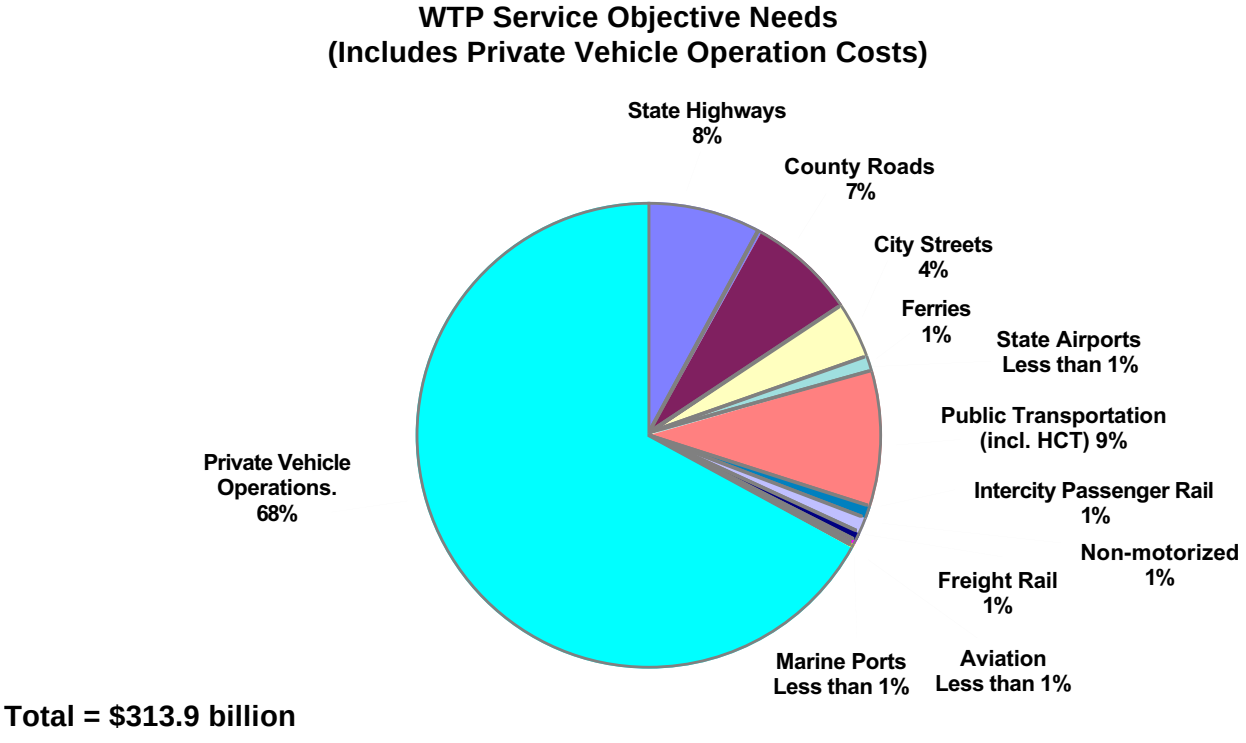


Figure 2b

For some modes of transportation, including intercity passenger rail and public transportation, the costs in this plan include the daily operation of rail and transit vehicles, as well as capital costs needed for track improvements, transit centers, and the purchase of buses and rail cars. For other modes, including highways and aviation, the costs in this plan include only capital costs for preserving and improving highway and aviation infrastructure, leaving out a large operations component. The cost of operating vehicles on highways over the life of the plan, including vehicle purchase, insurance, fuel, and maintenance totals more than $200 billion. It is significantly higher than the cost of needed highway capital investment as well as the combined capital and operations costs of rail and transit services.

2. The Plan Establishes Sensible 20-Year Targets

Faced with this funding shortfall dilemma, the Transportation Commission turned to the citizens of Washington in the fall of 1995. Over 7,000 Washingtonians, including some from each county, responded to a survey that asked for their priorities, and willingness to pay, for transportation improvements. Three strong messages emerged from the survey results:

A. Continue to take care of what we already have, improve safety, and meet our environmental responsibilities. Over 80 percent of survey respondents agreed with these investments as "top" priority.

B. Take a balanced approach to meeting the freight and people mobility needs of our growing state, recognizing that the "right solution" may vary by region of the state. Across the state, public transportation, high capacity transit, and intercity passenger rail were rated as high priority investments. Some regional priorities, such as additional ferry service in Kitsap County and support for expanded roadways in central and eastern Washington, emerged as an important part of the mix.

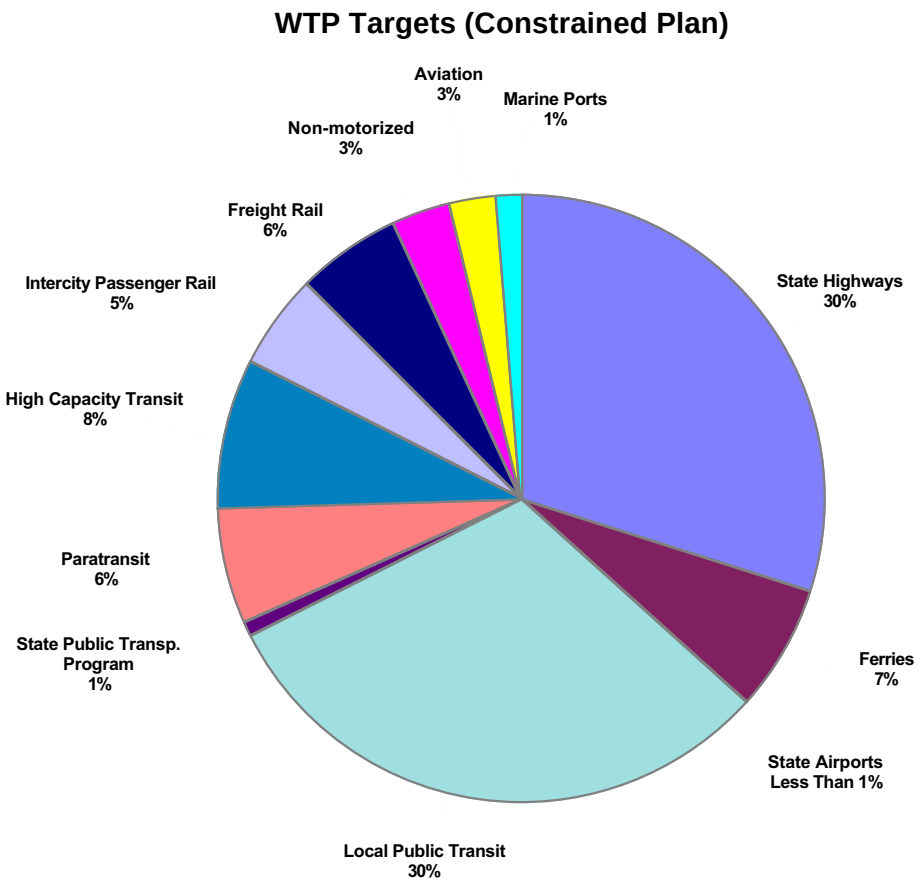
C. Increase transportation taxes to pay for these priority improvements. An overwhelming 76 percent supported either fully funding the plan or pegging transportation investment to keep up with inflation and growth. This was a high response considering that respondents knew how much the revenue scenarios would cost them individually. Only 7 percent of respondents supported keeping current transportation tax rates, which would mean that some existing transportation services would not be maintained.

Based on these survey results, the Transportation Commission assessed the proposed plan objectives and established 20-year funding targets for each mode and program. These targets are summarized in Tables 1 and 2 and in Figure 3. Two basic methods were used to set these targets:

1. For traditional transportation modes (i.e., highways, ferries, and public transportation), targets were set at levels that are consistent with long-term, historical expenditure trends.

2. For transportation modes where state public investment is relatively new (i.e., intercity passenger rail, high capacity transit, and freight rail), targets were based on achieving specific improvements. For example, the target

for intercity passenger rail will provide a mix of track, train, and operating improvements in the Pacific Northwest Rail Corridor that will significantly improve travel speeds and train reliability.



Total = $56.9 billion

Figure 3

*Note: • This plan does not include targets for city and county roads.
• Public transit includes operating costs that are not included for highways.
• Public transit includes mostly local funding.

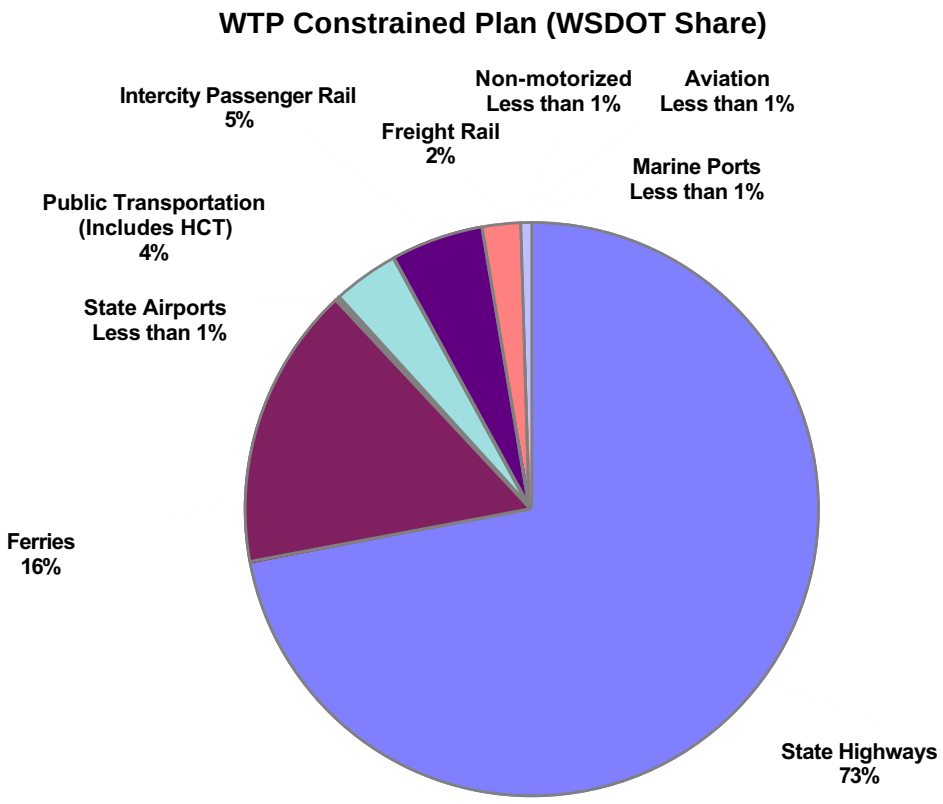
3. The Plan Identifies Responsibilities for Implementation

The state is not the sole provider of transportation services in Washington. Many transportation services are provided by local governments, the private sector, and the federal government. Services are provided through local transit, county roads and city streets, private railroads, commercial and general aviation services, and marine shipping lines. The plan recognizes and supports the important contributions of local governments, the private sector, and the federal government in providing these necessary transportation services. While the plan identifies a multimodal balance in transportation needs across the state (see Figure 2a), implementing the plan will largely be the responsibility of system owners. Table 2 and Figure 4 describe the WSDOT role in implementing the WTP service objectives. These figures reflect WSDOT's historical role in owning and operating the state highway and ferry systems, with an increasing role in supporting public transportation, rail services, and multimodal advocacy.

TABLE 2
WSDOT Share of WTP Targets
(1995 Million Dollars)

Note: All figures rounded to the nearest million dollars

	WTP Targets	WSDOT Share of WTP Targets (State and Fed. Funds)	Funded With Current Revenues	Increased Revenue Needed	Sources of Increased Revenue: State Funds	Sources of Increased Revenue: Federal Funds	Sources of Increased Revenue: Other Funds
State Highways							
Maintenance	2,440	2,440	Current revenue amounts not determined for these program areas.		State and federal amounts undetermined at this time.		0
Traffic Operations	410	410					0
Preservation	4,000	4,000					0
Imp - Safety	2,000	2,000					0
Imp - Econ Init	1,360	1,360					0
Imp - Env Retro	790	790					0
Imp - Mobility	6,140	6,140					0
Total	17,140	17,140	9,900	7,240	5,940	1,300	0
County Roads	Needs are shown for comparative purposes only. The Commission did not establish WTP Targets for these areas.						
City Streets							
Vehicle Operations	Represents private costs of owning and operating motor vehicles						
Ferries							
Maintenance and Operations	2,300	2,300	2,300	0	0	0	0
Preservation	1,010	1,010	1,010	0	0	0	0
Improvement	540	540	540	0	0	0	0
Total	3,850	3,850	3,850	0	0	0	0
State Airports							
Maintenance	1	1	1	0	0	0	0
Preservation	0	0	0	0	0	0	0
Improvement	2	2	0	2	2	0	0
Total	3	3	1	2	2	0	0
Public Transportation							
Preservation	20,080	15	Revenues not separated by program.	15	15	0	0
Education / Tech. Support	9	9		9	9	0	0
Buid. Partnerships / Plan.	11	11		11	11	0	0
Improvement	5,848	744		744	744	0	0
Baseline		138	138	0	0	0	0
Total	25,948	916	138	779	779	0	0
Intercity Passenger Rail							
Preserve Existing Service	507	193	193	0	0	0	0
System Completion	2,400	1,071	207	863	863	0	0
Total	2,907	1,263	400	863	863	0	0
Freight Rail							
Mainlines and Terminals	2,646	282	0	282	282	0	0
Branchline Preservation	501	201	10	191	191	0	0
Corridor Preservation	15	14	10	4	4	0	0
Total	3,162	497	20	477	477	0	0
Non-motorized							
Local Needs	1,600	0	0	0	0	0	0
State Advocacy	5	5	5	0	0	0	0
Total	1,605	5	5	0	0	0	0
Aviation							
General Aviation	267	96	76	20	20	0	0
Air Carrier	1,168	1	1	0	0	0	0
Aviation Safety	4	4	4	0	0	0	0
Emergency Response	6	6	6	0	0	0	0
Regulation	4	4	4	0	0	0	0
Total	1,449	110	90	20	20	0	0
Marine Ports and Navigation							
Port and Other Costs	827	0	0	0	0	0	0
State Advocacy	20	20	5	15	15	0	0
Total	847	20	5	15	15	0	0
Grand Total	56,911	23,805	14,409	9,396	8,096	1,300	0



Total = $23.8 billion

Figure 4

How Do We Achieve the Commission's Targets?

The Commission's targets for the WTP represent a realistic and achievable package of transportation services for the next 20 years. Like the last 20 years, achieving these targets requires regular increases in revenue sources. In total, state transportation programs will need an additional $9.4 billion over the next 20 years (in addition to $14.4 billion that will be available at current revenue rates) to meet the state action strategies laid out in the plan. For state highways alone, the target is $17.1 billion, while current revenue sources for state highways are projected at only $9.9 billion. This means that highway revenue source must increase about $7.2 billion over the next 20 years in order to fund the highway services proposed in this plan. In addition, local public transportation, city streets, and county roads will all require additional investments to meet the needs of our growing state. While meeting these needs seems daunting, it is important to look at the past to keep perspective. Over the last 20 years, transportation revenues have more than doubled as the state's population and economy grew. Keeping up with this historical growth rate will go along way toward meeting our 21st Century transportation needs.

The state legislature will make the final decision on the appropriate levels to fund the modes and programs within the WTP through biennial state budgets and other revenue authorizations. The plan provides a longer term context with which those shorter term revenue decisions can be made.

What's Next?

A Six-Year Implementation Plan

A Six-Year Implementation Plan for state actions is currently under development. This Six-Year Plan provides a multi-year framework for all state investment and advocacy actions which will be proposed in future agency budget requests. This Implementation Plan will be developed throughout 1996 and will form the foundation of WSDOT's 1997 budget request.

Legislative Debate on How Much to Fund

WTP and it's Six-Year Implementation Plan are adopted by the Transportation Commission. They represent the Commission's responsibilities under RCW 47.01 and RCW 47.06 to develop state transportation policy and plans for Washington. The state legislature will have an opportunity to review the WTP and determine appropriate levels of funding for each of the desired transportation services.

Regular Plan Updates

Washington's Transportation Plan 1997-2016, is financially constrained and reflects what realistically may be done within available revenues. It will be updated every two years to incorporate changing conditions and financial reality. The plan update cycle begins immediately after adoption. The Commission is expected to adopt the next plan in the fall of 1997.

Monitoring the Plan's Performance

The Washington State Department of Transportation (WSDOT) will continuously gather information about programs and projects implemented from this plan. This information will tell us how well the plan is being executed and the effectiveness of proposed strategies. Monitoring the plan's performance will also help identify new deficiencies for future plan updates.

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The Public Involvement Process

To guide and shape Washington's Transportation Plan 1997-2016, WSDOT completed an extensive public outreach process to ensure that future transportation plans meet the needs of our customers — the users of the system — now and into the future.

This plan is an unprecedented effort to identify, recognize, and respond to the diverse and changing transportation needs of Washington citizens. During the past two years, we have been out across the state seeking input from citizens on their ideas for the state's future transportation system. Traditional groups were represented as well as people who have never participated before. A summary of the plan was circulated to over 500,000 citizens across the state and over 7,000 of them responded to us through surveys, phone calls, attending meetings, via the Internet, and through letters.

Here is what we heard:

- Over 80 percent supported the Transportation Commission's emphasis to maintain, operate, and improve safety on current transportation systems.
- Over 70 percent of the respondents ranked more public transit and high capacity transit systems as a "top" or "high" priority to address the needs of a growing population.
- Likewise, over 65 percent of the respondents ranked High Occupancy Vehicle (HOV) lanes and intercity passenger rail service as either a "top" or "high" priority.
- Seventy-six percent of the respondents indicated support for either fully funding the plan or increasing transportation taxes to keep up with growth. Both of these funding options would require increases in current transportation revenues.

We are always interested in hearing from the citizens who use the transportation system. If you need more information or have questions, please call us at (360) 705-7962, or:

- Write us at:

  Washington State Department of Transportation
  Washington's Transportation Plan
  P.O. Box 47370
  Olympia, WA 98504-7370

For information on local projects in your area or to obtain additional copies of this plan, please call your WSDOT regional office.

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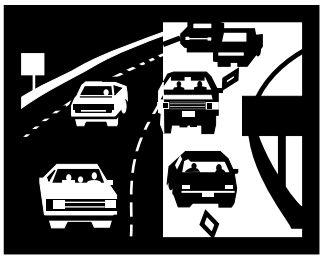
The State Highway System Plan



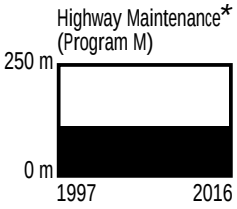
The State Highway System Plan is one element of Washington's Transportation Plan. It is important because it is the basis for the 1997-99 state transportation budget and the 1997-2003 six-year plan. Specifically, it provides service objectives and strategies for maintaining, operating, preserving, and improving our state highways.

Highway Programs

The following describes the major highway programs and sample action strategies.

Highway Maintenance (Program M)

Service Objective: Maintain state highways on a daily basis to ensure safe, reliable, and pleasant movement of people and goods.



20-Year Cost: $2.45 Billion
Plan Target: Fully fund over 20 years
20-Year Trend: The Maintenance Program remains relatively constant with a net increase of 3.5 percent over 20 years. It will decline slightly at the end of the first decade by fully meeting the Preservation Program lowest lifecycle paving strategy. The second decade will experience a small increase caused by overall growth of the highway system.

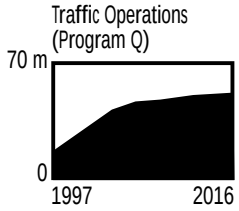
Specific components of this program include:

- **Providing Reliable Roadway Surfaces** — Patching potholes, filling cracks, and sealing asphalt or concrete surfaces reduces pavement deterioration.
- **Roadside Repair** — Repairing ditches, dikes, and slopes, as well as cleaning ditches, culverts, and other drainage structures to keep the roadway and adjacent property free of water runoff.
- **Vegetation** — Managing and maintaining 97,500 acres of vegetation adjacent to state highways through grass and brush control, litter removal, etc.
- **Structures** — Inspecting, repairing, and operating bridges.
- **Snow and Ice** — Plowing, sanding, deicing, and performing avalanche control to keep traffic moving safely during the winter season.
- **Traffic Signs, Signals, and Striping** — Maintaining and repairing lighting equipment, guardrails, signs, pavement markings, traffic signals, etc.
- **Rest Areas** — Cleaning and sanitizing restroom buildings, picking up litter, mowing lawns, routine maintenance, etc.

****Note:*** Icons represent the proposed 20-year expenditures in each program.

Traffic Operations (Program Q) (Formerly Transportation System Management)

Service Objective: Operate the highway transportation system safely and efficiently.



20-Year Cost: $410 Million
Plan Target: Fully fund over 20 years
20-Year Trend: The Q program is expected to grow approximately 50 percent over the next eight years as Traffic Management Centers are completed within the Central Puget Sound, Spokane, and Vancouver metropolitan areas. Upon completion, Q program costs are expected to be relatively constant over the ensuing 12 years. If fewer Improvement Program projects are completed, the need to address operational deficiencies will increase.

This program also provides the essential service of keeping traffic moving safely and efficiently. Personnel operate freeway flow control systems such as ramp meters, traffic signals, highway advisory radio, tunnel fire suppression ventilation systems, etc. Incident response crews and radio communications personnel coordinate with the Washington State Patrol and emergency services to clear traffic blockages, thus enhancing safety and transportation mobility.

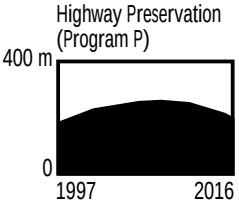
The Q Program also serves local constituents by addressing small cost safety improvements. These small investments (aside from routine maintenance) often represent the only improvements on state highways until a major Preservation or Improvement project occurs.

Efficiencies of travel time and fuel savings result from specially trained personnel who adjust timing and coordinate the 730 state-owned and operated traffic signals. This function is performed on a daily basis.

Traffic Operations is responsible for establishing statewide traffic standards, policies and signing programs for all of Washington State and its local roadways.

Highway Preservation (Program P)

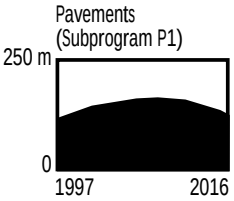
Service Objective: Preserve the highway infrastructure cost effectively to protect the public investment.



20-Year Cost: $4.00 Billion
Plan Target: Fully fund over 20 years
20-Year Trend: The P Program will decline over 20 years as pavements are resurfaced on a lowest life cycle cost schedule.

Whereas the Highway Maintenance and Traffic Operation Programs are concerned with daily safety and efficiency, the Highway Preservation Program focuses on the long-term health of the state highway system.

Pavements (Subprogram P1)

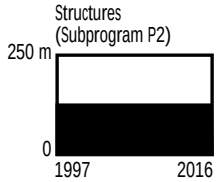


20-Year Cost: $2.33 Billion
Plan Target: Fully fund over 20 years

During the next 14 years, the Pavement Preservation Program will aggressively seek to catch up on pavement preservation and bring the highway system in line with the lowest life cycle cost schedule. Roadway and roadside safety is also

addressed through restoring and updating signing, guardrails, striping, drainage features, etc. Once lowest life cycle cost goals are achieved, the Pavement Preservation Program needs will decline accordingly.

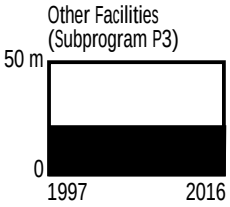
Structures (Subprogram P2)



20-Year Cost: $1.26 Billion
Plan Target: Fully fund over 20 years

This subprogram is designed to replace, retrofit, and renovate bridges and structures.

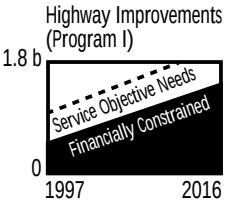
Other Facilities (Subprogram P3)



20-Year Cost: $420 Million
Plan Target: Fully fund over 20 years

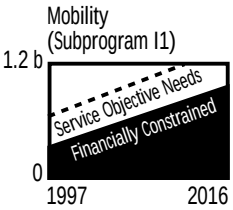
This subprogram is designed to stabilize known unstable slopes, such as potential landslide areas. The subprogram will also rebuild signals, construct truck weighing facilities, and refurbish safety rest areas to extend service life and improve safety. In addition, the program will provide funding for preservation of major drainage and electrical systems.

Highway Improvement (Program I)



Highway Improvement is the largest WSDOT program and is concerned with making the highway system work better. Its four subprograms are: Mobility, Highway Safety, Economic Initiatives, and Environmental Retrofit.

Mobility (Subprogram I1)



Service Objective: Improve mobility within congested corridors.

20-Year Cost: $15.1 Billion
Plan Target: Fund $6.14 Billion of 20-year needs

The Mobility subprogram consists of the following:

- **Puget Sound Core Freeway HOV Lanes** — The Puget Sound Core Freeway HOV Lane System will be fully completed. This commitment of $1.5 billion to the Puget Sound region represents a large part of the state's share of the high capacity transit (HCT) system under development in that region. Similar commitments in other urban regions (Clark, Thurston, and Spokane Counties) will be addressed as these areas more fully develop their HCT plans.
- **Urban and Rural Mobility Improvements** — Strives to maintain a Level of Service C on rural highways and a Level of Service D in urban areas. In urban areas, local and regional jurisdictions will cooperatively seek to mitigate congestion[1].
- **Access Control** — A cost-effective method for WSDOT to ensure the smooth flow of traffic on state highways as significant development and future traffic occurs.

[1]Mobility deficiencies in urban and rural areas of the state are funded based upon urban and rural designations of the Growth Management Boundary. Allocation of urban and rural Mobility funds to each region is based on a combination of the region's prorata share of the total Highway System Plan mobility deficiencies and targeting top mobility deficiencies throughout the state.

- **Urban Bicycle Connections** — Provides bicycle connections along or across state highways within urban growth areas to complete local bicycle networks.

Reaching Regional Consensus on Highway System Plan Mobility Improvements

Throughout 1994, the WSDOT Regional Planning Offices met with Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Organizations (RTPOs) to communicate the Transportation Commission's draft Program Trade-Off decisions. Working with affected MPOs and RTPOs, WSDOT reached consensus with the regions on the specific Mobility solutions to be included in the constrained final State Highway System Plan, which was used for the 1995-1997 biennium budget. Mobility strategies that are reasonably expected to be funded within available resources are listed in the Mobility Strategies appendix.

Programming Projects From the Systems Plan

Having reached agreement with the MPOs and RTPOs on the financially constrained solutions in the 20-Year State Highway System Plan, the state will continue to develop future biennial budgets from this list of improvements. The MPOs, RTPOs, and the state are each expected to include these mobility strategies in their respective transportation plans and to ensure local comprehensive plans do the same.

It is important to understand the basic mix of assumptions underlying the State Highway System Plan mobility solutions and trade-off decisions. These assumptions are as follows:

- Transportation demand management (such as encouraging people to take transit, walk, or carpool), traffic operations, access controls, and land use alternatives through the Growth Management Act are the first choices in meeting the mobility service objective. System expansion for single occupancy vehicles is a last resort strategy.
- The State Highway System Plan assumes some form of high capacity transit (such as commuter buses and rail) will be funded and in operation in the Central Puget Sound region and in Clark County in the next 20 years.
- Travel forecasts are based on projections of the trend line growth in travel, with consideration to the assumed effects of changing population (e.g., an aging population) and transportation demand management.

Public/Private Partnerships and Their Impact on the Mobility Subprogram

Currently, there are four potential public/private transportation proposals in Washington State:

- King County Park and Ride Capacity Enhancements,
- SR 522 Corridor Improvements,
- SR 16/Tacoma Narrows Bridge Improvements, and
- SR 520/Evergreen Point Floating Bridge Improvements.

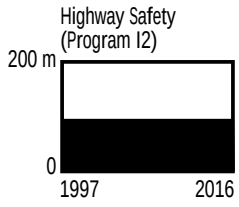
These Public/Private Partnerships require extensive public involvement and approval before they can be implemented. It is important to understand that without private funding, these projects may not be included in the financially constrained mobility list in future state highway system plans.

For more information, contact:

Jerry Ellis, Director
Transportation Economic Partnerships Division
P.O. Box 47395
2420 Bristol Court, SW, Building E, 2nd Floor
Olympia, WA 98504-7395
(360) 664-2900

Highway Safety (Subprogram I2)

Service Objective: Provide the safest possible highways within available resources.



20-Year Cost: $2.00 Billion
Plan Target: Fully fund over 20 years
20-Year Trend: Constant funding commitment to safety improvements.

WSDOT is aggressively pursuing this objective by targeting collision reduction and collision prevention improvements. Specifically, the Safety Program has the following two subcategories and their respective elements:

Collision Reduction[2]

- **High Accident Location** — Identifies short sections of highway (typically less than 0.25 miles) that exhibit accident rates above the statewide average for similar highways.
- **High Accident Corridors** — Identifies longer sections of highway (typically greater than 1 mile) that exhibit accident and severity rates above the statewide average.

[2]***Note:*** Collision Reduction strategies are targeted at highway corridors that have a history of a high rate of accidents and at High Accident Locations (HALS). HALS are typically spot locations that have a short history of accidents. Because of this, HALS cannot be forecasted in a 20-year plan and are programmed on a biennial basis. Therefore, specific improvements addressing HALS are not included in this plan.

- **Pedestrian Accident Locations** (PALS) and safe walking routes for school children are a part of the Reduction subcategory.

Collision Prevention

- **Risk Reduction** — Proactively identifies sections of highways that have a high probability of vehicles leaving the roadway.
- **Interstate Safety** — Provides funding for improvements on the Interstate system as defined by federal guidelines.
- **At-Grade Intersections** — Identifies intersections that have a high accident potential and recommends safety solutions such as interchanges and grade separations.
- **Signals and Channelizations** — Identifies high priority intersection improvements such as new traffic signals and added turn lanes.

In addition to these specific Improvement program subcategories, safety is an important element in the Maintenance, Preservation, Traffic Operations, Mobility, and Economic Initiative programs.

Achieving the safety objective cannot be done through highway investment alone. Vehicle manufacturers will have to continue their efforts to improve the safety of their vehicles. The Washington Traffic Safety Commission must continue to educate drivers about proper auto maintenance, safe driving, and the hazards of drunk driving. Finally, adequate enforcement by the Washington State Patrol and other law enforcement agencies is critical.

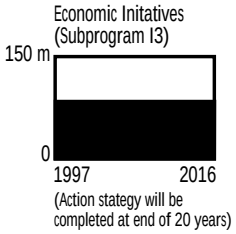
Economic Initiatives (Subprogram I3)

Service Objective: Support efficient and reliable freight movement on state highways.

Service Objective: Support tourism development and other Washington industries.

Service Objective: Preserve, restore, enhance, and maintain the heritage resources along scenic and recreational highways where appropriate, within state-owned rights of way and easements, and cooperatively with communities and interested parties* for heritage resources of state-interest outside state-owned rights of way, as identified in Corridor Management Plans.

Service Objective: Reinforce the state's competitive position in international trade.



20-Year Cost: $1.49 billion
Program Target: Fund $1.36 billion over 20 years
20-Year Trend: Constant funding commitment but completed in 20 years as the Trunk System is completed and the Freight and Goods Transportation System is improved.

*Interested Parties — Includes, but is not limited to cities, towns, counties, Tribes, Regional Transportation Planning Organizations, state and federal agencies, associations, special interest and corridor groups.

The following subcategories of the Economic Initiatives Program are fully funded at $1.28 billion:

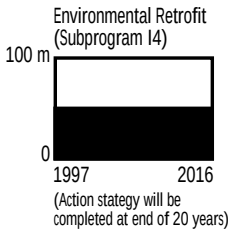
- **All-weather Highways** — Ensures rural highways on the Freight and Goods Transportation System are upgraded and are no longer subject to freeze-thaw restrictions.
- **Trunk System** — Completion of a four-lane, divided, statewide system of freight routes. The trunk system includes the Interstate System, SR 18, SR 395 between I-182 and I-90, and SR 12 between I-182 and SR 730.
- **Eliminate Bridge Restrictions** — Identifies and replaces state bridges that restrict the height or weight of freight movement on the Interstate system.
- **Border Crossings** — Highway improvements targeted at key international border crossings to improve the flow of products and people into and out of the state.

These components of the Economic Initiatives Program are partially funded:

- **Bicycle Touring Routes** — Rural highway bicycle touring loops are designated state highways that experience the most bicycling in the state. This program is designed to widen highway shoulders to a minimum of four feet along designated routes.
- **New Safety Rest Areas** — The construction of future safety rest areas will occur through partnerships and grant funding. Safety rest areas are targeted to occur within vicinity zones on the National Highway System and on Scenic and Recreational Highways.
- **Scenic and Recreational Highways (Byways)** — Projects that will achieve this service objective will be based upon grant and partnership funding that reflects statewide priorities and route specific needs. Innovative partnerships and the ability to leverage non-WSDOT funds are given priority consideration.

Environmental Retrofit (Subprogram I4)

Service Objective: Retrofit state highway facilities as appropriate to reduce existing environmental impacts.



20-Year Cost: $790 million
Plan Target: Fully fund over 20 years
20-Year Trend: Constant funding commitment to Environmental Retrofit needs but completed within 20 years.

The environmental retrofit objective is in response to currently unmitigated environmental impacts caused by the existing transportation system. It is critical to understand that the environmental retrofit program is in addition to WSDOT's commitment of performing appropriate environmental mitigation as a part of all other highway system projects.

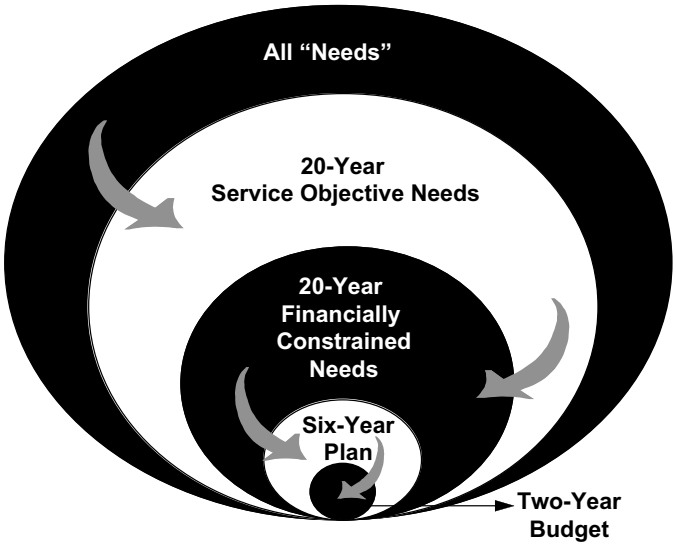
Specifically, the program focuses on:

- **Noise Walls** — Add noise mitigation along state highways where neighborhoods are exposed to unacceptable noise levels as defined by federal statute.
- **Fish Passage** — Targeting the removal of fish barriers along state highways. Based on benefit cost analysis, approximately 10 to 12 fish passage barriers are identified to be removed every two years.
- **Stormwater Discharge** — Reconstruct existing stormwater discharge facilities according to new state and federal requirements. WSDOT has surveyed over 1,000 miles of state highways and 2,932 outfalls in Spokane County, Clark County, and the Puget Sound region. Nearly 400 outfalls have been designated as a top priority for retrofitting. Future State Highway System Plans will include stormwater retrofit needs on the Olympic Peninsula.
- **Statewide Implementation Plan (SIP) for Air Quality** — WSDOT is committed to implement all transportation control measures as identified in this plan. Currently, there are no transportation control measures specifically identified in either the SIP or the State Highway System Plan, but air quality programs will continue to be monitored and projects will be included as needed.
- **Construct All System Improvements With No Net Loss of Wetlands** — WSDOT is committed to this as a continuous responsibility of the agency.

Transportation Needs and the Commission's Highway System Plan

The Transportation Commission is the policy making body for WSDOT. The Transportation Commission has adopted ten service objectives and 51 action strategies describing the services that should be provided by the State Highway System Plan. These define the state's highway "needs." The cost to achieve these objectives over 20 years exceeds $26 billion, while revenues over the same period were originally projected at $18.1 billion. Newer trends show revenues may be closer to $17.1 billion over 20 years. Given the disparity between needs and revenues, the State Highway System Plan is prioritized and constrained to a financial level that can reasonably be expected over the next 20 years.

Financially Constrained Planning



Potential revenues over 20 years may not be enough to fund even the reduced level of service objective needs. Therefore, priorities are established to further limit service objective needs to a financially realistic level. Washington's Transportation Plan proposes strategies and actions over 20 years within this financially realistic level. Finally, a two-year budget and six-year plan are proposed to advance the most important projects contained in the 20-year plan. These projects are chosen through the priority programming process.

Summary of Trade-Off Decisions

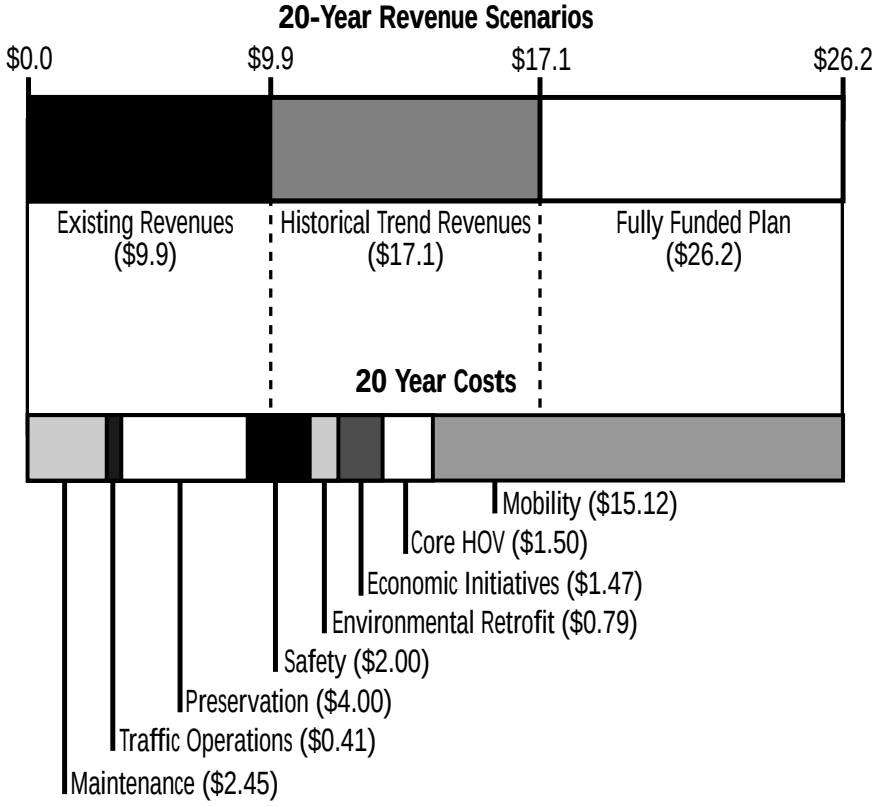
Based on the limited projected revenues in comparison to transportation needs, the Transportation Commission made the following trade-off decisions:

1. Maintenance, operation, and preservation activities are a top priority.
2. Environmental Retrofit, Economic Initiatives, Core HOV, and Safety Improvement service objectives are to be fully met.
3. Because of limited revenues, only about 40 percent of the Mobility service objectives are met.

By fully funding the Maintenance, Traffic Operations, and Preservation Programs, this effectively causes long-term shortfalls to occur in the Improvement Program. However, future biennial reductions in Maintenance, Traffic Operations, and/or Preservation may occur to meet emergent Improvement Program needs. Because the Maintenance, Traffic Operations, and Preservation Programs are on a lowest life cycle cost basis, short-term reductions in these programs would result in increased long-term 20-year costs to achieve the Maintenance, Traffic Operations, and Preservation service objectives.

These trade-off decisions clearly communicate that the majority of system expansion program needs are beyond reasonably expected revenues over the next 20 years. Increasing growth management, demand management, and other innovative strategies are essential to addressing state highway deficiencies.

State Highway System Plan Trade-Off Decisions
(1995 Billion Dollars)



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The State Ferry System

The state ferry system operates 25 vessels on Puget Sound which carry more that 21 million passengers and 9 million vehicles a year. The system includes 20 terminals on 11 Puget Sound routes. It is the nation's largest ferry system and Washington's number one tourist attraction. Tourists, however, account for only about one-third of the passengers.

Ferry ridership is growing at about 5 percent a year (see Figure 5).

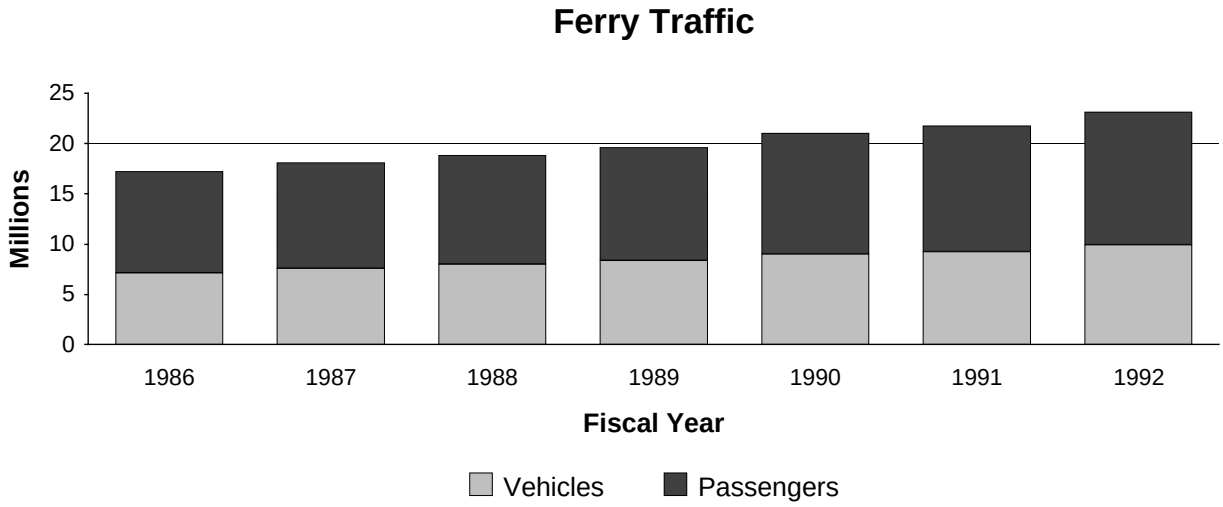


Figure 5

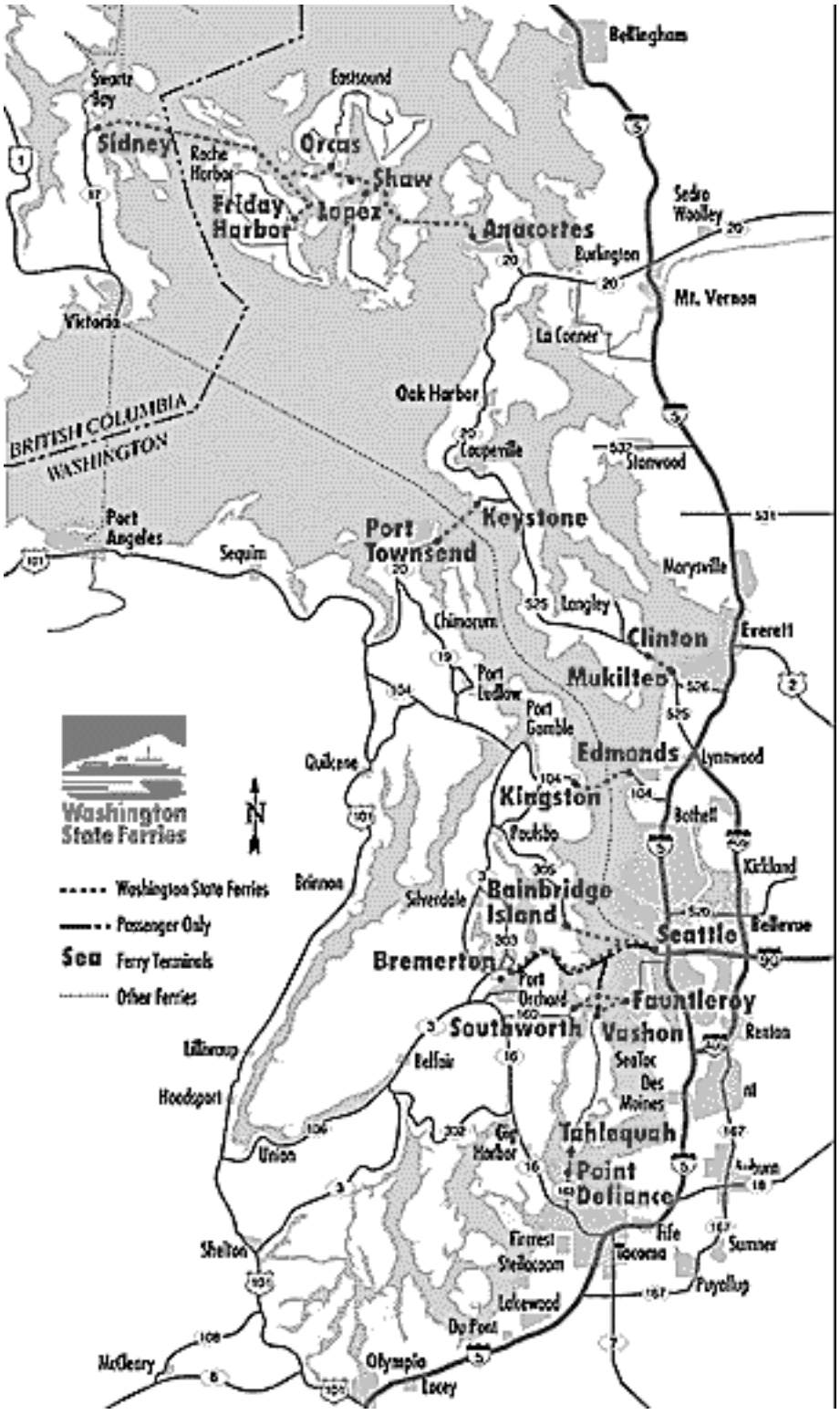
Service Objectives

The ferry system maintenance service objectives call for vessels and terminals to be well-maintained for the safety, pleasure, and convenience of ferry customers and to keep them running on time. The objectives are also intended to meet Coast Guard regulations through regular preventive maintenance practices.

Ferry preservation service objectives recognize that facility service life can be extended through major refurbishment. The objectives call for vessels and terminals to be refurbished or replaced, whichever is cost effective.

For ferry system improvements, the fleet will be sized to accommodate pedestrians, bicycles, and registered HOVs on every sailing. Also, daily freight traffic will be accommodated on each route, but not necessarily on each sailing. Lastly, 1987 volume/capacity levels will be maintained for all other vehicles. Passenger-only ferry service will be increased to reduce vehicle travel into urban centers.

A new method of measuring level of service on the ferry system, which records customer delay, has been developed. The ferry system service objectives will be updated in 1996 to reflect this improved method.



This draft map is provided for illustrative purposes only and should not be relied upon for detailed information. For more specific information or to obtain a color version of this map, please contact the WSDOT Planning Office at (360) 705-7962.

Ferry Maintenance

- Provide the traveler with clean, reliable, and pleasant facilities at terminals and onboard vessels.
- Keep ferries running on schedule.

Ferry Preservation

- Refurbish terminals, when cost effective, to extend their service life.
- Refurbish vessels, when cost effective, to extend their service life.

Ferry Improvement

- Maintain 1987 volume/capacity levels for vehicles on all routes.
- Accommodate over height vehicle demand (height greater than 7 feet 6 inches) on a daily basis.
- Accommodate all pedestrians, bicyclists, and registered HOVs on each sailing.
- Improve passenger ferry service to reduce single occupancy vehicle travel to urban centers.

The Plan for State Ferries

The Commission Selected a 20-Year Revenue Scenario of Existing Revenues

The cost to achieve the above service objectives exceeds $4 billion (in 1993 dollars) over the next 20 years. “Existing revenues” are defined to be those tax sources currently authorized by the legislature. The Commission can directly increase ferry tariffs within these authorized limits. Tariffs will need to be increased in order to meet the ferry system service objectives. Existing revenue sources will provide about $3.75 billion over 20 years.

Ferry Maintenance, Preservation, and Some Improvements Are Funded

Maintenance and preservation needs for vessels and terminals will cost about $3.3 billion over the next 20 years. Existing revenue sources are sufficient to meet these needs. There is sufficient remaining revenue to complete construction of three new Jumbo Class ferries. Also, this plan envisions expansion of the Passenger-Only Ferry Program which calls for increased frequency of service and new service across Puget Sound. This will include new service between Southworth and Seattle and between Kingston and Seattle. This will also include expanded service between Vashon and Seattle and between Bremerton and Seattle. However, revenues will need to be increased over the “existing revenues” level in order to accomplish this.

State Ferry System Improvements Beyond 2001 Are Not Identified

This plan does not include vehicle vessel capacity improvements after completion of the Jumbo Class ferries. Because of this, the Commission is embarking on a Long-Range Ferry Plan to develop ferry capacity needs beyond 2001. This plan will be complete in early 1996.

The State Airport System

WSDOT manages 16 airports across the state. These airports serve as staging areas for search and rescue operations and provide emergency landing sites for aircraft in distress. These are also used extensively by recreational pilots who will contribute to the economies of local communities. The use of state airports has been increasing at a rate of 3 to 5 percent a year.

Service Objectives

To keep airports in safe operating condition, the service objectives call for maintenance to keep runways smooth and free of obstructions, and to keep lighting and navigational equipment functional.

Airport preservation activities will refurbish airports through resurfacing runways, replacing lighting aids, upgrading equipment with new technology, and removal of flight critical hazards and obstacles.

Improvements to state airports may include paving unpaved runways and upgrading lighting and auxiliary facilities to improve safety and effectiveness in bad weather, and to extend the usefulness of these airports in the fall and winter. Also, several airports around the state are threatened with closure by incompatible land uses, environmental pressures, and higher operating and liability costs. The service objectives propose assisting local agencies in acquiring these airports or locating suitable replacements.

Airport Maintenance

- Maintain and improve state-owned airport facilities in safe and efficient conditions.

Airport Preservation

- Refurbish airport facilities when cost effective.

Airport Improvement

- Improve state-owned airports in accordance with needs detailed in the Washington State Airport System Plan.
- Provide technical assistance to local agencies in protecting airports threatened by incompatible land uses. Acquire or assist with relocation of essential airports threatened with closure.

The Plan for State-Owned Airports

The Commission Selected a 20-Year Historical Trend Line Revenue Scenario

The Commission selected a revenue scenario for state-owned airports that would be equivalent to historical revenue increases. This will provide approximately $1.1 million over the next 20 years. However, this is only enough to meet the maintenance and preservation service objectives listed above.

There Is Not Enough Revenue to Meet Improvement Needs

Adopting this revenue scenario means that no funds will be available to meet the improvement service objectives. In an effort to remedy the lack of improvement funds, the Aviation Division will divert 10 percent of the local airport aid program to the improvement of our state-owned airports. This will contribute about $2.19 million additional dollars for improvements bringing the total amount for state-owned airports to $3.29 million. These improvements are included in the Washington State Continuous Airport Systems Plan (WSCASP) which addresses all significant airports in the state.

The Commission recognizes that state-owned airports are not heavily used commercial or general aviation airports and that they generally function as emergency landing strips. However, in recent years, prohibitive aircraft liability costs have dropped causing a significant increase in general aviation activity. This increased activity has increased the scope of state-owned airports to include recreational use as well as emergency need. The improvement of the state-owned airport system is necessary as the needs are great. Therefore, this plan proposes that state-owned airports be improved, maintained, and preserved.

The Public Transportation System

In Washington, public transportation passenger trips have been on a steady increase (see Figure 6). This increase is the result of population growth, the addition of three new transit systems since 1987, and the major annexations to transit system areas in Whatcom, Kitsap, Thurston, and Island Counties.

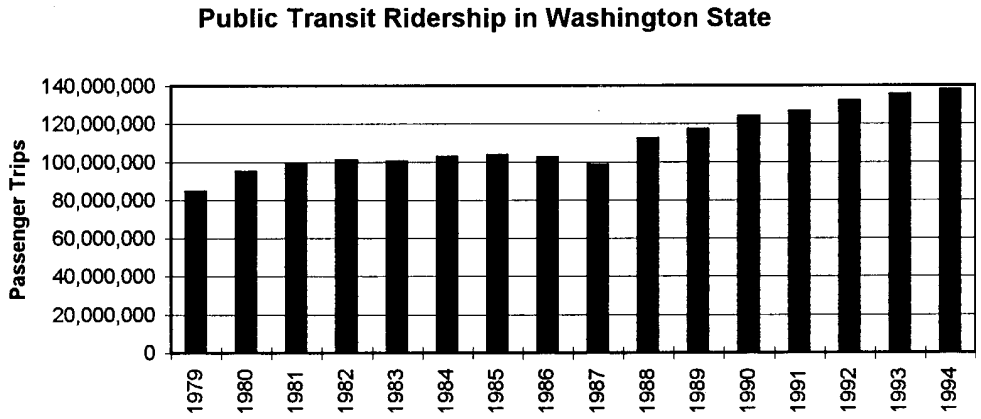


Figure 6

There are 24 public transit authorities in Washington State. In 1994, the transit service area population totaled 4,442,895 people. This means that 83.3 percent of Washington's citizens reside within the boundaries of a public transit provider. (See map of Public Transportation Benefit Areas.) The majority of transit agencies provide fixed route, demand response (including Americans with Disabilities Act (ADA) service), vanpool and ridesharing services and programs, and park and ride facilities. In 1994, approximately 138 million passenger trips and over 94 million revenue service miles were provided as part of fixed route and demand response services in urban and rural areas and through vanpool programs (see Figure 6). Many passengers make some form of intermodal connection between services operated by another provider or other modes.

High Capacity Transportation (HCT) is currently under development in the state. HCT systems are being planned for the three most populous and transportation congested areas of the state. The Regional Transit Authority (RTA) is planning a comprehensive system for the Puget Sound region. An extension of Portland's MAX system to Vancouver is under development by 14 jurisdictions in two states, including C-TRAN, the transit provider in Clark County. Furthermore, a high capacity transportation system is in the early planning stages in Spokane.

Currently, there are 270 state park and ride lots with a total of 30,654 spaces. During the 20-year planning period, it is estimated that at least 9,800 additional spaces, provided by new and expanded lots, will be needed. This estimate excludes the need for park and ride lots in urban areas, where it is anticipated they will be constructed and financed as part of high capacity transportation projects.

Paratransit service (i.e., specialized services for persons with disabilities, seniors, and the economically disadvantaged) is offered statewide via a variety of state, regional, and local programs. Several transit agencies operate and provide funding for paratransit service. The Department of Social and Health Services (DSHS) administers multiple transportation programs, the largest being the Medical Assistance Program. Numerous community-based paratransit services are also available and are sponsored by DSHS and local community programs.

Several private intercity bus carriers serve Washington, including Bassett Bus Lines, Borderline Stage, Gray Line of Seattle, Greyhound Lines, Link Transportation, Olympic Bus Lines, Quick Shuttle, Northwestern Trailways, Trailways Northwest, and Wheatland Express.

Public Transportation Issues

As part of the state public transportation planning process, which includes input from the Public Transportation Advisory Committee, several significant transportation issues have been identified:

- Agency Coordination
- Rural Mobility and Statewide Accessibility
- Linkage Between Land Use and Public Transportation
- Development of High Capacity Transit
- Consistent Reporting
- Compliance With Legislation
- Meeting Economic Development, Environmental, and Congestion Relief Goals
- Development of Multimodal Choices and Intermodal Connections

Public Transportation Defined

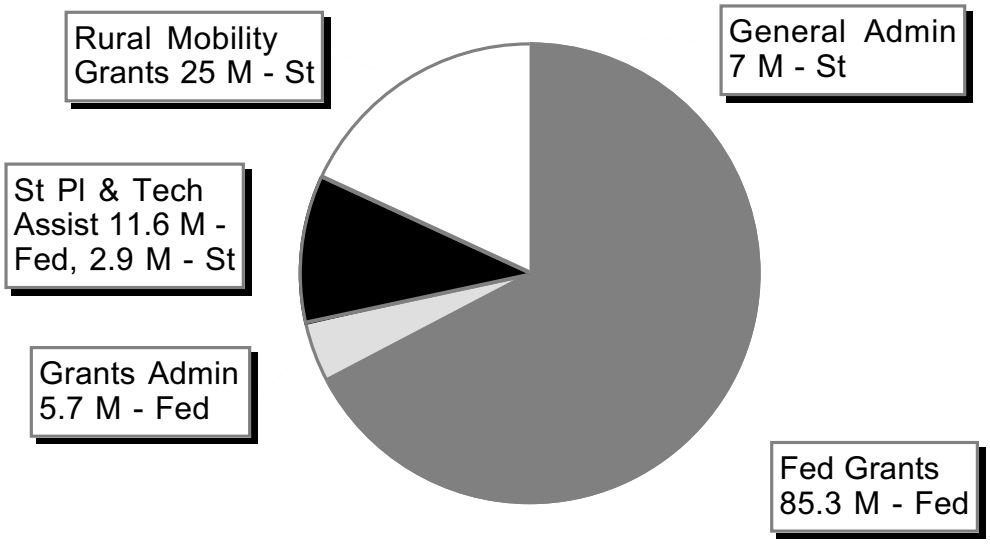
The state transportation policy planning process has defined and approved six broad areas of transportation policy and 23 public transportation policy statements. In the most comprehensive context, it has defined “public transportation” as:

> A publicly supported system of services and facilities that provides an alternative to the single occupant automobile and enhances mobility, environmental quality, and appropriate land use patterns. Such systems may include any combination of services, facilities, and infrastructure related to transit, paratransit, ridesharing, intercity bus, airport shuttles, passenger rail, ferries, pupil transportation, high capacity transit, transportation demand management, people movers, bicycle and pedestrian programs.

WSDOT Public Transportation Program Baseline Cost = $137.5 M ($102.6 M federal, $34.9 M state)

WSDOT's baseline budget supports the following Public Transportation Office activities: statewide planning; data collection; reporting; technical assistance to local agencies consisting of training, site visits, peer reviews, and program/project development; and grants to local and regional agencies. Grants that are provided to small urban and rural areas include the State Rural Mobility Grant Program (operating and capital) and the Federal Transit Administration's (FTA) Section 5311 and Section 5310 (operating and capital) grant programs. The majority of the grantees are nonprofit social service agencies and/or providers. Furthermore, FTA Section 5303 planning grants are given to metropolitan planning organizations on an annual basis.

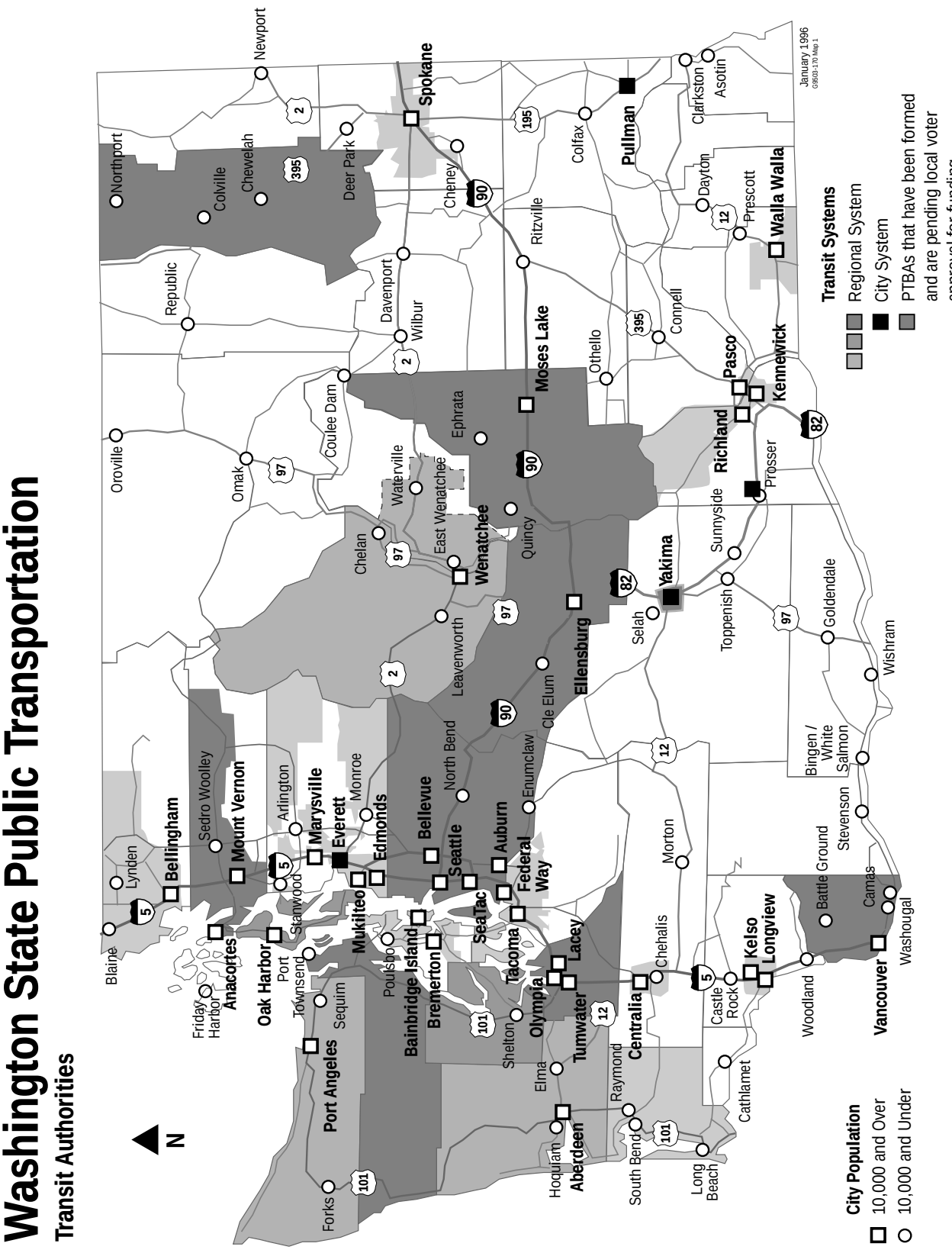
Public Transportation 20-Year Baseline Budget



Objectives, and Strategies to Address Deficiencies

The Public Transportation element of the WTP has as its major focus those services, facilities, and programs related to public transit, high capacity transportation, intercity bus, paratransit, vanpools/ridesharing via HOV lanes, and park and ride lots, and their connections to each other, ferries, passenger rail, airports, and nonmotorized transportation. The 12 Public Transportation Service Objectives developed for the Public Transportation element define "state interest" in the broadest sense. The state is interested in all of public transportation, including those services and programs operated at the state, local, and private sector levels.

The majority of public transportation is provided locally, and while travel within individual service areas may be excellent, travel between other systems and modes, both within broader regions or across the state, are often difficult. Improvements need to be made in connectivity (travel between other systems



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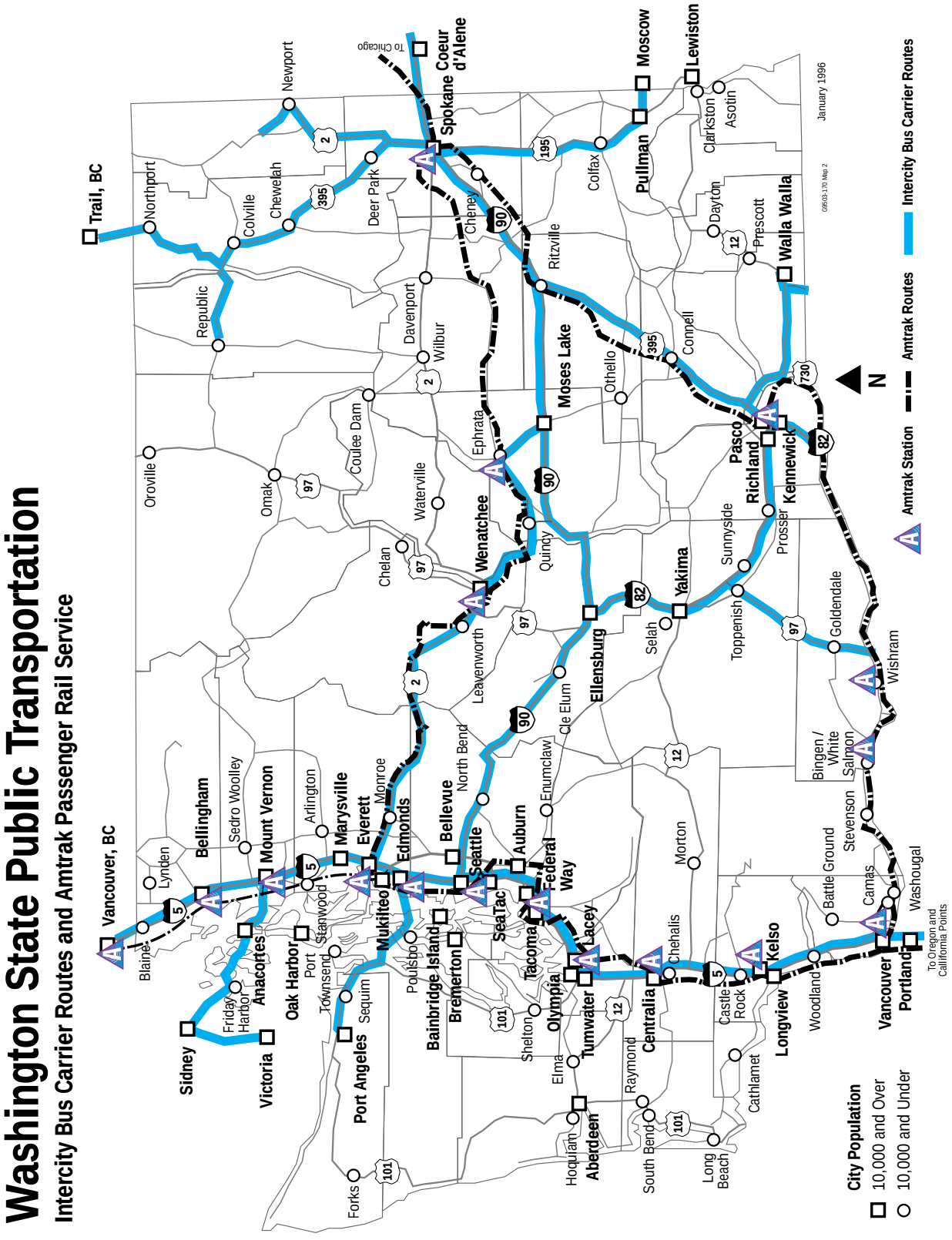

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and modes), rural mobility, and geographical accessibility. Public transportation also has a key role in solving environmental problems (e.g., diminishing air quality) and reducing congestion by the implementation of increased transit, HCT, HOV lanes, and TDM.

The action strategies clarify WSDOT's responsibility for addressing deficiencies and achieving the public transportation service objectives. An investment in the public transportation action strategies would broaden the role of the Public Transportation Office. When implemented, some strategies would allow for a stronger advocacy role for public transportation in the department. The investment strategies would expand the existing and add new state grant programs. The service objectives will also be achieved through actions of other state agencies and local and private public transportation providers.

The objectives for Public Transportation and WSDOT action strategies (A.S.) consist of the following:

Preservation

1. Preserve existing public transportation service levels. Cost = $17,296.92 M ($14,161.2 transit, $3,126 DSHS, and $9.72 WSDOT A.S.)

Advocacy — 1A. Develop a tool for measuring access levels for public transportation in urban and rural areas.

Advocacy — 1B. Ensure adequate funding by enabling local governments to impose local taxes for public transportation services.

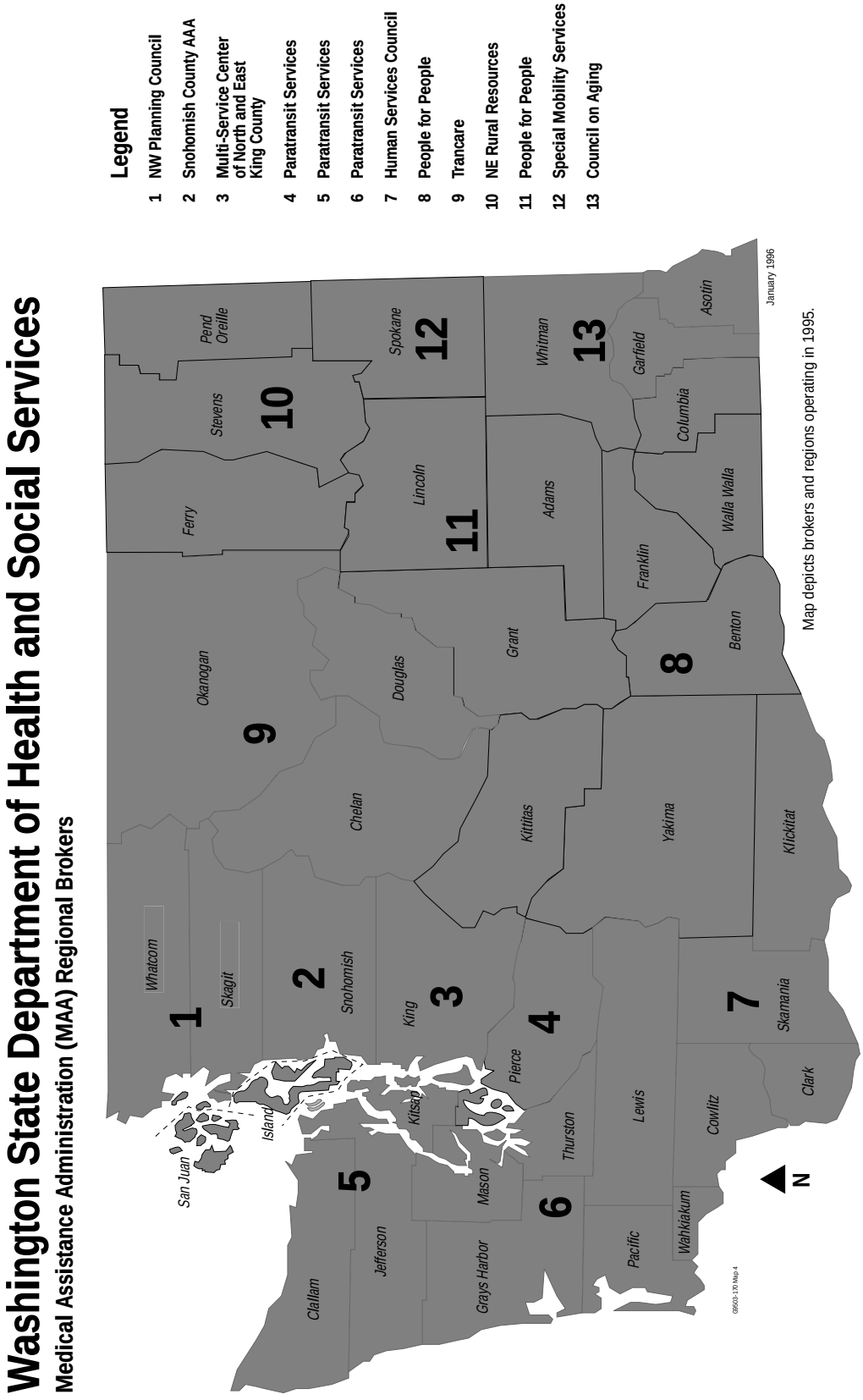
Investment — 1C. Develop a Contingency Assistance Grant Program.

2. Preserve existing public transportation facilities and equipment. Cost = $2,782.8 M ($2,778 transit, $4.8 WSDOT A.S.)

Advocacy — 2A. Establish the Public Transportation Facilities and Equipment Management System (PTMS) and develop guidelines for implementation in coordination with regional transportation planning agencies and transit providers.

Investment — 2B. Preserve corridors that can be used for public transportation purposes such as abandoned railroad tracks and rights of way.

Total Preservation Cost = $20,079.72 M ($14.52 M WSDOT A.S., $20,065.20 others)



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Education and Technical Support

3. Implement state-of-the-art public transportation management to ensure efficient and effective service delivery.
Cost = $2.35 M (all WSDOT A.S.)

Advocacy — 3A. Establish ongoing technical support programs and resources to assist providers, especially small urban and rural systems, and a transportation training program.

4. Promote the use of public transportation.
Cost = $6.49 M (all WSDOT A.S.)

Advocacy — 4A. Develop and implement a public involvement plan for the state public transportation planning program.

Advocacy — 4B. Develop and implement a public education plan for statewide public transportation.

Advocacy — 4C. Provide increased financial support for the Public Transportation Conference to facilitate technical assistance, public involvement, and education.

Investment — 4D. Implement a study/demonstration project which would provide operational and scheduling information for travelers making multimodal, cross jurisdictional trips.

Total Education and Technical Support Cost = $8.84 M (all WSDOT A.S.)

Building Partnerships and Planning

5. Build partnerships between federal, state, regional, local, and private sector public transportation entities to improve public transportation planning and coordinate service delivery.
Cost = $6.60 M (all WSDOT A.S.)

Advocacy — 5A. Create an interagency transportation council and planning process to define public transportation roles and responsibilities for state agencies with a particular emphasis on developing coordination opportunities and supporting legislation.

Advocacy — 5B. Evaluate the feasibility of transferring the funding and administration of the DSHS Medicaid transportation programs to WSDOT, develop a work program, and implementation plan.

Advocacy — 5C. Conduct a survey of airport accessibility by public transportation.

Advocacy — 5D. Expand the existing transit reporting system to achieve consistent reporting from all public transportation providers.

Investment — 5E. Continue a grant program to provide assistance for local public transportation planning and WSDOT required reporting.

6. Address state public transportation policy in regional and local transportation plans.
Cost = $3.97 M (all WSDOT A.S.)

Advocacy — 6A. Update the State Public Transportation and Intercity Rail Passenger Plan and maintain a planning program that defines the state interest in public transportation and provides ongoing policy to local and regional planning agencies and public transportation providers.

Advocacy — 6B. Create an inter-jurisdictional planning process to develop a multimodal performance review program to assist local jurisdictions in developing their local public transportation systems.

7. Facilitate the integration of public transportation in the land use development process, including the permitting and environmental impact processes.
Cost = $.26 M (all WSDOT A.S.)

Advocacy — 7A. Survey current environmental review and comment practices by public transportation agencies, make recommendations for involvement, and provide guidance for local and regional planning agencies to use in project approval. Seek legislative remedies if found necessary.

Total Building Partnerships and Planning Cost = $10.83 M (all WSDOT A.S.)

Improvement

8. Promote the development of some form of public transportation service in all areas of Washington State for use by the general public. Cost = $0 (all WSDOT A.S.)

Advocacy — 8A. Continue to pursue PTBA formation statewide.

9. Integrate public transportation services into a coordinated system linked by intermodal facilities. Cost = $105.5 M (all WSDOT A.S.)

Advocacy — 9A. Identify a statewide intercity, multimodal public transportation network linked by intermodal facilities.

Advocacy — 9B. Conduct a demand survey and analysis for intercity, multimodal public transportation services, define any deficiencies, and determine costs. Prepare a feasibility study regarding the ability to provide financial assistance for capital support for private intercity bus carriers.

Investment — 9C. Establish a competitive capital grant program for funding preliminary design, land acquisition, and construction/rehabilitation of intermodal transportation facilities and support equipment.

Investment — 9D. Coordinate the development of feeder bus services to serve the new intercity passenger rail system.

10. Improve mobility in small urban and rural areas. Cost = $220.38 M ($115.1 transit, $105.28 WSDOT A.S.)

Advocacy — 10A. Forecast demand for public transportation services in small urban and rural areas, identify deficiencies and propose solutions, and monitor demand every four years.

Advocacy — 10B. Assist public transportation providers in coordinating public transportation service in rural areas by supporting multimodal coordination and planning through Regional Transportation Planning Organizations (RTPOs).

Investment — 10C. Continue the competitive Rural Mobility Grant Program.

11. Public transportation providers will continue to meet ADA and state barrier-free design regulations and improve mobility for the special needs population.
Cost = $357.92 M ($270 DSHS, $77 local paratransit, and $10.92 WSDOT A.S.)

Advocacy — 11A. Review ADA plans submitted by the transit agencies, survey plan implementation status, and assess any deficiencies.

Advocacy — 11B. Coordinate the development of uniform ADA eligibility criteria to be used by transit providers statewide.

Advocacy — 11C. Conduct a Special Needs and ADA Passenger Study: Washington State Trends. This study would identify any impacts that ADA implementation has had on non-ADA eligible individuals with special needs.

Investment — 11D. Establish an ADA Public Transit Implementation Grant Program for small urban and rural public transit agencies.

12. Improve and develop urban public transportation services, facilities, and programs, including as options HCT, HOV lanes, and Transportation Demand Management (TDM), to respond to growth, and to meet local and regional economic development, congestion, energy, and clean air objectives.
Cost = $8,472.73 M ($3,717 transit, $4,195 HCT, $38 park and ride lots, and $522.73 WSDOT A.S.)

Investment — 12A. Develop operating and information systems demonstration projects that encourage the use of new technologies.

Investment — 12B. Develop and implement a statewide plan and grant program for TDM.

Investment — 12C. Continue investment in HCT. Leverage federal and local sources with funds from the High Capacity Transportation Account (HCTA) leading to the implementation of HCT in Washington State.

Total Improvement Cost = $9,156.53 M ($744.43 M WSDOT, $8,412.1 M others)

Costs

The Statewide Public Transportation Needs Assessment, reported to the Transportation Commission in June 1994, has been updated for this planning time frame. Needs have been determined in five public transportation categories: transit, paratransit, high capacity transit, state park and ride lots, and state responsibility action strategies for the 20-year period.

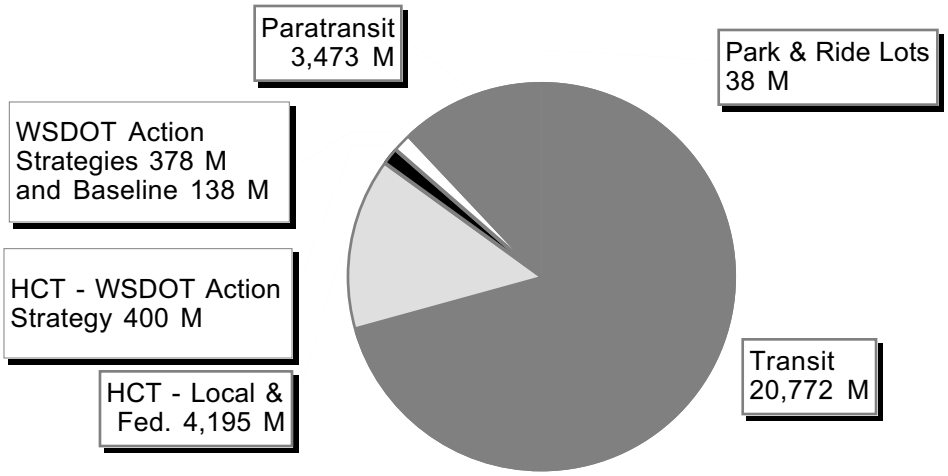
Public transportation needs for the planning period total $29.4 billion. This includes administration, which is estimated to be 10.65 percent of total cost and the Public Transportation Office baseline budget. Using historical trend lines, revenues are projected at $21.1 billion. This results in an unfunded need of approximately $8.3 billion for the 20-year period.

Of the total needs of $29.4 billion, transit accounts for $20.8 billion. If historical revenue trends continue, 84 percent of transit needs will be funded, leaving an unfunded need of $3.3 billion. Paratransit needs totals $3,473 M. DSHS needs, 98 percent of the total cost of paratransit, are projected as funded. The remaining unfunded needs are $77 million for the 20-year planning period. WSDOT actions strategies are less well funded, with revenues projected at $25 million.

High capacity transit needs are $4.59 billion which includes the $400 M HCT action strategy. Presently, revenues have been identified in the amount of $153 million. This results in an unfunded need of $4.44 billion, or almost 97 percent of the program. While the needs for park and ride lots are orders of magnitude smaller, at $38 million, no revenues are currently identified for them.

The costs for the entire WSDOT Public Transportation program including HCT and TDM are summarized below.

Public Transportation 20-Year Costs



Public Transportation Office

Baseline	$138 M
Action Strategies	256 M ($19 M Advocacy, $237 M Investment)
Total	$394 M

High Capacity Transportation Office

TDM Baseline	$ 60 M
TDM New Program	62 M
TDM Total (Action Strategy)	$122 M (Investment)
HCT Baseline	$153 M
HCT New Program	247 M
HCT Total (Action Strategy)	$400 M (Investment)
Grand Total	**$916 M**

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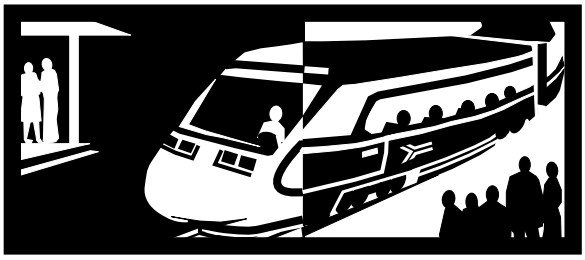
Intercity Rail Passenger System



The Intercity Rail Passenger system links major population centers throughout the state. Intercity rail passenger service is operated by Amtrak between Seattle and Vancouver, B.C.; Seattle and Portland; Seattle and Spokane; and Spokane and Portland by Amtrak on trackage owned by the Burlington Northern Santa Fe. There are 14 stations statewide.

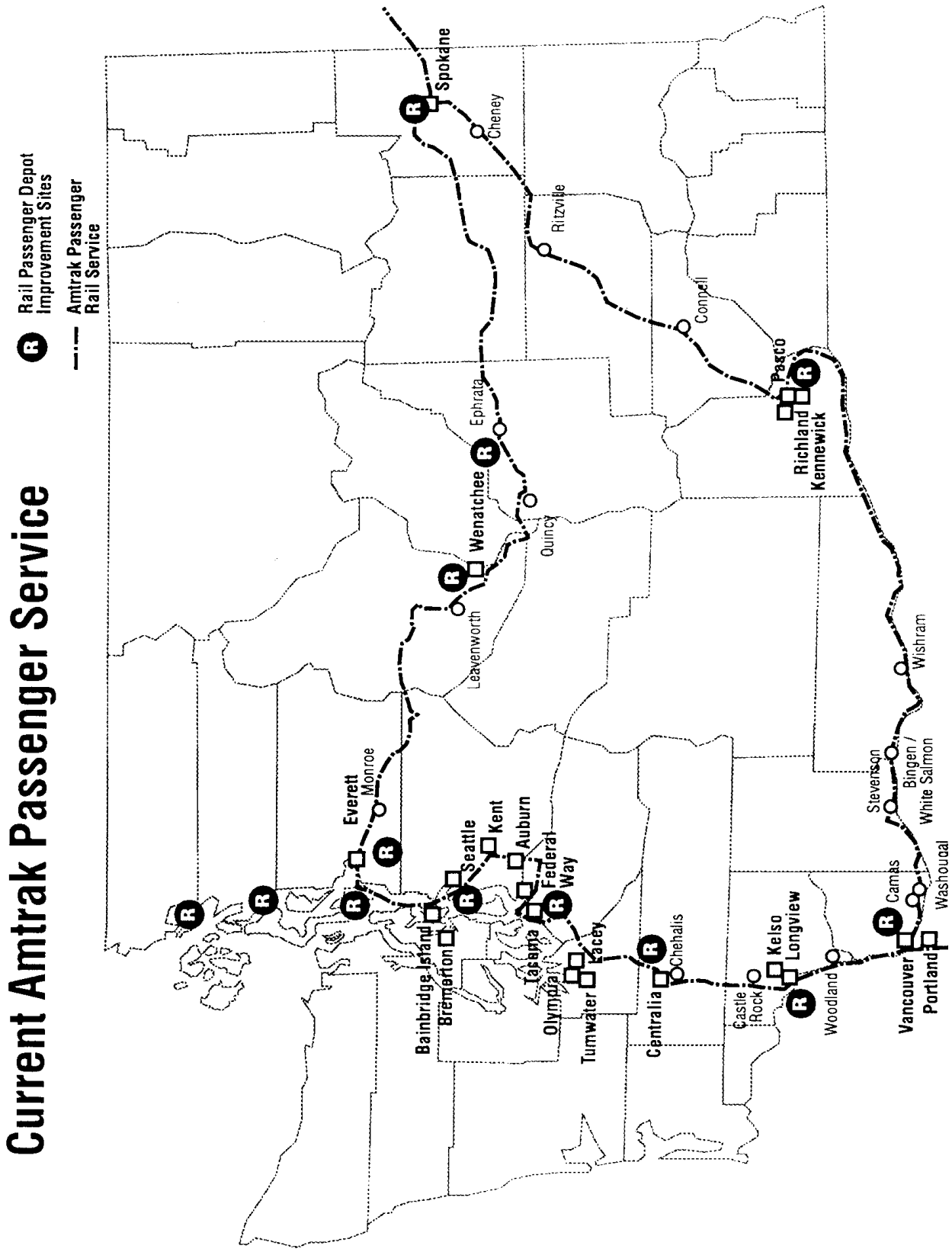
Current service between Seattle and Portland consists of daily round trip service with three trains: the Cascadia, the Mount Adams, and the Coast Starlight. The Pioneer provides additional service three days per week. This 186-mile route includes intermediate stops at Tacoma, Olympia-Lacey, Centralia, Kelso-Longview, and Vancouver. The Cascadia and Mount Adams are regional corridor trains that offer a high degree of reliability. The Coast Starlight and Pioneer are long-haul trains with service to Los Angeles and Chicago. The long-haul trains often experience delays and northbound reliability toward Seattle suffers.

Service between Seattle and Vancouver, B.C., consists of one daily round trip with the Mt. Baker International. This 155-mile route extends along Puget Sound. Intermediate stops include Edmonds, Everett, Mt. Vernon/Burlington, and Bellingham.

The Empire Builder, an Amtrak route from Chicago and Minneapolis, reaches Spokane four days per week. At Spokane, the Empire Builder service splits into two sections, with the northern section extending between Spokane and Seattle with intermediate stops at Ephrata, Wenatchee, Everett, and Edmonds. This 326-mile route passes through the 8-mile-long Cascade Tunnel. The southern section of the Empire Builder extends between Spokane and Portland, with intermediate stops in Pasco, Wishram, Bingen-White Salmon, and Vancouver. This 378-mile route runs along the Columbia River between Pasco and Vancouver.

Rail Passenger Service as an Alternative

Intercity travel within Washington is expected to increase by 75 percent in the next 20 years. The ability to move people and goods throughout the region is essential for maintaining economic vitality. As major intercity transportation corridors become increasingly congested, intercity rail passenger service is expected to be an integral component of a balanced transportation system that provides an efficient, environmentally responsible, safe alternative method of travel.



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Washington's Intercity Rail Passenger Program: An Incremental Approach

The state of Washington first became significantly involved in intercity rail passenger service in 1989 when the legislature funded a study of methods to improve existing Amtrak rail service and a small program for improving rail depots across the state. In 1991, the legislature created the High Speed Ground Transportation Steering Committee, which was charged with determining if high speed rail service (greater than 150 miles per hour) was feasible for Washington. This Committee issued its final report in 1992, finding that high speed rail service was feasible in Washington, especially in the north/south corridor between Portland, Seattle, and Vancouver, B.C. However, the Committee also recommended that the state take an "incremental" approach to implementing higher speed service, providing a logical progression of infrastructure investment, service frequencies, and performance to build a "rail culture" in the region that would make rail a competitive and viable alternative to automobile and commuter air travel.

In 1993, the Washington State Legislature enacted RCW 47.79 which created the state's Intercity Rail Passenger Program. This legislation recognized that major intercity transportation corridors are becoming increasingly congested and that high speed ground transportation offers a safer, more efficient, and environmentally responsible alternative to increasing highway capacity. This legislation also recognizes that high speed ground transportation can compliment and enhance air transportation. The legislature also embraced the recommendations of the High Speed Ground Transportation Steering Committee and set a long-range goal of true high speed rail service for the state to be implemented in an incremental manner. This incremental enhancement of existing service is designed to tie rail system improvements with Washington citizens' acceptance of rail as an alternative.

Pacific Northwest Rail Corridor

In 1992, the United States Department of Transportation designated the Pacific Northwest Rail Corridor (PNWRC). The corridor runs from Eugene, Oregon, through Portland and Seattle to Vancouver, B.C., and is one of five national rail corridors to be developed for high speed rail passenger service. Development of the PNWRC is a cooperative partnership of Washington, Oregon, British Columbia, Burlington Northern Santa Fe Railroad, Southern Pacific Railroad, Amtrak, the Federal Railroad Administration, and local jurisdictions. Washington's Intercity Rail Passenger Program has been developed in light of this federal designation.

Intercity Rail Passenger Options Report

In December 1995, WSDOT released the report "Options for Passenger Rail in the Pacific Northwest Rail Corridor." This report is the first product of a Corridor Plan being developed jointly by the states of Washington and Oregon and the Province of British Columbia. The report identifies options for increasing the reliability, frequency, travel times, and intermodal access of intercity rail passenger service along the corridor. Specific improvements, phasing, and costs are identified as part of the options. This report will be used to scope an environmental impact statement which will result in a detailed Corridor Plan for a preferred option.

Service Objectives

The service objectives and actions contained in this plan reflect the incremental philosophy established by the legislature. They call for preservation of existing service levels and rail system improvements which achieve target travel times and service levels incrementally over the 20-year period. This approach allows the service to be sized to the market demand, ensuring that the new service will be used and minimizing the state's risk. The action strategies contained in this plan are broad actions needed to achieve the travel time and service level targets, and the costs reflect current estimates to fully achieve these targets. These cost figures include assumptions about fare-box recovery and shares of capital and operating expenses to be paid by Washington and others, including Oregon, British Columbia, Amtrak, local agencies, private railroads, and train riders.

A detailed environmental impact statement for the Corridor Plan is under development. Once a Corridor Plan is adopted, this plan will be updated with more site-specific improvement details and updated cost estimates.

Service Objective 1

Preserve and Maintain Existing Service

Action Strategy 1 (Advocacy) **WSDOT Cost: $20,200,000**

Promote and facilitate the preservation of existing intercity rail passenger service statewide. Promote rail safety, maintain partnerships, and educate the public about the benefits of rail passenger service as a transportation option. Actions include:

a. Partner with Amtrak to preserve existing Amtrak system rail passenger service in the Pacific Northwest Rail Corridor.

b. Promote and facilitate the re-establishment of daily service between Seattle and Spokane via the Empire Builder train.

c. Promote the re-establishment of daily service between Spokane and Portland via the Empire Builder train.

d. Promote public railroad safety by participating in the Operation Lifesaver Education Program and advocate other safety related issues.

e. Develop and implement a public involvement plan for the PNWRC.

f. Educate the public about the role of existing rail passenger services as an alternative transportation mode in congested regions of the state and promote their use through marketing and other public outreach efforts.

g. Maintain existing and establish new partnerships with public, private, and nonprofit organizations at the local, state, federal, and international level.

Action Strategy 2 (Investment) **WSDOT Cost: $172,500,000**

Continue operation of existing state supported rail passenger services and facilities. Partner with other jurisdictions to provide public safety through grade crossing consolidations, grade separations, closures, eliminations, and pedestrian crossings. Facilitate the development of rail technology to provide additional safety. Actions include:

a. Operate existing rail passenger service between Seattle and Vancouver, B.C., via the Mount Baker International train.

b. Operate existing rail passenger service between Seattle and Portland via the Mount Adams train.

c. Partner with Amtrak and local jurisdictions to maintain existing intermodal facilities.

d. Partner with Amtrak and the private railroads to preserve and maintain capital equipment and infrastructure in statewide rail passenger corridors.

e. Work with federal, state, and local jurisdictions and agencies to consolidate, grade separate, or close highway grade crossings throughout the state.

f. Work with local jurisdictions to identify, prioritize, and implement pedestrian overcrossings throughout the state.

g. Study and demonstrate the application of Positive Train Separation (PTS) technology in the PNWRC.

Service Objective 1: Preserve and Maintain Existing Service

WSDOT Costs	$ 192,700,000
Private/Amtrak/Oregon/BC/Others	314,300,000
Total 20-Year Costs	$ 507,000,000
Less Operating Revenues	85,000,000[3]
20-Year Net Costs	$ 422,000,000

[3]Operating revenues are directly credited against the costs of operating rail passenger service.

Service Objective 2

Improve speed, frequency, reliability, and intermodal access of passenger rail service in the Pacific Northwest Rail Corridor (Portland-Seattle-Vancouver, B.C.), and improve the quality of intercity passenger rail service in other corridors statewide.

Action Strategy 1 (Advocacy) **WSDOT Cost: $24,000,000**

Promote and facilitate the enhancement of rail passenger service statewide. Actions will include:

a. Coordinate with the private railroads, Amtrak, Washington State Utilities and Transportation Commission, Canadian, Provincial, and local jurisdictions to modify track speed restrictions to ensure reduced travel times between Portland/Seattle and Seattle/Vancouver, B.C.

b. Implement and refine public involvement, education, and safety programs for the further development of the PNWRC.

c. Develop and strengthen partnering strategies between WSDOT, Amtrak, railroads, federal, ports, regional, and local jurisdictions to provide funding methodology for investment actions.

d. Advocate and facilitate discussions between Amtrak and local jurisdictions concerning the operation of additional Amtrak excursion service between Seattle and eastern Washington recreation destinations.

e. Assist local jurisdictions and Amtrak to determine the viability of additional rail passenger service between Seattle and Spokane and between Portland and Spokane.

f. Evaluate and monitor performance of enhanced rail passenger service to determine timing of additional investment to provide for completion of the PNWRC.

Action Strategy 2 (Investment) **WSDOT Cost: $1,046,700,000**

Enhance rail passenger services in the PNWRC between Portland and Vancouver, B.C., by increasing service levels through safely adding frequencies, higher speeds, and reliability. Partner with Amtrak, railroads, ports, federal, local, and regional jurisdictions to provide infrastructure investment in track system capital, intermodal facilities, rolling stock, and operation of trains. Actions will include:

a. Improve the rail system between Seattle and Portland to provide for approximate run times of 2:30 and operate a minimum of eight daily corridor round trips, with up to 17 daily corridor round trips depending on incremental performance review and market demand[4].

b. Improve the rail system between Seattle and Vancouver, B.C., to provide service with approximate run times of 3:00 and operate a minimum of four daily corridor round trips, with up to eight daily corridor round trips depending on incremental performance review and market demand.

c. Implement advanced technology train equipment within the PNWRC to allow for effective operation of an enhanced intercity rail system.

d. Improve the intermodal access and user quality of existing rail passenger terminals and partner with Amtrak and local jurisdictions to construct or remodel new or existing intermodal facilities.

e. Conduct Wetland Banking Pilot project to evaluate the potential for wetland banking in the PNWRC.

Service Objective 2: Improve Intercity Rail Passenger Service

WSDOT Costs	$ 1,070,700,000[5]
Private/Amtrak/Oregon/BC/Others	1,329,600,000[6]
Total 20-Year Costs	$ 2,400,300,000
Less Operating Revenues	491,800,000[7]
20-Year Net Costs	$ 1,908,500,000

[4]Eight daily corridor round trips would provide every two-hour service. Seventeen daily round trips would provide hourly service.

[5]RTA Commuter Rail cost sharing would reduce WSDOT improvement costs by approximately $90 million. These costs would be shifted to the "Others" category.

[6]Non-WSDOT costs include approximately $625 million for work in British Columbia.

[7]Operating Costs and Operating Revenues are incremental values and do not include amounts from already existing service. Operating Revenues do, however, include additional revenues attributed to previously existing trains due to higher revenue per passenger mile yields.

Service Objective 1

Preserve Existing Program

Costs	WSDOT	Others	Total
Advocacy	20,200,000	11,800,000	32,000,000
Investment	172,500,000	302,300,000	475,000,000
Totals	192,700,000	314,300,000	507,000,000

Service Objective 2

Enhanced Intercity Rail Passenger Program

Costs	WSDOT	Others	Total
Advocacy	24,000,000	0	24,000,000
Investment	1,046,700,000	1,329,600,000	2,376,300,000
Totals	1,070,700,000	1,329,600,000	2,400,300,000

	WSDOT	**Others**	**Total**
Total Program Costs	**1,263,400,000**	**1,643,900,000**	**2,907,300,000**
Less Operating Revenues	**---**	**576,800,000**	**576,800,000**
Total Net Program Costs	**1,263,400,000**	**1,067,100,000**	**2,330,500,000**

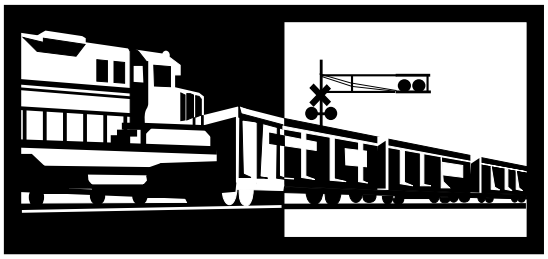
Expenditures for 20-Year Program

	WSDOT	Others	Fares	Total
Advocacy	44,200,000	11,800,000	0	56,000,000
Investment	886,300,000	1,048,400,000	0	1,934,700,000
Operating	332,900,000	6,900,000	576,800,000	916,600,000
Totals	**1,263,400,000**	**1,067,100,000**	**576,800,000**[8]	**2,907,300,000**

7:P:WTP2

[8]Fares (operating revenues) are estimated to offset greater amounts of the operating costs as frequencies and ridership increase over time. PNWRC improvements would allow for an annual farebox recovery ratio between 75 and 93 percent at the end of 20 years. The estimates reflect the conservative 75 percent figure. Average revenue recovery over the 20-year period is 63 percent of operating costs.

Freight Rail



Washington's freight rail system is made up of 13 common carriers, including ten line-haul carriers, one nonoperating rail line owner, and two switching/terminal companies. The ten line-haul carriers range in size from short lines to large national railroad systems. Some of the short lines are relatively new spin-offs from major systems, while others have retained their identity since their origin in the early part of the century.

A total of 3,102 route miles are included in this system. Sixty-eight percent of this total is owned by the Burlington Northern Santa Fe (BNSF), and 12 percent is owned by the Union Pacific (UP). Twenty percent is owned by short line companies, while less than 1 percent is owned by switching/terminal companies. Both the BNSF and UP operate a considerable amount of line under trackage rights (incidentally over rail lines owned by each other). Another carrier, Montana Rail Link, operates in the state only by trackage rights.

In addition, Washington has several non-common carrier rail lines. Included are lines owned by Simpson Timber, the Weyerhaeuser Company, and the U.S. government. These lines also move freight within the state that would otherwise move over public roads.

Major categories of freight carried in Washington include farm products, lumber/wood products, food/kindred products, metallic ores, and containers/trailers on flat cars (COFC/TOFC).

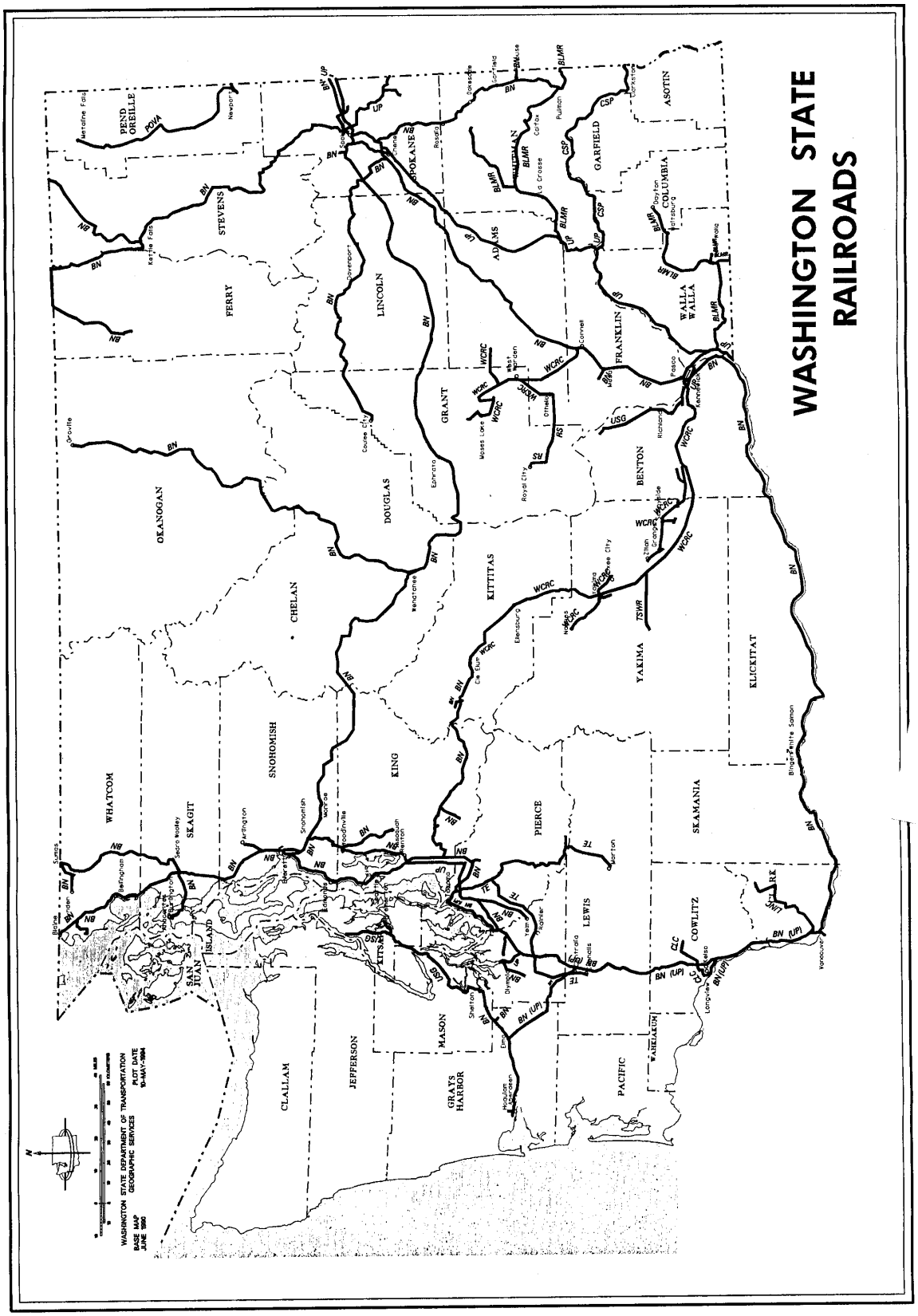
Washington's freight rail system has four major types of connections to other modes including: deep water marine ports, river ports, intermodal trailer/container transfer terminals, and shipper connections at industrial spurs and team tracks. COFC/TOFC Terminals are those locations where containers or trailers are transferred to or from rail cars to trucks, ships, or barges. These terminals can be generally classified into two categories: (1) International Terminals, handling containers coming on or off of ships or barges, and (2) Domestic Terminals which handle containers that are transferred to or from trucks for origins and destinations within North America. The following ports are served by freight rail:

Deep Water Marine Ports

Seattle
Tacoma
Aberdeen
Vancouver
Kalama
Longview
Bellingham
Everett
Olympia

River Ports

Kennewick and Pasco



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COFC/TOFC Terminals

Railroads in Washington currently operate COFC/TOFC terminals in the vicinity of Seattle, Spokane, and Tacoma. Inactive terminals are located in Wenatchee, Pasco, and Yakima. The railroads in Washington also own and operate a number of rail yards that currently function as car classification, switching, storage, and maintenance facilities. Some of these facilities have potential to serve as major COFC/TOFC terminals. Such improvements may help address statewide and regional transportation needs including mainline rail capacity constraints, congestion within port areas, traffic congestion, and state and local road maintenance requirements.

Washington's rail system also has connections to the other states and Canada at Vancouver, Blaine, Sumas, Spokane, Pullman, Clarkston, Palouse, Wallula, and Wishram.

Mainlines

The two Class 1 railroads in the state (BNSF and UP) share one north-south alignment between Oregon and Tacoma. From Tacoma to Seattle, each railroad operates over its own track. As of 1996, BNSF is the only Class 1 railroad connecting north of Seattle to Canada, although negotiations are underway as part of the proposed UP-SP merger to allow the merged UPSP to also provide service north from Seattle to Canada. Burlington Northern Santa Fe, the only east-west railroad in the state, has three Cascade Mountain crossings: the Cascade Tunnel (Stevens Pass), the Columbia River Gorge, and Stampede Pass (which has been out of service for several years). The UP connects from Portland up the Oregon side of the Columbia River to Pasco. Both UP and BNSF maintain track between Pasco and Idaho through Spokane.

These routes face major capacity constraints in the near future. Increases in intermodal traffic and the increased demand for passenger service in these corridors will combine to create intolerable congestion and delays at the Washington end of BNSF's system. Since UP shares track with BNSF between Portland and Tacoma, they share the same congestion problems. The UP single track corridor between Tacoma and Seattle faces similar problems to those predicted on the BNSF track. This in turn will either force large investment in track improvements or the growth in business which keeps Washington ports viable and returns economic benefits to Washington State will gravitate to other West Coast ports.

Potential solutions to these problems involve installing additional track, and passing sidings on existing mainlines, constructing additional crossings in the Cascade Mountains, modernizing rail yards, eliminating highway grade crossings, and improving terminal areas. Resumption of service across unused Cascade Mountain crossings, such as Stampede Pass, is another option.

Washington's public ports are projecting large increases in trade with Pacific Rim trading partners. This includes a projected doubling of international container traffic as well as large increases in grain traffic handled through Washington's deep water grain terminals. However, these same ports have identified major capacity constraints at port interfaces with the railroads. These constraints include lack of adequate dock-side rail access, necessitating truck transfers from container yards to rail loading areas; inadequate track space to make up or terminate long

trains; and trains blocking surface streets and access roads which not only causes inconvenience to the public, but also restricts truck transportation in and out of terminal areas.

Potential solutions to these problems include reconfiguring track in congested areas, constructing and improving rail access to marine terminals, separating domestic intermodal traffic handling from that of international intermodal traffic, consolidating terminals in centralized locations in the Puget Sound area, and constructing grade separations for road traffic.

Main rail lines operated by the Class 1 railroads (BNSF and UP) require an average of $24,000 per mile per year in maintenance. Some main lines in Washington consist of double track which double these costs. Maintaining efficient service on main lines also requires construction of sidings and passing track, terminal/yard maintenance and expansion, and construction of other rail facilities. The Class 1 railroads invest more than $100,000,000 per year in Washington to meet such needs. A recent WSDOT study concluded that Washington's main line railroads save taxpayers nearly $800 million in avoided highway congestion costs and road damages.

Branch Lines

Washington's branch lines handle traffic that, if not moved by the railroads, would either move by truck over state and local roads or would cease to move causing businesses to fail or relocate. These lines are important to our state because the service they provide reduces traffic congestion and maintenance requirements of state and local roads. Washington's branch rail lines also help keep our transportation system healthy by providing shippers competitive alternatives. A recent study conducted for WSDOT indicated that Washington's branch lines contribute nearly $20 million per year to the state in avoided road maintenance costs.

Some of these branch lines have traffic levels that do not generate adequate revenue needed for appropriate track maintenance. This in turn creates a situation where the track condition deteriorates in a declining spiral, eventually leading to abandonment or a need for public assistance. These less profitable light density lines are, however, essential to the state and local jurisdictions because they provide economic opportunities and competitive shipping alternatives. Some branch line railroads may be key to solving future transportation problems.

Branch lines require annualized maintenance investment of around $14,000 per mile of track. In 1995, Washington had roughly 1,821 miles of lines with annual traffic densities less than 5 million gross ton miles per mile. Of these, 1,371 had very light traffic density less than 1 million gross ton miles and did not generate adequate income for the operator. Washington branch lines require an annualized

which is being provided by the owners/operators, but much of which is routinely deferred. Accumulated deferral of these costs leads to a gradual deterioration of the track, ties, and base culminating in reduced train speeds and inefficient operations. Costs of operation escalate, service deteriorates, shippers convert to trucking, deferred maintenance costs accumulate to a staggering total and the line ends up in trouble, possibly abandoned. This has a major impact on Washington's state and local roads.

Rail Corridors

Washington has lost in excess of 2,000 miles of its rail system to abandonment since 1970. The legislature, in RCW 47.76.260, directed WSDOT to identify, evaluate, and preserve rail corridors of statewide significance. Solutions to the problem of rail abandonments lie in programs which preserve railroads as viable operating entities, however, WSDOT continues to advocate preservation of rail corridors threatened by abandonment.

WSDOT Freight Rail Program

WSDOT published the first State Rail Plan in December 1978. Subsequent updates were published in February 1980, July 1982, and August 1984, with amendments in 1986 and 1990. In 1983, the Washington State Legislature established the Essential Rail Assistance Account to provide funds to preserve and maintain essential rail service. In 1985, the state legislature amended the state freight rail statute (RCW 47.76) to authorize "rail banking," the state or local purchase of abandoned railroad rights of way, as part of the WSDOT rail program.

In 1994, WSDOT established the Freight Rail Policy Development Committee composed of representatives from the state legislature, local government, county government, ports, Class 1 railroads, shortlines, rail labor, agriculture, WSDOT, and the Transportation Commission. The Committee was charged with studying the WSDOT Freight Rail Program, Washington State transportation issues, and railroad problems over a nine-month period and formed the following recommendations:

1. The WSDOT rail program should continue to monitor, analyze, and evaluate the state rail system. WSDOT should support the Freight Rail Service Objectives through a set of strategies and projects that support branch lines, mainlines, port rail access facilities, and rail corridors.
2. WSDOT should support adequate rail system capacity and rail access to intermodal terminals through projects such as rail/highway grade crossing improvements including signalization and grade separation, rail intermodal facilities, port rail access improvements, mainline congestion reduction improvements, rail facilities and equipment, rail service restoration, and supporting rail services.
3. The state should establish a permanent funding source to provide funds for preservation of branch and light density rail lines, port access and congestion problems, and selective capacity needs of the state rail system.

4. WSDOT should assume an active, facilitating role in promoting rail system improvements that increase the efficiency and capacity of the state rail system through cooperative working relationships involving railroad companies, ports, local jurisdictions, tribal governments, adjoining states and countries, and the federal government leading to integrated seamless transportation service.
5. The state should encourage railroads to invest in Washington by leveraging such investments with tax incentives or public funds. The state should provide incentives to railroads to invest in infrastructure and equipment in Washington State. These incentives may include such as sales tax exemptions on rail materials, property tax exemptions on railroad equipment, credits on property and sales taxes, and public/private partnerships.
6. The state should seek to moderate governmental disincentives such as over burdensome permitting requirements and environmental regulation of railroad projects to encourage projects which improve air quality or reduce traffic congestion.
7. WSDOT should encourage regional transportation plans and local comprehensive plans to include existing or potential rail lines. Regional or local plans should consider compatibility of land uses, and encroachment of incompatible uses such as housing developments adjacent to rail facilities. Local/regional comprehensive plans and the state's freight and passenger rail plans should be consistent.
8. WSDOT should include freight rail advocacy as part of its ongoing public involvement program to promote the importance of rail service to trade, agriculture, natural resource development, employment, and economic development.
9. WSDOT should evaluate the role of potential projects as related to the state rail system. Projects must serve to benefit the movement of common carrier rail freight. Project lines or associated lines must be included on the state rail system map or the project must increase business on a light density line; must decrease port rail access and congestion problems; or must increase mainline rail capacity. The project Benefit/Cost Ratio must exceed 1.0.

As a result of these recommendations, legislation was enacted in 1995 which broadened the focus of the WSDOT Freight Rail Program to address issues related to mainline congestion and port access in addition to light density lines and corridor preservation. The following service objectives are derived from deliberations of this committee.

Service Objectives

Service Objective 1

Ensure Adequate Mainline Freight Capacity and Safety and Enhance Access to and Capacity of Intermodal Terminals

Action Strategy 1 (Advocacy) **WSDOT Cost = $10,000,000**

Promote and facilitate the expansion of mainline freight railroad capacity by private railroad companies and the improvement of rail access to and efficient use of intermodal terminals and ports. State actions will include:

a. Continued monitoring, analysis, evaluation, and planning of the state's rail system.

b. Facilitating rail system improvements through cooperative approaches involving railroad companies, ports, local jurisdictions, tribal governments, adjoining states and countries, and the federal government.

c. Working with regulators to develop financial incentives to encourage railroad investment in Washington and reduce permitting and environmental regulatory burden on rail system expansion while maintaining environmental quality.

d. Working with local and regional bodies to encourage regional transportation plans and local comprehensive plans to include existing or potential rail facilities and to consider compatibility of land uses with railroad facilities.

e. Advocating the needs of freight rail in ongoing public involvement and information programs, emphasizing the importance of adequate rail service to the state's economy.

f. Supporting the reopening of mainline rail service over the Stampede Pass rail line and capacity improvements of the other cross-Cascade rail crossings at Stevens Pass and through the Columbia River Gorge.

Action Strategy 2 (Investments)[9] **WSDOT Cost = $272,000,000**

Improve efficiency and safety of Washington's transportation infrastructure by partnering with local agencies, railroads, ports, and others to improve mainline capacity and to improve highway/rail interfaces and connections, build sidings, on-dock facilities, switching yards and grade separations of key port rail facilities and roadways and to improve access to mainlines. State actions will include:

a. Constructing railroad improvements to mitigate mainline congestion and to improve safety at rail/highway grade crossings.

b. Constructing rail intermodal facilities and accesses thereto.

c. Constructing grade separations of key high volume mainline/roadway crossings.

d. Improving rail access to Washington ports.

Total Service Objective 20-Year Cost — $646 Million **($364M Ports etc., $282M WSDOT)**

[9]Class 1 railroads (BNSF and UPRR) bear substantial responsibility for investment in track maintenance, capital projects, etc. State investments are largely for the improvement of those interfaces where railroads and motor vehicles are in conflict and it is unreasonable or unlikely to expect the railroads or local jurisdictions to fund improvements. Examples of this are the Royal Brogham crossing of the BNSF and UP mainlines near the Kingdome in Seattle; arterial grade crossings of the Washington Central RR in the Tri-Cities area which may be impacted by increased traffic from the Stampede Pass line; improvements in grade crossing protection statewide. State money may be necessary in the future to leverage railroad investment for capacity improvements that are determined to be in the state's interest.

This category also includes projected needs from major ports, primarily Seattle, Tacoma, Kalama, Longview, and Vancouver. These ports will be unable to provide adequate funding for improvements of the type, scope, and cost that will be needed over the 20-year period. General categories of improvements include providing on-dock rail access, enlarging areas available for making up trains, improving rail access, relieving problems generated by long trains blocking surface street traffic, and providing through rail traffic bypasses of congested areas. Also included under this category are highway projects to improve access to terminal areas. It is estimated that state funds would be used as seed money along with local funds on a 1/3 state - 2/3 local funding ratio.

Service Objective 2

Preserve and Enhance Service on Branch Lines, Promote Continued Service on Light Density Lines, and Preserve Essential Lines Threatened With Abandonment

Action Strategy 1 (Advocacy) **WSDOT Cost = $10,000,000**

Facilitate and promote the continuation and improvement of freight service on branch and light density rail lines. State actions will include:

a. Continue monitoring, analysis, planning, and evaluation of the state's light density and branch line rail system.

b. Assume a primary role in facilitating rail service improvement through cooperative approaches involving railroads, ports, local jurisdictions, tribal governments, adjoining states and countries, and the federal government.

c. Work with regulators to develop financial incentives to encourage railroad investment in Washington.

d. Work with local and regional bodies to encourage regional transportation plans and local comprehensive plans to include existing or potential rail facilities and to consider compatibility of land uses with railroad facilities.

e. Advocate the importance of Washington's light density and branch line system to the state's economy in ongoing public involvement and information programs.

f. Promote the increased availability of railroad equipment on branch lines for Washington shippers through advocacy with railroad companies, shippers, and terminal operators.

Action Strategy 2 (Investments)[10] **WSDOT Cost = $191,000,000**

Continue and increase state financial assistance in the form of loans and grants through the Essential Rail Assistance program. State investment will include:

a. Acquiring, rehabilitating, and improving light density rail lines.

b. Purchasing and/or rehabilitating railroad equipment necessary to maintain essential rail service.

c. Constructing loading facilities to increase business on light density lines.

d. Preserving rail corridors for future rail purposes by purchase of rights of way including track, bridges, and associated elements.

Total Service Objective 20-Year Cost — $501 Million **($300 M Private and Local, $201 M WSDOT)**

[10]Of the $501 million projected needs, it is estimated the state will need to fund $201 million through loans and grants per RCW 47.76. This category includes rehabilitation projects and projects which increase traffic density on light density lines such as the Grain Train as well as funds for the acquisition of light density rail lines which are deemed essential and can be purchased intact for continued operations.

Service Objective 3

Identify and Preserve Essential Rail Corridors for Future Rail Service

Action Strategy[11] **WSDOT Cost = $14,000,000**

Preserve rail corridors with statewide significance for future rail purposes by purchase of rights of way or provide loan funds to local jurisdictions to preserve corridors with local significance.

Total Service Objective 20-Year Cost — $15 Million **($1 M Local, $14 M WSDOT)**

Summary of Costs

Total 20-Year WSDOT Costs =	**Advocacy**	**= $ 20,000,000**
	Investment	**= $ 477,000,000**
	Total	**= $ 497,000,000**
	Annual Cost	**= $ 24,850,000**

8:P:WTP2

[11]This category is intended to provide funds for the direct purchase of rail corridors with state significance and for loans to local jurisdictions wishing to railbanked corridors with local significance which are subject to abandonment.

The Marine Ports System

Washington State is one of the nation's leading centers of international trade. The state's geographic location and the port industry's strategic development of that advantage have changed Washington from being on the nation's periphery of international trade to being at the center of the world's fastest growing trade markets. In 1994, international waterborne cargo valued at over $50 billion flowed through Washington ports. That equates to almost $10,000 for every Washington resident on a per capita basis. Domestic waterborne trade also plays a significant role. Puget Sound is the primary gateway to Alaska, and products flow between Washington, Hawaii, and California.

Port terminals and rail and highway infrastructure make Washington competitive with other West Coast ports. Congestion and environmental problems in California are creating opportunities for Washington to continue to increase market share in many cargoes, particularly Pacific Rim containerized and dry bulk cargoes. A major trading center such as Washington State requires a sophisticated array of specialized services and complex transportation infrastructure. Fundamental to the ability of ports to efficiently handle trade is the network of rail, highway, and water modes of transportation which link the state's ports to points throughout the state and beyond.

Identifying areas to concentrate transportation system improvements and coordination between public agencies which provide transportation facilities and services is crucial to maintaining Washington ports' competitive position in world trade markets.

Service Objectives: Trade and Economic Development

- Increase Washington ports' share of West Coast trade.
- Support the development and growth of port related tourist activities.

Strategies to Address Trade and Economic Development

Port investments, as well as public investments in Washington's transportation system, can support ports' economic development goals. Trade is an engine that helps drive the economies of many communities. It is a value-added service that creates considerable employment and income. Today, it is estimated that approximately 150,000 jobs throughout the state are connected to trade and a significant portion of these jobs are in port areas. Continued growth in trade, and attracting cargoes through Washington ports will add to jobs in this state. But, strategic action by ports with assistance by WSDOT is needed. Actions identified include:

1. Prioritize and target strategic investment to attain market share targets in the following areas: containers, grain, motor vehicles, and other specified markets.
2. Preserve competition between modes to maintain competitive rates and time-saving efficiencies.
3. Preserve competition within modes, where appropriate.
4. Encourage existing efforts by ports to coordinate investments and increase market share while recognizing that historic competition between ports within the state has increased the level of economic activity in the state.
5. Develop emergency management preparedness cooperation procedures between ports.
6. Pursue federal legislation to allow the sailing of international cruise ships between U.S. ports.
7. Establish that there is an appropriate "state interest" in:
    - Commercial transportation use of the Columbia/Snake River.
    - Commercial transportation use of the Straits of Juan de Fuca, even if designated as a marine sanctuary.
    - Dredging to maintain channel depth for commercial uses.
    - Local land use decisions involving marine ports of statewide significance.
    - Improving inland transportation system connections to marine ports.

Costs for Trade and Economic Development

The costs to the state for acting in an advocacy role to achieve the service objectives for trade and economic development are included under Costs for State Advocacy below.

Service Objectives: Landside Access

Rail (also included in Freight Rail chapter)

- Ensure adequate mainline freight capacity and safety and enhance access to and capacity of intermodal terminals.
- Preserve and enhance service on rail branch lines, promote continued service on light density lines, and preserve essential rail lines threatened with abandonment.
- Identify and preserve essential rail corridors for future rail service.

Roadways

- Upgrade port access freight and goods system roadways to have an all-weather surface capable of supporting legal loads year round.
- Maintain minimum LOS D for truck movement on roadways connecting marine port terminals to the trunk highway system.
- Maintain current travel time advantages for freight vehicles when compared to port access in other West Coast states.

Strategies to Address Landside Access

Rail

The rail transportation system is the key inland transportation system for large volume flows of import and export cargo originating from or destined for Washington State ports. Import and export containers, grains, dry bulks, and autos are all primarily moved by rail. Total rail traffic in Washington has been growing steadily. Today, over 1.3 million carloads of goods are moved by rail throughout the state. Most of the growth in rail traffic has come from increased grain exports and containerized imports and exports moving through Washington ports. In 1993, Washington ports generated almost 50 percent of the total rail traffic through the state. Actions identified include:

1. Ensure that rail passenger enhancements will complement main line rail freight capacity and service.
2. Develop turnouts and siding extensions serving ports.
3. Develop rail/highway grade separation to improve access to ports.
4. Promote enhanced technology applications to facilitate “just in time” rail car delivery, remote staging, or other efficiency improvements.
5. Promote development of on-dock rail yards that eliminate the need to dray between marine terminals and off-dock rail yards.
6. Streamline environmental regulations to expedite increased capacity on rail mainlines and support facilities.
7. The following standards help define an essential branch rail line:
    - Branch rail lines which enhance main line rail capacity.
    - Branch rail lines that serve deep water ports.
    - Branch rail lines that act as an alternative to roadways where barge traffic could be interrupted by river drawdowns.
    - Branch rail lines where they aid economically distressed areas.

Roadways

Like rail connections, roadway access to ports is essential. For the most part, heavy trucks comprise less that 5 percent of daily traffic in urban areas and truck traffic is growing slower than passenger vehicle traffic. In rural areas, heavy truck traffic is typically more than 5 percent of daily traffic and on some routes can be as high as 30 percent. Although truck traffic typically represents a smaller portion of travel, targeted improvements in roadway access to ports can help maintain and improve Washington’s attractiveness for moving international cargo. Right now, Puget Sound ports estimate a two-hour advantage in delivering goods from Pacific Rim countries to the Midwest. Maintaining the efficiency of each transportation link will help keep this competitive advantage. Actions that are recommended to begin meeting roadway service objectives include:

1. Develop and maintain appropriate and adequate "freight only" vehicle access ramps.
2. Develop "freight only" vehicle lanes where necessary to maintain LOS D for freight vehicles in urban areas during off peak hours.
3. Develop and implement grade separation programs in marine port areas.

Costs for Landside Access

The costs to the state for acting in an advocacy role to achieve the service objectives for landside access are included under Costs for State Advocacy below.

Rail

The costs to meet the service objectives for rail landside access are included in the costs for meeting the freight rail service objectives in the Freight Rail chapter of this plan.

Roadways

The costs of upgrading state highways accessing ports are included in the costs for meeting the state highway service objectives in the State Highways chapter of this plan.

Non-state investments to meet the service objectives for roadway landside access include: upgrading city streets and county roads that serve as access roads to ports to all-weather surfaces at an estimated $47 million, upgrading congested local roadways that access ports to LOS D at an estimated $100 million, and providing grade separation for local port access roads at an estimated $100 million.

Service Objectives: Waterside Access

Water Channels and Dredging

- Maintain the use of Columbia/Snake River system as a transportation right of way.
- Preserve channel depths and widths for shipping and barging.
- Maintain and improve ship turning basins in port areas to meet demand.
- Maintain adequate dockside water depth.

Locks

- Maintain minimum operating pools to preserve current lock handling capacity on the Columbia and Snake River systems.
- Preserve current lock handling capacity on the Lake Washington ship canal.

Navigation

- Maintain appropriate navigation aids and traffic systems for safe navigation.
- Coordinate with regulatory boards to maintain safe and competitively priced pilotage.

Strategies to Address Waterside Access

Ports cannot provide essential marine to land links without appropriate water depth in shipping channels or near docks. Upper Columbia River ports are faced with pending river drawdowns; and in the future, larger ships will be restricted from using lower Columbia ports because of restricted channel depths. A study of the costs to deepen the Lower Columbia channel to accommodate larger ships is underway. The study is to be completed in 1998. A balanced transportation system that includes all modes is essential to ensuring uninterrupted flow of commerce at competitive prices through Washington ports. As the viability of specific modes are threatened by current events, alternate modes must be available to shippers. Greater choice of modes keeps rates competitive. In eastern Washington, rail line abandonment, salmon migration, and seasonal road restrictions all affect the feasibility of rail, barge, and truck alternatives. Actions recommended include:

1. Maintain adequate numbers of public dredges to provide quick response during natural emergencies.
2. Streamline regulations to allow provision of adequate sites for disposal of dredged materials.
3. Provide adequate shipping channels to meet future shipping needs through deepening and widening waterways when necessary.

Costs for Waterside Access

The costs to the state for acting in an advocacy role to achieve the service objectives for waterside access are included under Costs for State Advocacy below.

Water Channels and Dredging

The non-state costs to maintain channels by dredging over 20 years are estimated at $420 million. When the study on deepening the Lower Columbia channel is completed in 1998 and if the study concludes that channel deepening is economically and environmentally feasible, then the cost estimate developed in the study will be considered for addition to this needs assessment.

Locks

The non-state costs of operating and maintaining locks on the Columbia and Snake River system and the Hiram L. Chittenden Locks in Seattle are estimated at $160 million for the 20-year period.

Strategies to Address Intermodal Connections

Trade forecasts predict continued growth in containerized cargoes through Puget Sound ports and grain and non-grain dry bulks through Columbia River ports. Ports that have traditionally relied on log and wood products exports have been assessing market opportunities for other goods. Collectively, this means that Washington ports are planning for terminals and support facilities to accommodate cargoes in their specialized markets. Actions to support efficient intermodal connections include:

1. Promote development of efficient "on dock" rail facilities where appropriate.
2. Maintain "on terminal" port access roads and routes.
3. Develop adequate port facilities, equipment, and storage areas for rail cars, truck trailers, containers, and bulk cargo in port areas.
4. Encourage coordination between shipping lines and railroads.

Costs for Intermodal Connections

The costs to the state for acting in an advocacy role to achieve the service objectives for intermodal connections are included under Costs for State Advocacy below.

Service Objective: Environment

- Enable marine ports to continue to operate and expand within their shoreline locations while adequately protecting the natural environment.

Strategies to Address Environment

In recent years, many federal, state, and local programs have emerged for protecting wetlands. These programs have encompassed areas that have not been traditionally recognized as wetlands. From the ports perspective, regulatory agencies need to recognize that all wetlands may not be of equal value and that mitigation or banking options should be considered. Also, regulatory agencies should recognize the importance of water-dependent and water-related economic uses in making wetlands and development trade-offs. Coordination among the regulatory programs which effect wetlands is also needed.

In addition to wetland considerations, ports have also been faced with rapidly changing standards for contamination cleanup and sediment disposal. Public ports are major industrial land owners and very vulnerable to damages and liabilities due to the actions of past and present tenants. Actions to support the environmental objective include:

1. Expedite the environmental regulatory process to enable Washington marine ports to compete in the world market while adequately protecting the natural environment.
2. Pursue environmental regulatory process reform to ensure that regulatory agencies accommodate the needs of those port facilities and their supporting inland transportation and navigation channels identified as being of statewide significance.

3. Advocate for adequate disposal sites for the disposal of contaminated dredged materials.
4. Facilitate the ability to use federal EPA Super Fund moneys to clean up designated sites.

Costs for Environment

The costs to the state for acting in an advocacy role to achieve the service objectives for environment are included under Costs for State Advocacy below.

Costs for State Advocacy

The cost to the state for acting in an advocacy role to achieve the service objectives identified for marine ports and navigation is $20 million. This includes an expanded state role in working with marine and river ports, state and federal agencies, local governments, and the private sector to help assure that the state's port and water transportation system meets future needs and is an integral part of Washington's transportation system.

9:P:WTP2

The Bicycle Transportation and Pedestrian Walkways System

Walking and bicycling are integral parts of the transportation system. People walk and bike to commute to work and school, for utilitarian trips such as visiting friends, shopping, or other personal errands, and to make connections to transit or other intermodal facilities.

In some areas of the state, walking and bicycling already have significant numbers of users. In Seattle, 11 percent of commute trips are walking and bicycling trips (7 percent walking and 4 percent bicycling, respectively). In some parts of the city, bicycling and walking make up 20 percent of the commute trips.

The Transportation Commission has adopted pedestrian and bicycling policies. In 1991, a Bicycle Policy Plan was created. This plan has the four policy areas of bicycle facilities, funding, safety education and enforcement, and promoting bicycling commuting and touring. The plan also identified the state's existing roadway system as the basic network for bicycle travel.

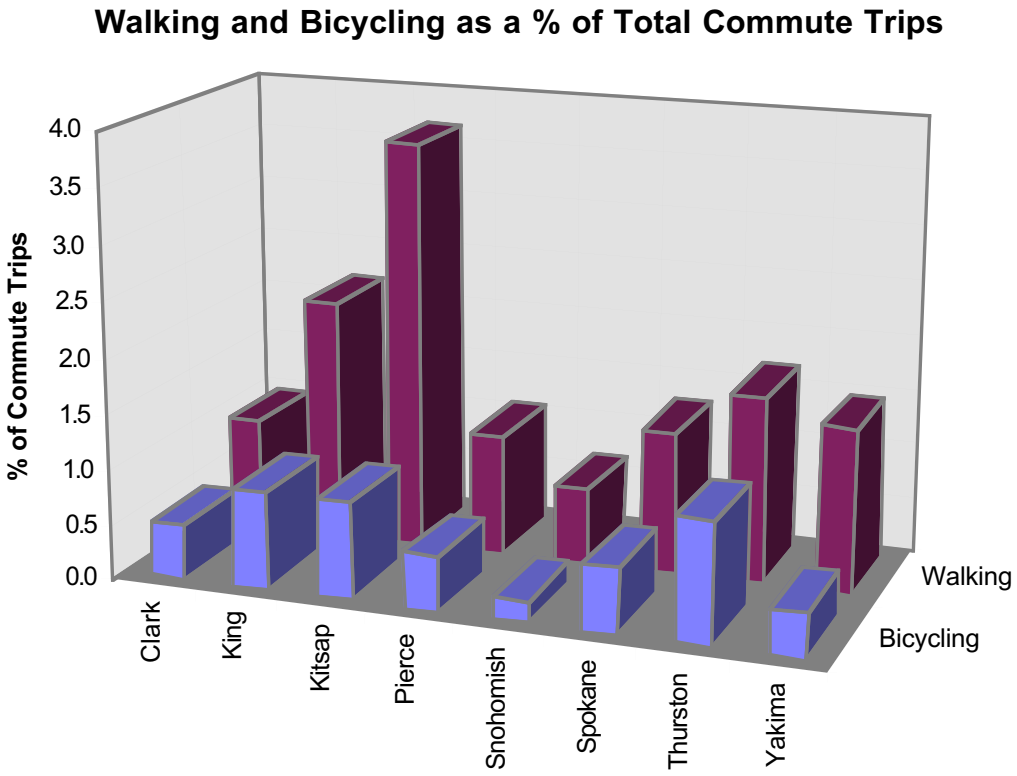
In 1993, the Commission adopted a Pedestrian Policy Plan which focused on local and regional planning for pedestrians, necessary pedestrian facility types and locations, and who should pay for them. The plan recognized that pedestrian trips are short and that local and regional agencies can have the greatest influence on creating a pedestrian network. The adopted pedestrian policies include recommendations from the Washington Traffic Safety Commission's Pedestrian Safety Strategic Plan.

Service Objectives: Bicycling and Walking

- Improve bicycle and pedestrian safety.
- Increase the use of bicycling and walking for transportation purposes, principally utilitarian and commuting trips and connections to intermodal facilities.

Strategies to Address Bicycling and Walking

Past planning efforts at the state level have identified bicycle and pedestrian issues. These issues serve as the foundation for the service objectives — increasing bicycle and pedestrian use and providing for safe facilities and the safe use of the transportation system. Specific performance measures propose doubling the amount of walking and bicycling while reducing the number of crashes by 10 percent over the next 20 years.



Source: Washington State Energy Office

Pedestrian and bicycle crashes with motor vehicles are significant. From 1988 to 1994, there was an annual average of 1,887 pedestrian-motor vehicle crashes. During this same period, there were also 613 pedestrian fatalities.

From 1988 to 1994, the seven-year average for bicycle-motor vehicle crashes was 1,449, and 71 bicycle fatalities were reported.

With the goal of improving safety and increasing bicycling and walking, a Bicycle and Pedestrian Committee developed 30 action strategies to achieve the service objectives. Performance measures are also in place to monitor the progress of the service objectives over time. A crucial aspect of the action strategies is that they are organized by issue areas and who bears responsibility for their implementation. The majority of the action strategies place the state in an advocacy role, and recognizes that the most effective investments in bicycling and walking occur at the local level. Action strategies are identified by the following legend:

L: Actions that are a local responsibility, but are in the state's interest.

C: Actions requiring cooperation among state and/or local agencies.

S: Actions that are strictly a state agencies responsibility.

V: Actions performed by volunteer groups that are in the state's interest.

Facilities — This issue area discusses updating design manuals to incorporate bicycle and pedestrian facilities, providing technical assistance to local agencies, preservation of linear corridors, and targeting funding to remove barriers that improves access for bicycling and walking.

L: Local governments should designate a bicycle and pedestrian system in order to prioritize project funding.

C: WSDOT and local governments should work together to modify the *Manual for Uniform Traffic Control Devices* and *Local Agency Guidelines* manual to incorporate bicycle and pedestrian facility practices.

C: WSDOT and local governments should develop the *Best Pedestrian Design Practices Manual.* The "Best Practices" manual should provide common sense approaches to improving the pedestrian environment.

C: Local governments should implement parking policies that encourage bicycling and walking.

C: WSDOT, other state agencies, and regional and local governments should preserve linear corridors for bicycle and pedestrian transportation purposes.

S: WSDOT should update its *Design Manual* and operational practices to incorporate contemporary bicycle and pedestrian facility practices.

S: WSDOT should provide information to local governments when changing its *Design Manual* procedures that relate to bicycle and pedestrian transportation facilities.

S: WSDOT should target its bicycle and pedestrian funding to remove barriers on the state system and improve access to local bicycle and pedestrian networks.

S: WSDOT should continue to provide technical assistance to local agencies on bicycle and pedestrian facility design and site location.

Safety Education and Enforcement — These action strategies ensure WSDOT's Safety Management System incorporates bicycle and pedestrian issues and clarifies the roles of other agencies in bicycle and pedestrian safety.

L: High school driver's training courses should include a section on the most frequent crashes motorists have with bicyclists and pedestrians.

C: The Washington State Patrol (WSP) and local police officers should ensure pedestrians and bicyclists correctly use traffic facilities and that motorists obey traffic laws so that traffic facilities are safe to use.

C: The state, schools, and local governments should continue to provide safety education materials to students in K-12 and targeted population groups on appropriate pedestrian and bicycle actions.

C: State and local governments should ensure police training occurs on how to report pedestrian and bicycle crashes. This may require modifying the existing police report sheet in order to better record bicycle and pedestrian crashes.

C: Ensure state and local updates of the Highway Safety Management System incorporates bicycle and pedestrian safety issues. (For example, pedestrian risk at intersections, right-turn movements where bicycle lanes are present.)

C: WSDOT should develop a memorandum of understanding between the Washington State Traffic Safety Commission, WSP, OSPI, and the Department of Health that clearly defines the roles and responsibility for providing bicycle and pedestrian safety education to targeted population groups. This can include designating a clearing house of model bicycle and pedestrian curriculum for schools.

S: WSDOT and the Department of Licensing should work together to include more information in the driver's manual and exam on correct traffic procedures between drivers and bicyclists or pedestrians.

V: Volunteer bicycle organizations should continue to provide bicycle safety education materials to their local communities.

Promotion — Encourages walking and bicycling for nonwork trips and promotes land use that encourages pedestrian and bicycle trips.

C: State and local governments should promote the concept of using bicycle and pedestrian travel to access activity centers that are within a bicycle and pedestrian travel shed.

C: WSDOT and local governments should distribute bicycle and pedestrian information through such technologies as Internet, and a bicycle/ pedestrian hotline.

S: WSDOT should continue to update and distribute the Washington State Traffic Data for Bicyclists Map.

S: WSDOT should continue to promote bicycling by completing the rural bicycle touring route system.

V: Local bicycle clubs should continue to promote bicycling through club rides, organized events, and citizen outreach efforts.

Intermodal Connections — These action strategies focus on incorporating bicycling and walking into all intermodal facilities.

L: Locally operated intermodal facilities such as transit centers, airports, and park and ride lots should ensure safe and convenient access for bicyclists and pedestrians.

L: Local school districts should ensure safe walk routes exist between schools and their adjacent neighborhoods.

C: WSDOT, in cooperation with federal and local governments, should ensure passenger rail terminals provide safe and convenient access for bicyclists and pedestrians.

S: WSDOT should ensure its intermodal connections (ferry terminals, park and ride lots) provide safe and convenient access to bicyclists and pedestrians.

Improvements — Encourages agencies to fund and prioritize projects which include bicycle and pedestrian facilities that link bicycle and pedestrian origins and destinations.

L: Local governments should identify major activity centers and ensure bicycle and pedestrian access within a bicycle and pedestrian travel shed.

L: Local governments and school districts should target hazardous walking routes for pedestrian facility improvements.

C: Ensure state and local agencies pursue funding nonmotorized needs identified in the 1994 Transportation Needs Assessment Study.

C: Ensure state and local funding agencies give priority to transportation projects based on serving the most users and that link bicycle and pedestrian origins and destinations.

Costs for the State Bicycle Transportation and Pedestrian Walkways Plan

Meeting the service objectives requires substantial efforts by state and local governments, the private sector, and volunteer groups. Costs for meeting the bicycle and pedestrian service objectives were estimated based on a sampling of local jurisdictions 20-year bicycle and pedestrian needs. The spending estimates include costs for bicycle and pedestrian facilities, education programs, enforcement efforts, and other programs.

Currently, there are few dedicated sources of revenue targeted for bicycle and pedestrian needs. The bulk of pedestrian and bicycle projects have been funded through regional allocations of ISTEA dollars or through ISTEA grants. This type of funding changes from year to year and, therefore, it is difficult to target a long-range bicycle and pedestrian network.

Bicycle and pedestrian safety education and enforcement programs are usually a small portion of larger outreach efforts.

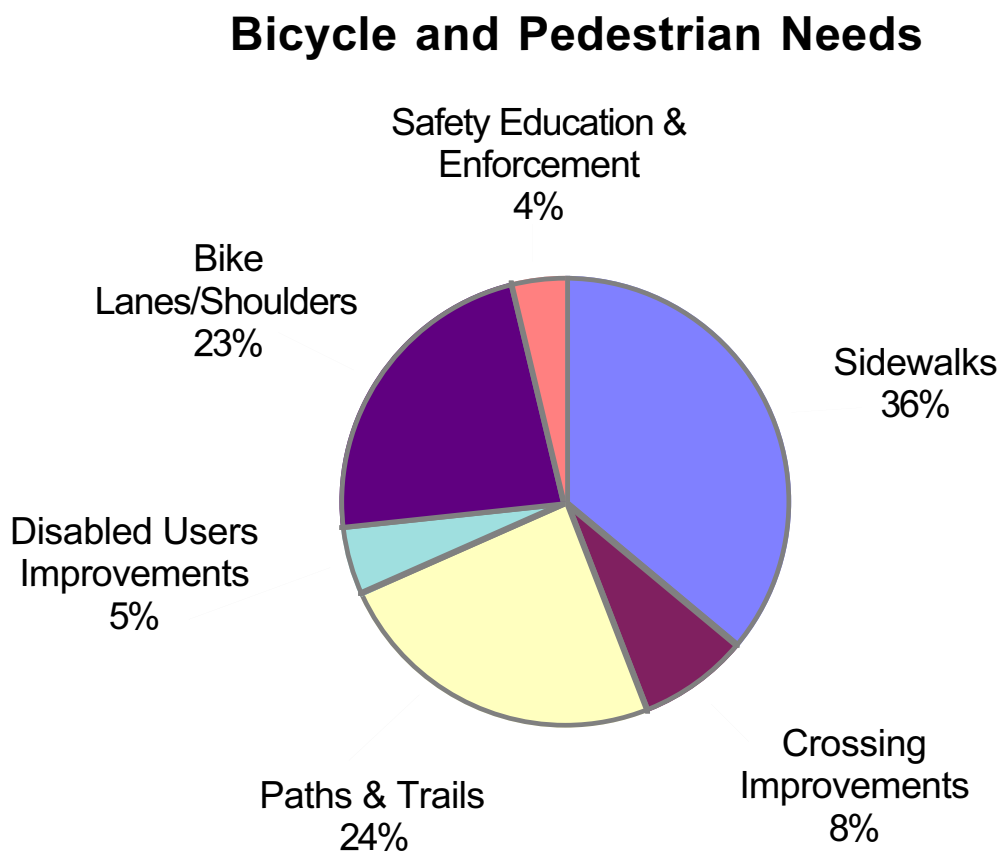
State Costs

WSDOT costs for state-interest bicycle and pedestrian advocacy efforts over the next 20 years are expected to be $5 million. The Highway System Plan has included an additional $325 million dollars in bicycle projects, but has chosen to limit this investment to $230 million over the next 20 years. A pedestrian element is also being developed that will identify pedestrian deficiencies on the state highway system.

Investments from other state agencies is approximately $54 million. The majority of this funding is based on expanding efforts in safety education and enforcement. This would require additional funding for the Office of the Superintendent of Public Instruction, the Washington State Traffic Safety Commission, WSP, and the Department of Licensing.

Non-State Costs

Based on the local agency surveys, costs for meeting the bicycle and pedestrian objectives is about $1.55 billion. If federal grant and pass through money continues on bicycle and pedestrian projects, cities and counties are projected to spend approximately $800 million over the next 20 years.



10:P:WTP2

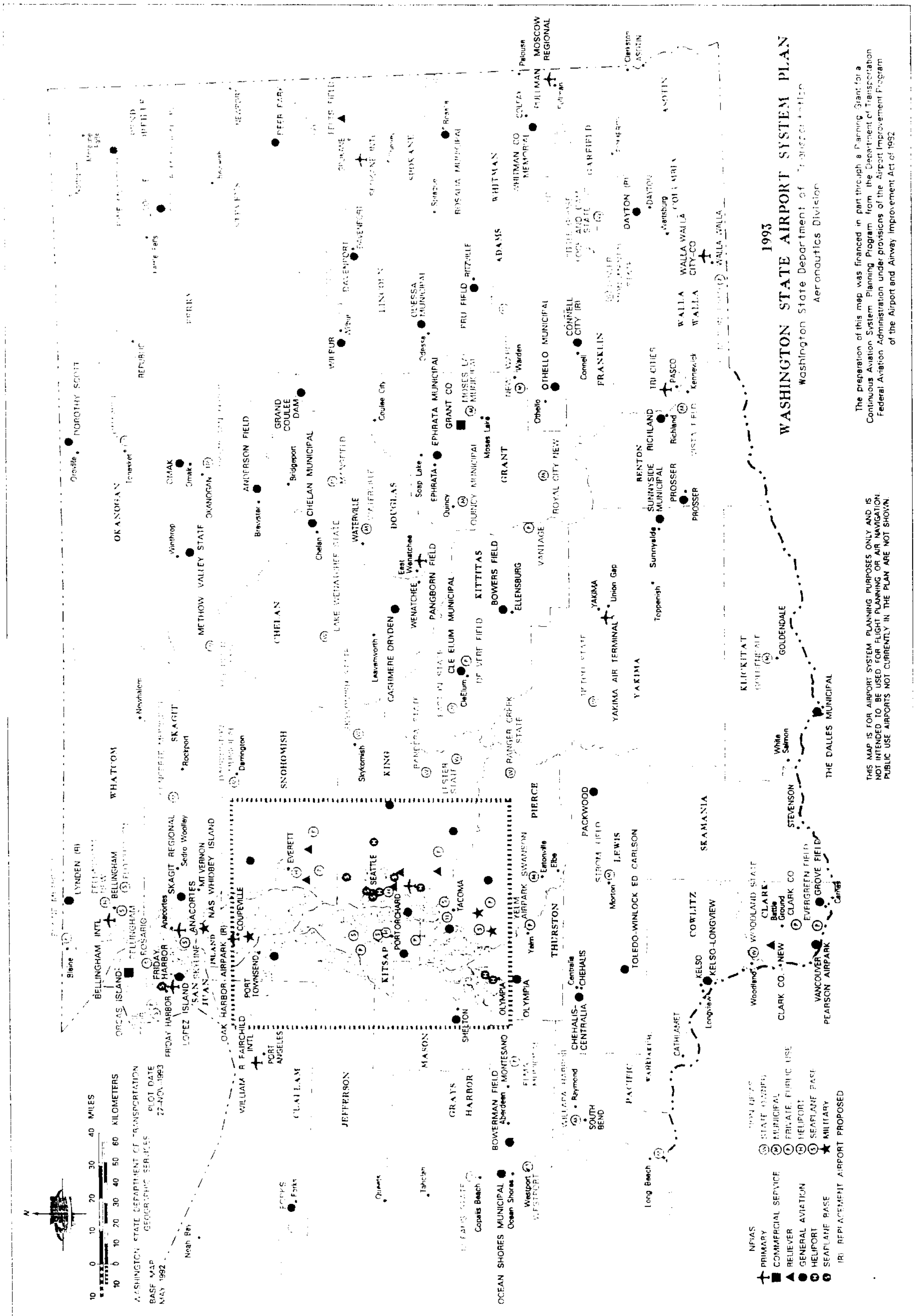
The Aviation System

The aviation system in Washington consists of over 500 public and private airports serving general aviation and commercial air carriers. Of these, 65 aviation facilities are of national interest and are included in the National Plan of Integrated Airport Systems (NPIAS). These nationally significant aviation facilities include 13 primary and commercial service airports which provide regularly scheduled passenger services; 6 reliever airports which are general aviation airports and also serve to relieve congestion at primary service airports; and 46 general aviation airports which are public or privately owned and serve general aviation users. An additional 64 general aviation airports are of statewide interest, and include state, municipal, or private facilities that are open to the public. The remaining airports are privately owned and have low activity levels.

According to the Federal Aviation Administration, Washington has about 24,000 registered pilots. There are almost 7,000 general aviation aircraft based at public-use airports and almost 4 million annual general aviation operations at public-use airports. Nearly 60 percent of Washington's based aircraft are located in just five counties: Clark, King, Pierce, Snohomish, and Spokane, reflecting the large urban populations of these counties. The number of registered pilots, based aircraft, and general aviation operations are all forecast for continued growth.

Air carrier service is offered at 13 primary and commercial airports in the state and are dominated by the state hub — Seattle-Tacoma International Airport. Statewide, air carriers enplane over 12 million passengers annually in over 600,000 aircraft operations. Seattle-Tacoma International Airport accounts for all foreign flag carrier passengers, almost all of the major and national passengers, and about half of the regional enplanements. Both enplanements and operations are forecast to continue to grow, with enplanements growing faster than operations reflecting the use of larger aircraft as passenger demand grows.

Air transportation in Washington is provided by both the public and private sectors, with the private sector being the users, and the public sector providing much of the aviation infrastructure. In the public sector, most of the higher-use airports, including all of the air carrier airports, are owned by local governments or port districts. The federal government, through the Federal Aviation Administration, has a large role in providing the air traffic control system, regulating air carrier and general aviation operations, and providing airport improvement grant funding for the nationally important airports. The state has a broad role, defined under RCW 47.68, in encouraging, fostering, and assisting in the development of aeronautics, and providing for the protection and promotion of safety in aeronautics. The principal state activities in carrying out this role include: registering



This draft map is provided for illustrative purposes only and should not be relied upon for detailed information. For more specific information or to obtain a color version of this map, please contact the WSDOT Planning Office at (360) 705-7962.

general aviation pilots and aircraft, providing safety education programs for pilots, coordinating the statewide search and rescue activities, administering a local airport aid grant program, and developing the Washington State Continuous Airport System Plan which identifies general aviation and air carrier airport needs across the state.

The service objectives listed below call for developing and protecting adequate capacity for both general and air carrier aviation, improving aviation safety, continuing search and rescue activities, and continuing aircraft and pilot registration activities.

Service Objectives

General Aviation

- Ensure adequacy and improve general aviation facilities to meet current and future growth and demand in support of the state's trade and economic vitality.
- Facilitate no net loss of general aviation airport capacity.

Air Carrier Aviation

- Promote the development of adequate air carrier airport facilities, both airside and landside, to meet preservation, growth, and safety needs.

Aviation Safety

- Ensure the highest level of aviation safety.

Emergency Response and Public Safety

- Provide emergency response capability and public safety through search and rescue and by maintaining, preserving, and improving a system of general aviation and commercial aviation services and facilities.

Aviation Regulation

- Facilitate pilots, aircraft owners, and airport operators compliance with state aviation regulations to ensure safe aviation and provide funding for general aviation services and facilities.

Deficiencies and Strategies to Address

The 1993 Airport System Plan identified $521 million of capital facility needs for the national- and state-interest airports during the 10-year period 1994-2003. Of this amount, 65 percent is for the air carrier airports, 22 percent for reliever and other national-interest general aviation airports, and 13 percent for the state-interest general aviation airports. Development costs at national-interest airports are eligible for federal grant funding, which can be up to 90 percent of project costs. The remaining funding comes from local sources, including airport operating revenue which is significant for the larger air carrier airports. Assuming continuation of this federal support, most of the needs at national-interest airports can be met within current funding sources.

Funding is less certain for the state-interest general aviation facilities. While WSDOT has a local airport aid grant program, current funding is far short of meeting all identified capital facility needs identified through the year 2003.

Similarly, the state aeronautics programs, including pilot safety, education and training, and search and rescue activities, will need additional funding to maintain current levels of activity. These needs estimates do not include proposed system expansions to maintain general aviation basing capacity, such as the new general aviation airport in Clark County, which would need additional revenue.

General Aviation

Actions to support General Aviation:

1. Provide continuing education to both the public and private sectors on aviation's contribution to the state's economy.
2. Provide capital investment in partnership with local communities and other funding programs, and provide informational and technical assistance to communities in partnership with other agencies to enhance economic development through aviation (e.g., help communities identify and attract aviation compatible businesses).
3. Assist airport sponsors and managers in providing safe general aviation facilities including but not limited to:
    - Acquiring land and removing obstructions to protect runway and clear zone safety areas,
    - Working with local and regional planning jurisdictions to ensure compatible land uses surrounding airports,
    - Preserving and improving runway pavements, and
    - Installing lighting and other safety aides.
4. Work in partnership with other agencies/local jurisdictions to provide access, connectivity, and infrastructure to aviation facilities as part of a multimodal transportation system.
5. Work with airport sponsors and local jurisdictions to develop mitigation strategies for environmental impacts.
6. Where existing aviation facilities cannot be preserved or expanded, work with airport sponsors and local jurisdictions to site new facilities to preserve existing capacity. Provide technical assistance to local agencies on the preservation of airport facilities from encroachment by incompatible land uses.

Air Carrier Aviation

Actions to support Air Carrier Aviation:

1. Preserve and enhance air carrier service capacity at commercial service airports through the preservation of existing general aviation airports for use by GA aircraft.
2. Support airport operators in providing adequate air carrier airport capacity to ensure that Washington citizens can receive the maximum air carrier service that the system can provide. Serve as an advocate in the movement of goods and services through airport facilities.

Aviation Safety

Actions to support Aviation Safety:

1. Develop state aviation safety standards.
2. Provide continuing safety education and training opportunities for general aviation pilots.
3. Provide continuing educational opportunities and technical assistance to local and regional planners and the public on general aviation and commercial airport safety needs and requirements and incompatible land uses.

Emergency Response and Public Safety

Actions to support Emergency Response and Public Safety:

1. Ensure a strong role for aviation through working in partnership with emergency services agencies and communities to develop natural disaster emergency response programs.
2. Manage aerial search and rescue service in the state by providing training, facilities, and coordination of aerial search and rescue missions. Assure adequate funding is available.
3. Develop heightened public awareness of general and commercial aviation's key role in providing essential goods and services during natural disasters.

Aviation Regulation

Actions to support Aviation Regulation:

1. Increase awareness and enforcement of pilot and aircraft registration laws.

Costs

Cost estimates have been developed for each of the Aviation System Service Objectives for the 20-year time frame. Capital and maintenance costs shown here have been projected through a joint effort between WSDOT and the Federal Aviation Administration to accurately reflect the state's aviation needs. Historically, the capital improvement project data collected for general aviation facilities has not been critically evaluated to determine if the projects were feasible, fundable, and/or a priority to the governing jurisdictions. The costs listed below reflect a fully funded aviation system program.

The General Aviation Service Objective costs reflect ongoing state, federal, and local coordination programs, including planning. Air Carrier Service Objective costs portray the capital improvement and maintenance needs of primary, commercial, and reliever airports. The Aviation Safety Service Objective costs identify the capital improvement and maintenance needs of non-NPIAS airports (which are not eligible for federal funding) including the state's Airport Aid Program, and the needs of NPIAS general aviation airports (those eligible for federal funding).

The Emergency Response and Public Safety Service Objective costs outline the costs of operating and maintaining the traditional state aviation programs including search and rescue and pilot education. The Aviation Regulation Service Objective costs show the agency's cost to enforce and collect pilot fees and aircraft regulation laws.

Service Objective Category	1993 Costs (Thousands) Totals	State Cost	Federal Cost	Local Cost
Aviation System Costs				
General Aviation				
Operation Cost		$ 15,959	$ 4,500	
Education		$ 800		
Partnering				
Capital Cost:				
NPIAS G.A. Airports		$ 1,471	$ 126,539	$ 19,128
Non-NPIAS Airports		$ 73,858		$ 20,729
State-Owned Airports		$ 4,174		
Total	**$ 267,158**			
Air Carrier				
Preserve Existing Airports		$ 635	$ 540	$ 60
Capacity Enhancements:				
Primary Airports			$ 789,404	$ 235,796
Commercial Airports			$ 41,325	$ 6,175
Reliever Airports			$ 84,960	$ 9,400
Total	**$ 1,168,295**			
Aviation Safety				
Standard Development		$ 1,838		
G.A. Training		$ 612		
Local/Regional Training		$ 1,225		
Total	**$ 3,675**			
Emergency Response and Public Safety				
Search and Rescue		$ 2,914		
Partner With ESAs		2,185		
Public Awareness		730		
Total	**$ 5,829**			
Aviation Regulation				
Awareness and Enforcement		$ 3,675		
Total	**$ 3,675**			
20-Year Total	**$1,448,623**	**$ 110,076**	**$1,047,268**	**$ 291,288**

11:P:WTP2

Access Control: Control of access is the condition where the right of owners or occupants of abutting land or other persons to access, light, air, or view in connection with a highway is fully or partially controlled by public authority.

A.S.: Action Strategies are specific steps to be taken to achieve the service objectives identified in Washington's Transportation Plan. They can be state actions or actions by others. Further, the state actions can be either "investment" or "advocacy" actions.

ADA: The **Americans with Disabilities Act of 1990** mandates changes in building codes, transportation, and hiring practices to prevent discrimination against persons with disabilities, in projects involving federal dollars, including federally funded transportation projects.

Air Carrier: A provider of commercial transportation services. Included are certified air carriers, air taxis (including commuters), supplemental air carriers, commercial operators or large aircraft, and air travel clubs that hold certificates of public convenience and necessity.

CAAA: The **Clean Air Act Amendments of 1990** identify "mobile sources" (vehicles) as primary sources of pollution and call for stringent new requirements in metropolitan areas and states where attainment of National Ambient Air Quality Standards (NAAQS) is or could be a problem.

CMAQ: The **Congestion Mitigation and Air Quality Improvement Program**, a categorical funding program contained in Title I of ISTEA that provides funds for projects and activities to reduce congestion and improve air quality. To be eligible for CMAQ, projects and activities must contribute to achieving National Ambient Air Quality Standards and must be included in a Transportation Improvement Program (TIP).

COG: Council of Governments, one of several possible names for a Metropolitan Planning Organization.

CRAB: County Road Administration Board. CRAB is an oversight agency for county road organizations. As part of that function, it administers the Rural Arterial and the County Arterial preservation programs for the state.

CTR: The **Commute Trip Reduction** legislation requires major employers in the eight most populous counties in the state to take measures to reduce the number of single-occupant vehicle (SOV) trips and the number of vehicle miles traveled (VMT) by their employees. SOV trips and VMT are targeted to be reduced from a baseline year within homogeneous trip-reduction zones by 15 percent in 1995, 25 percent in 1997, and 35 percent in 1999.

DOE: The **Department of Ecology** is responsible for ensuring compliance with CAAA and SIP preparation.

DOT: Department of Transportation refers to the U.S. DOT.

Dray: To move cargo locally by truck or cart.

EPA: The **Environmental Protection Agency** is the federal agency responsible for monitoring and ensuring compliance with air quality standards at the state level.

FHWA: The **Federal Highway Administration** is the agency of U.S. DOT with jurisdiction over highways.

FTA: The **Federal Transit Administration** is the agency of U.S. DOT with jurisdiction over transit. Formerly known as the Urban Mass Transit Administration.

General Aviation: That portion of civil aviation that encompasses all facets of aviation except air carriers.

GMA: The **Growth Management Act** of 1990, amended in 1991, addresses the negative consequences of unprecedented population growth and suburban sprawl in Washington. The GMA requires all cities and counties in the state to do some planning and has more extensive requirements for the largest and fastest growing counties and cities in the state. Its requirements include guaranteeing the consistency of transportation and capital facilities plans with land use plans.

HCT: A **High Capacity Transit** system is a public transit system, such as rail, that can accommodate large volumes of riders.

HOV: A **High Occupancy Vehicle** is a car carrying enough people to be able to travel in the HOV or Diamond Lane, or a vanpool or a bus. In Washington, most HOV lanes require that two or more persons travel together, although in some places three people are needed.

ITS: Intelligent Transportation System generally refers to the advanced technology applications that automate highway and vehicle systems to enable the more efficient and safer use of existing highways.

Intermodal: Refers to transfer facilities where freight or passengers change modes of transport. For example, an airport is an intermodal facility where freight and passengers make intermodal transfers between motorized vehicles and airplanes.

ISTEA: The **Intermodal Surface Transportation Efficiency Act of 1991** implemented broad changes in the way transportation decisions are made by emphasizing diversity and balance of modes and preservation of existing systems over construction of new facilities, especially roads, and by proposing a series of social, environmental, and energy factors that must be considered in transportation planning, programming, and project selection.

LOS: Level of Service refers to the six levels of congestion defined for differing facilities. They are given letter designations from “A” to “F,” with LOS “A” representing the best conditions and LOS “C” and “D” representing generally acceptable quality of service on rural and urban facilities.

LRP: A **long-range plan** is a 20-year forecast plan, now required at both the metropolitan and state levels, that must consider a wide range of social, environmental, energy, and economic factors in determining overall regional goals and how transportation can best meet these goals.

MPO: A **Metropolitan Planning Organization** is the agency designated by the Governor (or governors in multi-state areas) to administer the federally required transportation planning process in a metropolitan area. An MPO must be in place in every urbanized area over 50,000 population. The MPO is responsible for the 20-year long-range plan and the Transportation Improvement Program. The official name for an MPO may also be Council of Governments, Planning Association, Planning Authority, Regional or Area Planning Council, or Regional or Area Planning Commission. ISTEA provides procedures under which local governments and governor(s) may designate or redesignate an MPO.

Mode: A form of transport. For example, airplanes and trains are both transportation modes.

Multimodal: Refers to a plan or program that accounts for the needs and/or trends of multiple modes. Washington's Transportation Plan is an example of a multimodal plan.

NAAQS: National Ambient Air Quality Standards were established by the Environmental Protection Agency to help mitigate the health impacts of air pollution. National Ambient Air Quality Standards exist for six pollutants: carbon monoxide, ozone, particulate matter, lead, sulfur dioxide, and nitrous oxide.

NHS: The **National Highway System** to be designated by Congress will contain all interstate routes, a large percentage of urban and rural principal arterials, and strategic highways and connectors. ISTEA funding will be available for NHS.

PE: Preliminary Engineering includes all work and every action needed to allow for construction including construction plans, specifications, and cost estimates for transportation facilities. All TIP projects need to have passed the preliminary engineering phase to be able to receive funding. This is particularly important for contingency projects that may be moved up from a later year within a TIP for projects that cannot be carried out as planned.

Public Private Partnerships: Authorized by the Washington State legislature for the purposes of financing needed transportation facilities jointly with the private sector.

PTBA — Public Transportation Benefit Area: Most of the local Transit agencies in Washington State are organized under the authority of a PTBA (RCW 36.57A.010-160). PTBAs are separate legal entities which may be smaller than a county or in multiple counties. The process to establish a PTBA includes convening a public transportation conference, selecting the governing body, defining the formal boundary area, and holding an election. A majority of voters must pass the measure for the taxing authority to take effect. The local sales tax generated, up to six tenths of one percent are then matched by motor vehicle excise taxes.

Registered HOV: High Occupancy Vehicles that use the Washington State Ferries and are registered so as to receive priority in boarding.

RTA: The **Regional Transportation Authority** is one of the agencies established by legislation and has the ability to provide High Capacity Transit.

RTP: The **Regional Transit Project** is the name for the rail/bus/HOV project planned for the Puget Sound Region (Snohomish, King, and Pierce Counties).

RTP: A **Regional Transportation Plan**, coordinating transportation planning efforts of all member jurisdictions, is required by all Regional Transportation Planning Organizations receiving funding for regional planning under the Regional Transportation Plan Program of the GMA.

RTPO: Regional Transportation Planning Organizations were authorized by the legislature in 1990 as part of the Growth Management Act. They are voluntarily created by local governments to coordinate transportation planning among jurisdictions and to develop a regional transportation plan. Washington provides funding and a formal mechanism that is available to all local governments (and not only those required to plan under GMA) and the state to coordinate transportation planning for regional transportation facilities.

SEPA: The **State Environmental Policy Act** requires the evaluation of environmental impacts associated with a project or agency action prior to approval. Its purposes are (1) to make decision makers aware of the environmental consequences of their actions, and (2) to involve the public and other interested parties in the analysis.

Service Objective: Specific, desired outcomes for each mode of transportation included in Washington's Transportation Plan.

SOV: Single-Occupancy Vehicle is one that is carrying only one person.

STIP: The **Statewide Transportation Improvement Program** is a three-year transportation investment strategy, required at the state level, which addresses the goals of the state long-range plan and lists priority projects and activities throughout the state.

STP: The **Surface Transportation Program** is one of the key capital programs in Title I of ISTEA. It provides flexibility in expenditure of "road" funds for nonmotorized and transit modes and for category of activities known as transportation enhancements, a broadening of the definition of eligible transportation activities to include pedestrian and bicycle facilities, and enhancement of community and environmental quality through 10 categories of activities.

System Owners: Parties, either public or private, who own or are responsible for maintaining or operating a particular transportation mode, such as city streets and county roads, public transportation, private ports, and rail.

Telecommuting: The substitution of electronic or telephone systems for traditional forms of transportation. A person that uses a personal computer at their home or at a neighborhood work station, that is linked by a modem or facsimile machine to their work place or coworkers, is telecommuting when they can substitute a journey to work electronically. This can also apply to other travel substitutions, for example teleconference, telemedicine, etc.

TCM: Transportation Control Measures are implemented to enable nonattainment areas to meet their emissions goals. They can include TDM measures, parking policies and pricing, or other system improvements that reduce congestion.

TDM: Transportation Demand Management measures try to reduce the proportion of person-trips by single-occupancy vehicles. They can include promotion of alternative modes of transportation, car and vanpool formation assistance, transit subsidies, and a variety of other measures.

TIP: A **Transportation Improvement Program** is a three-year transportation investment strategy required from metropolitan planning organizations under the Intermodal Surface Transportation Efficiency Act that addresses the goals of long-range transportation plans and lists regional transportation priority projects and activities.

TMA — Transportation Management Areas: Under the Intermodal Surface Transportation Efficiency Act, any urban area over 200,000 population is automatically a Transportation Management Area, which subjects it to additional planning requirements but also entitles it to funds earmarked for large urbanized areas.

TSM: Transportation System Management improves the flow of traffic through traffic signal sychronization, freeway on-ramp signals, the construction of high-occupancy-vehicle (HOV) lanes, left-turn restrictions, and other measures.

Travel Shed: The distance a bicyclist or pedestrian is able to travel within 20 minutes.

VMT — Vehicle Miles Traveled: A measure of transportation system use reflecting the number of miles traveled during a trip, multiplied by the total number of trips made.

Vicinity Zones: Locations on a state highway within a designated distance.

12:P:WTP2A