Washington Transportation Plan Update

Phase 2 Workshop

Preservation – Safety (Part 1)

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Due to time constraints, this presentation was not completed at the Feb. 16 meeting. The presentation ended with slide 40. The slides following slide 40 will be shown at the March Commission meeting and are subject to change.

February 16, 2005

Washington State Department of Transportation

Topics to cover today:

Timeline

- Where we've been in Phase 1
- Timeline to complete the WTP

Commission's new revenue proposal and how it relates to today's workshop

Policy check

- Policy & Strategy "To Do's"

Preview of Areas of Targeted Investment

Today we talk about 3 of the 9 issues:

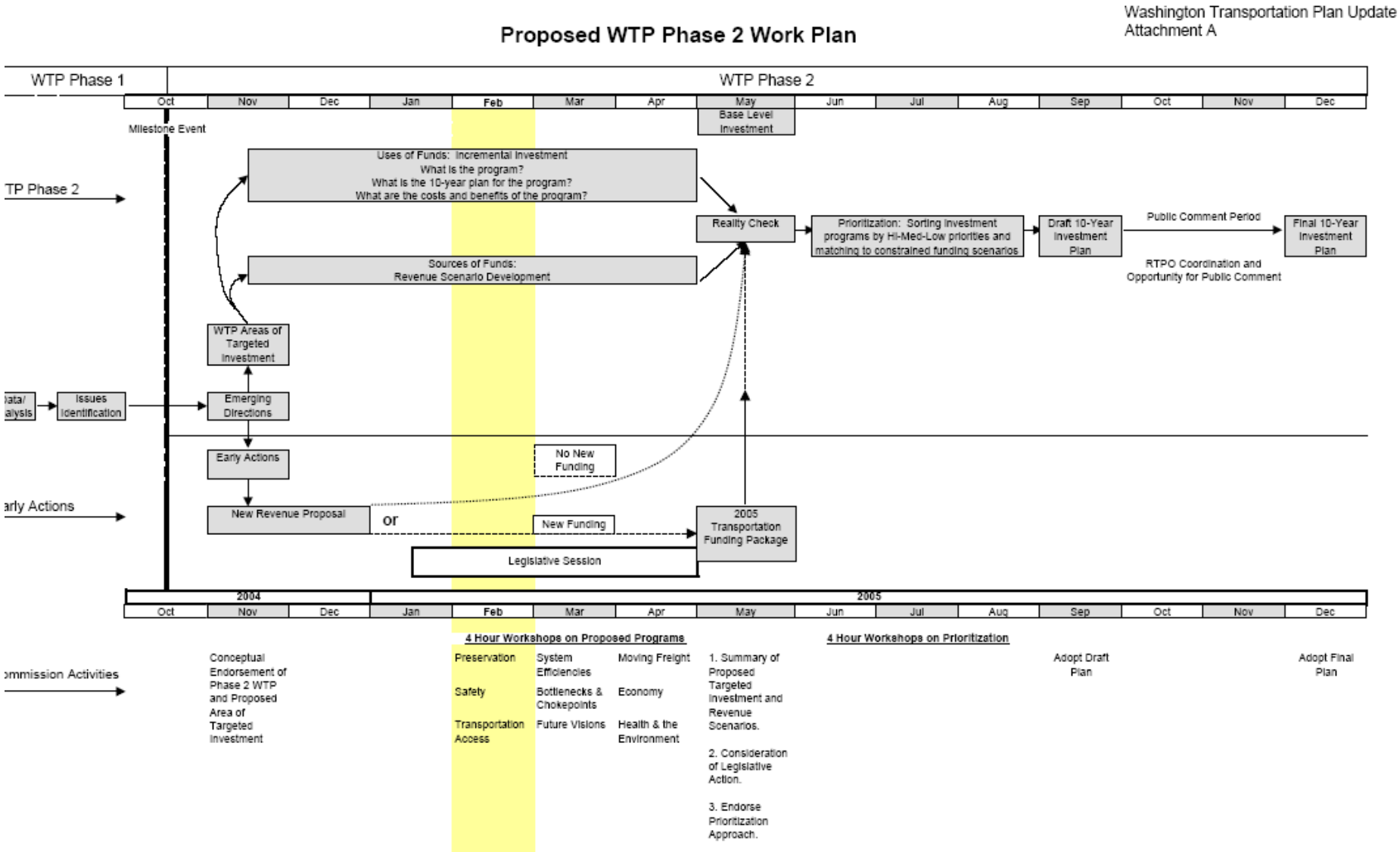
- Preservation
- Safety
- Transportation Access

Action requested today:

- Concurrence on the statutory and policy guidance
- Concurrence on the "To Do" policy and strategy proposals
- Concurrence on investment proposals to continue into later prioritization stages

Where we are now

Proposed WTP Phase 2 Work Plan



Type of Proposal

- [x] Policy
- [x] Strategy
- [ ] Capital
- [ ] Operating

Expected Benefits

- [x] Preservation
- [ ] Safety
- [ ] Transportation Access
- [ ] System Efficiencies
- [ ] Future Visions
- [ ] Bottlenecks & Chokepoints
- [ ] Moving Freight
- [ ] Economy
- [ ] Health & Environment

All or Part Included in ’05-’07 Commission Funding Recommendation?

- [ ] All
- [x] Part
- [ ] None

Funded in Current Law Budget

- [ ] All
- [x] Part
- [ ] None

Preservation

Preservation

Emphasize transportation system preservation. **(23 CFR 135)**

Priority programming for the preservation program shall consider extending the highway system service life with the most cost-effective pavement surfaces, ensuring structural load requirements are met and life cycle costs are minimized. **(RCW 47.05.051)**

Preservation of existing investments. **(RCW 47.06)**

No interstate highways or local arterials shall be in poor condition, no bridges shall be structurally deficient, and safety retrofits shall be performed on state bridges at the highest risk levels. **(RCW 47.01.012)**

Ensure Preservation of the Existing State Highway System. **(RCW 47.05.010)**

State funding for rail service, rail preservation, and corridor preservation projects must benefit the state's interests. **(RCW 47.76.240)**

Transportation facilities are in sound operating condition. **(TC)**

Emphasize infrastructure preservation and maintenance as the priority in funding transportation programs. **(TC)**

Use lowest life cycle cost methodology to determine the appropriate schedule for upkeep. **(TC)**

Identify and preserve vital transportation corridors and sites for future transportation uses. **(TC)**

Summarized

Emphasize transportation system preservation and maintenance as a priority in funding. **(CFR, RCW, TC)**

Use lowest life cycle cost methodology (extending the service life most cost effectively) to determine schedule for investments. **(RCW, TC)**

Keep existing system in sound operating condition. **(RCW, TC)**

State funding for rail service, rail preservation, and corridor preservation projects must benefit the state's interests. **(RCW)**

Identify and preserve vital corridors and sites for future needs. **(TC)**

Preservation

Airport Land Use Compatibility Policy

What is the Problem?

Aviation facilities are essential assets to the state's air transportation system. Incompatible development such as residential uses adjacent to airports can affect an airport's ability to operate and meet future air transportation expansion needs in the state.

Description of Proposal

Proposed policy development with local, regional, state, and national interests would result in state policy and possibly national policy, guidance materials, and resources that address the state's ability to discourage incompatible land uses adjacent to airports.

Description of Benefit(s)/Impacts of Implementing the Proposal

Policy development, support materials, technical assistance and community outreach to assist GMA and non-GMA jurisdictions meet statutory requirements for adoption of comprehensive plans and development regulations that discourage incompatible land uses adjacent to public use airports. Monitoring program to determine effectiveness of program.

Lynden Airport

Type of Proposal

- [x] Policy
- [x] Strategy
- [ ] Capital
- [ ] Operating

Expected Benefits

- [x] Preservation
- [x] Safety
- [x] Transportation Access
- [x] System Efficiencies
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- [x] Economy
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[ ] All [ ] Part [x] None

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Preservation

Short-Line Railroad Strategy

Type of Proposal
☑ Policy
☑ Strategy
☐ Capital
☐ Operating

Expected Benefits
☑ Preservation
☐ Safety
☐ Transportation Access
☐ System Efficiencies
☐ Future Visions
☐ Bottlenecks & Chokepoints
☐ Moving Freight
☐ Economy
☐ Health & Environment

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☐ All ☐ Part ☑ None

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What is the Problem?

Current policy based on RCW 47.76 calls for the preservation and restoration of rail corridors and infrastructure, support to branch lines, light-density lines, and port access. This policy does not have a strategy for prioritizing needs. Funding has been limited and directed to small economic development projects. As WSDOT faces rail abandonment issues, clarification of the Commission's policy direction is needed. The current approach is to engage the Legislature on a case-by-case basis when rail abandonment issues arise.

Description of Proposal

Revisit the policy and solicit advice from a freight policy advisory committee in partnership with the WSDOT-Freight Strategy & Policy Office. This effort would be similar to the earlier work of the Freight Rail Policy Advisory Committee.

Inventory track conditions

- Inventory track conditions
- Prepare an economic analysis of the freight rail system and
- Prepare a preservation analysis of the state's freight rail system

Description of Benefit(s)/Impacts of Implementing the Proposal

Strategic investments in the state's freight rail system can support the state's economy and help preserve the life of other local, regional, and state highway assets. This will result in a reduction in vehicle miles traveled, reduced wear and tear to roadway system, pollution, and fuel consumption (AASHTO). However, many short-line railroads have large backlogs of track repairs that will need to be addressed in the years ahead.

Preservation

Highway Pavements - Concrete Pavement Rehabilitation

Eliminate backlog of needs

What is the Problem?

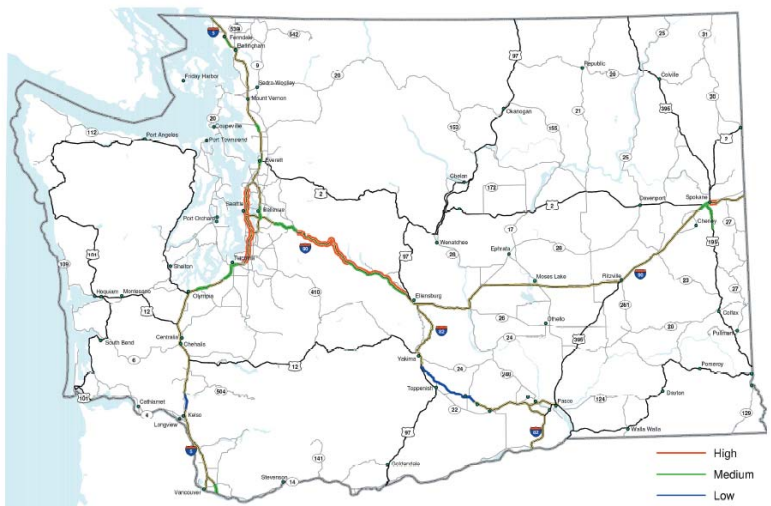
Concrete pavement conditions on the state's most important highways are in decline and will be expensive and inconvenient to fix. This backlog will result in a higher cost of rehabilitation.

Description of Proposal

Rehabilitate concrete pavement by replacing concrete panels and performing dowel bar retrofits.

Description of Benefit(s)/Impacts of Implementing the Proposal

Concrete pavement rehabilitation will provide the traveling public smoother rides and when complete, less closures due to maintenance.



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Preservation

Highway Pavements – Hot Mix Asphalt (HMA)

Maintain Highways at the lowest life cycle cost

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [x] Capital
- [ ] Operating

Expected Benefits

- [x] Preservation
- [ ] Safety
- [ ] Transportation Access
- [ ] System Efficiencies
- [ ] Future Visions
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[ ] All [ ] Part [x] None

Funded in Current Law Budget

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What is the Problem?

It is anticipated that WSDOT will complete their "past-due" pavements in the 07-09 biennium, eliminating any backlog.

Description of Proposal

Maintain the lowest life cycle cost methodology for paving highways with HMA. If adequate pavement structure exists, some HMA routes could be converted to a chip seal for an added cost benefit while maintaining the lowest life cycle cost. This needs further analysis by WSDOT.

Description of Benefit(s)/Impacts of Implementing the Proposal

Reduce long term cost to preserve Washington's Highway System.

Location of 12,284 lane miles of Hot Mix Asphalt Pavements: 71.5% of Vehicle Miles Traveled

Preservation

Highway Pavements – Chip Seals (BST)

Maintain Highways at the lowest life cycle cost

What is the Problem?
Roadways require periodic resurfacing to keep the driving surface smooth and safe and to prevent failure of the underlying sub-structure.

Description of Proposal
Maintain the lowest life cycle cost methodology for applying a chip seal treatment to the highway.

Description of Benefit(s)/Impacts of Implementing the Proposal
Maintain the structure of the pavement at a low cost on highways with low traffic volumes.

Location of 4,490 lane miles of Chip Seal Pavements: 5.3% of Vehicle Miles Traveled (VMT)

Type of Proposal

- ☐ Policy
- ☐ Strategy
- ☑ Capital
- ☐ Operating

Expected Benefits

- ☑ Preservation
- ☐ Safety
- ☐ Transportation Access
- ☐ System Efficiencies
- ☐ Future Visions
- ☐ Bottlenecks & Chokepoints
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☐ All ☐ Part ☑ None

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☑ All ☐ Part ☐ None

Preservation

Highway Pavements – Intersection Pavement Strengthening

Strengthen pavement at intersections

What is the Problem?

Existing pavements at certain intersections are not performing well because of heavy truck traffic. HMA or BST ruts quicker and more severely than other intersections and locations. This program requires more frequent paving at higher cost due to small project size.

Description of Proposal

Replace problem HMA intersections with Portland Cement Concrete and BST with HMA.

Description of Benefit(s)/Impacts of Implementing the Proposal

Lowers the cost of repeated ACP paving by increasing the life of the pavement with Portland Cement Concrete.

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [x] Capital
- [ ] Operating

Expected Benefits

- [x] Preservation
- [ ] Safety
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Preservation

Highway Structures—Replace major seismically vulnerable, aging structures

Alaskan Way Viaduct

What is the Problem

Experts have determined that there is a 1 in 20 chance that an earthquake will take the viaduct out of service permanently in the next ten years. Even a moderate earthquake could render the viaduct unserviceable.

Description of Proposal

The project will replace the existing viaduct with a tunnel through the central downtown area, connecting on the north to the Battery Street Tunnel (BST) under Belltown and to the south with an at-grade roadway.

Description of Benefit(s)/Impacts of Implementing the Proposal

The new bridge will meet modern earthquake standards. The project preserves the capacity of the system; improves accessibility in the south; improves safety by adding full sized lanes and outside shoulders; and promotes long term economic vitality for the Port and the Region.

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [x] Capital
- [ ] Operating

Expected Benefits

- [x] Preservation
- [x] Safety
- [ ] Transportation Access
- [ ] System Efficiencies
- [ ] Future Visions
- [x] Bottlenecks & Chokepoints
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[ ] All [x] Part [ ] None

Funded in Current Law Budget

[ ] All [x] Part [ ] None

Preservation

Highway Structures—Replace major seismically vulnerable, aging structures

SR 520 – Bridge Replacement and HOV Project

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [x] Capital
- [ ] Operating

Expected Benefits

- [x] Preservation
- [x] Safety
- [ ] Transportation Access
- [x] System Efficiencies
- [x] Future Visions
- [x] Bottlenecks & Chokepoints
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- [x] Health & Environment

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[ ] All [x] Part [ ] None

Funded in Current Law Budget

[ ] All [x] Part [ ] None

What is the Problem

One of the oldest floating bridges in the world, the SR 520 Evergreen Point Bridge is at the end of its useful life and needs to be replaced for the safety of the traveling public. The facility is at risk from both storms and earthquakes. When the bridge is replaced, the region has the opportunity to complete the missing link in the King County HOV system.

Description of Proposal

Four, six, and eight lane floating bridge replacement options are currently being considered. Large pontoons with enough flotation for future high capacity transit (HCT) are also included. The project includes expansion and improvements to the approach structures on the Evergreen Point Bridge, the Portage Bay Bridge, and on-ramps and off-ramps.

Description of Benefit(s)/Impacts of Implementing the Proposal

The new bridge will withstand higher anticipated wind loadings and will meet modern earthquake standards. The project preserves the capacity of the system, and improves safety by adding outside shoulders. In addition, alternatives being considered add a bike path and sidewalk, HOV lanes, and capacity to carry light rail lines across the lake.

Preservation

Highway Structures—Modernization of Narrow Bridges and Approaches

What is the Problem?

- Bridge Width less than or equal to 24 feet
- Substandard approach roadway alignment
- Load restricted
- Over water (Bridge scour problems)

Description of Proposal

- Replace these bridges
- Realign the roadway that approaches the bridge

Description of Benefit(s)/Impacts of Implementing the Proposal

- New Bridges and Bridge approach roadway constructed to current standards
- Reduction in risk of collisions
- Reduction in maintenance costs

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [x] Capital
- [ ] Operating

Expected Benefits

- [x] Preservation
- [x] Safety
- [ ] Transportation Access
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[ ] All [ ] Part [x] None

Funded in Current Law Budget

[ ] All [x] Part [ ] None

Preservation

Highway Structures—Bridge Replacement & Rehabilitation

Type of Proposal
☐ Policy
☐ Strategy
☑ Capital
☐ Operating

Expected Benefits
☑ Preservation
☑ Safety
☐ Transportation Access
☐ System Efficiencies
☐ Future Visions
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☑ All ☐ Part ☐ None

Funded in Current Law Budget
☐ All ☑ Part ☐ None

SR104 Hood Canal Bridge

SR 2 Ebey Island Viaduct (Everett)

What is the Problem?

- Replacement of bridges that have reached the end of their effective service life
- Rehabilitation of some bridges to extend their service life

Description of Proposal

- Replace or rehabilitate remaining bridges on the current priority array

Description of Benefit(s)/Impacts of Implementing the Proposal

- Eliminates the need to limit weight restrictions on truck movement.
- Reduces obsolete and deteriorated bridges to ensure the safe movement of people and goods.

Preservation

Highway Structures—Concrete Deck Rehabilitation

Type of Proposal
☐ Policy ☐ Strategy ☑ Capital ☐ Operating
Expected Benefits
☑ Preservation ☐ Safety ☐ Transportation Access ☐ System Efficiencies ☐ Future Visions ☐ Bottlenecks & Chokepoints ☐ Moving Freight ☐ Economy ☐ Health & Environment
All or Part Included in '05 – '07 Commission Funding Recommendation? ☐ All ☐ Part ☑ None
Funded in Current Law Budget ☑ All ☐ Part ☐ None

Interstate 90 Spokane Viaduct Bridges (Spokane)

What is the Problem?

- Deteriorated Pre-1980 Concrete Bridge Decks
- Excessive Wheel Rutting in Concrete Overlays

Description of Proposal

- Rehabilitate and Overlay 44 Concrete Bridge Decks

Description of Benefit(s)/Impacts of Implementing the Proposal

- Prevent continued deterioration of bridge deck
- Lower maintenance costs
- Extend the bridge deck service life
- Maintain bridges at lowest life-cycle cost

SR12 Snake River (Clarkston)

Preservation

Highway Structures—Painting Steel Bridges

What is the Problem?

Steel Bridges require painting to prevent corrosion

Description of Proposal

- Repaint Steel Bridges (typically 15-20 years)
- Share cost on Steel Border Bridges (50% of total)
- Backlog of 50 Steel Bridges

SR141 Little White Salmon River Bridge

Description of Benefit(s)/Impacts of Implementing the Proposal

- Prevent premature steel corrosion
- Extend the Bridge service life
- Maintain Bridges at lowest life-cycle cost

SR433 Columbia River Lewis & Clark Bridge

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [x] Capital
- [ ] Operating

Expected Benefits

- [x] Preservation
- [ ] Safety
- [ ] Transportation Access
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[x] All [ ] Part [ ] None

Funded in Current Law Budget

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Preservation

Highway Structures—Catastrophic Failures of Bridges due to Scour

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [x] Capital
- [ ] Operating

Expected Benefits

- [x] Preservation
- [ ] Safety
- [ ] Transportation Access
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[ ] All [ ] Part [x] None

Funded in Current Law Budget

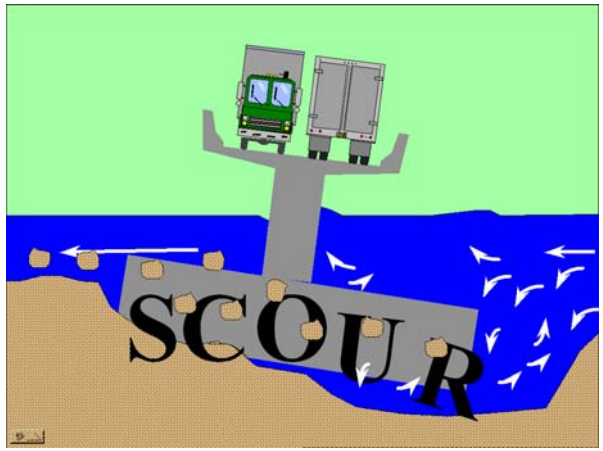
[x] All [ ] Part [ ] None

What is the Problem?

State Bridges over water with identified foundation scour problems

Description of Proposal

- Repair Scour damage of Bridge Foundations
- 35 bridge locations identified as of summer 2004



State Owned Bridges – since 1923:
70 Documented Failures
43 due to Floods/Scour

Description of Benefit(s)/Impacts of Implementing the Proposal

- Reduce the risk of catastrophic bridge collapse
- Maintain safe/reliable transportation network

SR542 Nooksack River Bridge - Nov 10, 1989

Preservation

Highway Structures—Catastrophic Failures of Bridges due to Earthquake

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [x] Capital
- [ ] Operating

Expected Benefits

- [x] Preservation
- [ ] Safety
- [ ] Transportation Access
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What is the Problem?

Substandard bridges (built in 1940-1980) in Seismic Zones B and C

Description of Proposal

Retrofit Bridge Superstructures	0 out of 326 remaining
Bridges with In-Span Hinges	
Bridges Simply Supported at Piers	
Major Bridges	4 out of 24 remaining*
Bridges with Single Columns (Higher Risk)	77 out of 189 remaining
Bridges with Multiple Columns (Lower Risk)	641 out of 692 remaining
Bridge Hollow Core Column Bridges	22 out of 22 remaining

Description of Benefit(s)/Impacts of Implementing the Proposal

- Reduce the risk of catastrophic bridge collapse
- Maintain safe/reliable transportation network

I-5 Beacon Holgate Undercrossing - Feb 28, 2001

*(3 of the four remaining are 95% complete…the only portions left to retrofit are the multiple columns on the bridges)

Preservation

Highway Other Facilities — Electrical and Drainage

Create an Inventory and Condition Assessment

SR 105 MP 16.7 (Vicinity Norris Slough)

What is the Problem?

Major Electrical features are either aging or reaching the point where replacement parts are difficult to purchase and the systems have become obsolete.

Description of Proposal

Complete inventory of assets including a condition assessment.

Description of Benefit(s)/Impacts of Implementing the Proposal

The replacement of electrical and major drainage rehabilitation addresses the old traffic signals and other electrical features along with storm water retrofit work done at the lowest life-cycle cost.

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [x] Capital
- [ ] Operating

Expected Benefits

- [x] Preservation
- [ ] Safety
- [ ] Transportation Access
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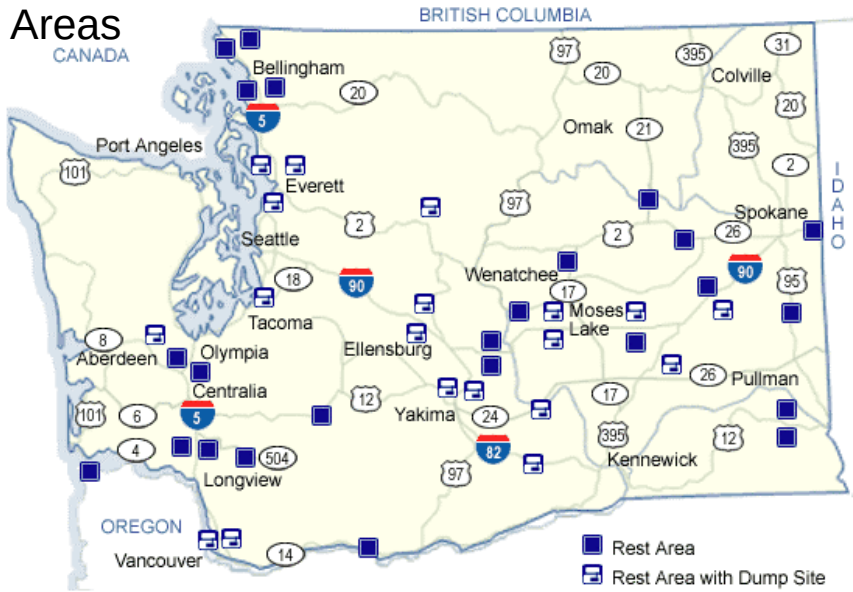
Preservation

Highway Other Facilities—Rest Areas

Refurbish/Rehabilitate Safety Rest Areas



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What is the Problem?

Washington's Safety Rest Areas are aging and some have undersized water, sewer, and electrical systems. Failures of these systems can result in closures of a few days or a few weeks.

Description of Proposal

- Replace buildings that have reached their economic service life based on renovation, maintenance, and operational costs.
- Site Refurbishment/Rehabilitation – Update the site to meet regulatory requirements and peak demand.
- Refurbish/rehabilitate building roofs, doors, surfaces and fixtures.

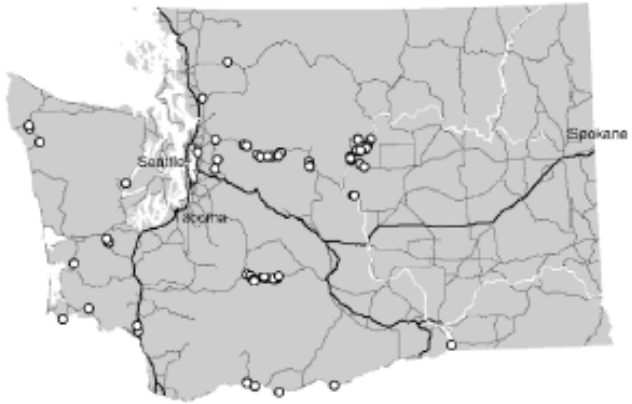
Description of Benefit(s)/Impacts of Implementing the Proposal

This program continues to provide travelers with a convenient location to rest and relax with easy and safe access to vehicles, restrooms, picnic areas and pet areas that are maintained in a clean and inviting condition.

Preservation

Highway Other Facilities—Unstable Slopes

Stabilization of slopes



Location of Known Unstable Slopes

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [x] Capital
- [ ] Operating

Expected Benefits

- [x] Preservation
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What is the Problem?

Unstable slopes can fail and impede the movement of traffic by partially blocking or completely blocking the roadway. In the worst case scenario, people can be injured or killed by falling debris or unexpected debris in the roadway.

Description of Proposal

The highest risk projects are nearly completed and a varied approach to prioritizing the remaining slopes is being developed. The remaining critical slopes will be mitigated and then this program will be scaled back.

Description of Benefit(s)

This program protects people from unstable slopes that have potential for failure. It also maintains open highways for the movement of people and freight as well as reducing maintenance costs.

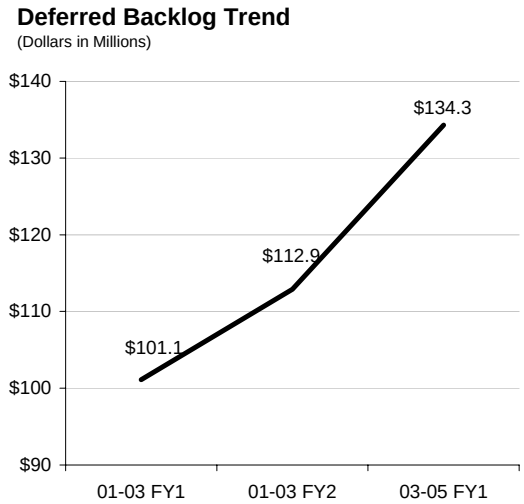
SR 12 near White Pass

Preservation

Highway Other Facilities—Facilities Replacement

What is the Problem?

WSDOT facilities are essential assets required to support the state's transportation system. As the transportation system is enhanced, the shortcomings of our aging facilities inventory also increase. In addition to regional administration, engineering, and special maintenance hubs, there are over 130 roadway maintenance facilities and 40 mountaintop radio communications sites across the state. Many existing facilities are functionally obsolete, and many other facilities require additions to remain functional.



Description of Proposal

Increase investment in facilities replacement and additions.

Invest based on payback analysis that considers facilities condition index, deficiency backlog, fragmentation and lease costs.

Description of Benefit(s)/Impacts of Implementing the Proposal

Save taxpayer dollars. Enhance department efficiency and program delivery by consolidating workforce and aligning core functions. Build equity in new commercial facilities, instead of paying rent to landlords.

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[ ] All [ ] Part [x] None

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Preservation

City Roadway Pavement Preservation

What is the Problem?

Lane miles within Washington's cities have increased by 10,505 miles (41%) since 1990. Cities do not currently have a dedicated preservation or maintenance account, and cities over 15,000 population are currently required to use one-third of their gas tax allotment on improvements leaving two-thirds for maintenance and preservation needs.

In 2003, cities invested $886 million on transportation—down from $937 million in 2002, and approximately $200 million for street maintenance alone. Yet this covers only one-third of on-going needs and does not address a critical maintenance backlog.

Description of Proposal

- Using a lowest life-cycle cost approach, establish grant funds to preserve pavements in cities with populations less than 10,000.
- Increase direct distribution to cities for preservation and maintenance needs.
- Remove the restrictions on how cities allocate their gas tax on city streets to provide more flexibility (HB 2035)

Description of Benefit(s)

- Major rehabilitation or reconstruction costs will be avoided
- A higher level of service can be provided to the public

Type of Proposal

- [ ] Policy
- [ ] Strategy
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Expected Benefits

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All or Part Included in '05 – '07 Commission Funding Recommendation?

[ ] All [x] Part [ ] None

Funded in Current Law Budget

[ ] All [ ] Part [x] None

Preservation

County System Preservation—Pavement and Ferries

What is the Problem?

Currently, counties have dedicated road funds which are supplemented by two grant programs administered by CRAB.
Many counties are addressing pavement conditions in lieu of other roadway improvements. More counties are deferring maintenance and are diverting county property tax levy dollars to other priorities within the county.

Additionally, the four counties (Pierce, Skagit, Wahkiakum, and Whatcom) that currently operate ferries anticipate unmet ferry capital needs and other needs (e.g., replacing landings, docks and pilings).

Description of Proposal

- Increase direct distribution to counties for preservation, maintenance and capital ferry needs.
- Work with the four counties operating ferries to develop capital and other needs.

Description of Benefit(s)

- Major rehabilitation or reconstruction costs will be reduced or avoided
- A higher level of service can be provided to the public

Type of Proposal

- [x] Policy
- [ ] Strategy
- [ ] Capital
- [ ] Operating

Expected Benefits

- [x] Preservation
- [x] Safety
- [ ] Transportation Access
- [x] System Efficiencies
- [ ] Future Visions
- [ ] Bottlenecks & Chokepoints
- [x] Moving Freight
- [x] Economy
- [ ] Health & Environment

All or Part Included in '05 – '07 Commission Funding Recommendation?

[ ] All [x] Part [ ] None

Funded in Current Law Budget

[ ] All [x] Part [ ] None

Preservation

Local Bridge Preservation—Short Spans & High Cost Bridges

What is the Problem?

Short spans or bridges under 20 feet in length and high cost bridges are two categories of bridges that are not currently being addressed. Both cities and counties report significant preservation needs in these areas.

Description of Proposal

Establish grant program to replace or rehabilitate bridges under 20 feet.

Establish grant program to prioritize high cost structures using the lower sufficiency ratings (50 and below) and structural deficiency designations.

Description of Benefit(s)

Improved system efficiency and removal of bottlenecks and chokepoints would result as restricted routes are opened as alternative options.

The replacement of short spans or small culverts is an important step in restoring streams and improving fish passage.

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [x] Operating
- [ ] Capital

Expected Benefits

- [x] Preservation
- [x] Safety
- [ ] Transportation Access
- [x] System Efficiencies
- [ ] Future Visions
- [x] Bottlenecks & Chokepoints
- [ ] Moving Freight
- [ ] Economy
- [x] Health & Environment

All or Part Included in '05 – '07 Commission Funding Recommendation?

[ ] All [ ] Part [x] None

Funded in Current Law Budget

[ ] All [ ] Part [x] None

Preservation

Ferry Terminals

What is the Problem?

- WSF has acquired its current terminals over a period of more than 50 years. Age brings deterioration.
- The Legislature measures the preservation status of terminals in terms of the percentage of terminal systems (trestles, transfer spans, dolphin, etc.) that are operating within their life cycles.
- Currently, three terminals are above the Legislative system-wide preservation performance standard.
- The average life cycle ratings for all terminals is far below the standard.

Description of Proposal

- WSF will meet the system-wide preservation performance standard by 2015.
- Meeting this standard will require replacement or rehabilitation of 351 terminal systems.
- The Legislature is supporting WSF's preservation efforts with terminal preservation funding of $553 million during the 2003-2015 biennia.

Description of Benefit(s)/Impacts of Implementing the Proposal

- Protection of Public Investments
- Service Delivery
- Quality of Service
- Environmental Protection

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [x] Operating
- [ ] Capital

Expected Benefits

- [x] Preservation
- [ ] Safety
- [ ] Transportation Access
- [ ] System Efficiencies
- [ ] Future Visions
- [ ] Bottlenecks & Chokepoints
- [ ] Moving Freight
- [ ] Economy
- [ ] Health & Environment

All or Part Included in '05 – '07 Commission Funding Recommendation?

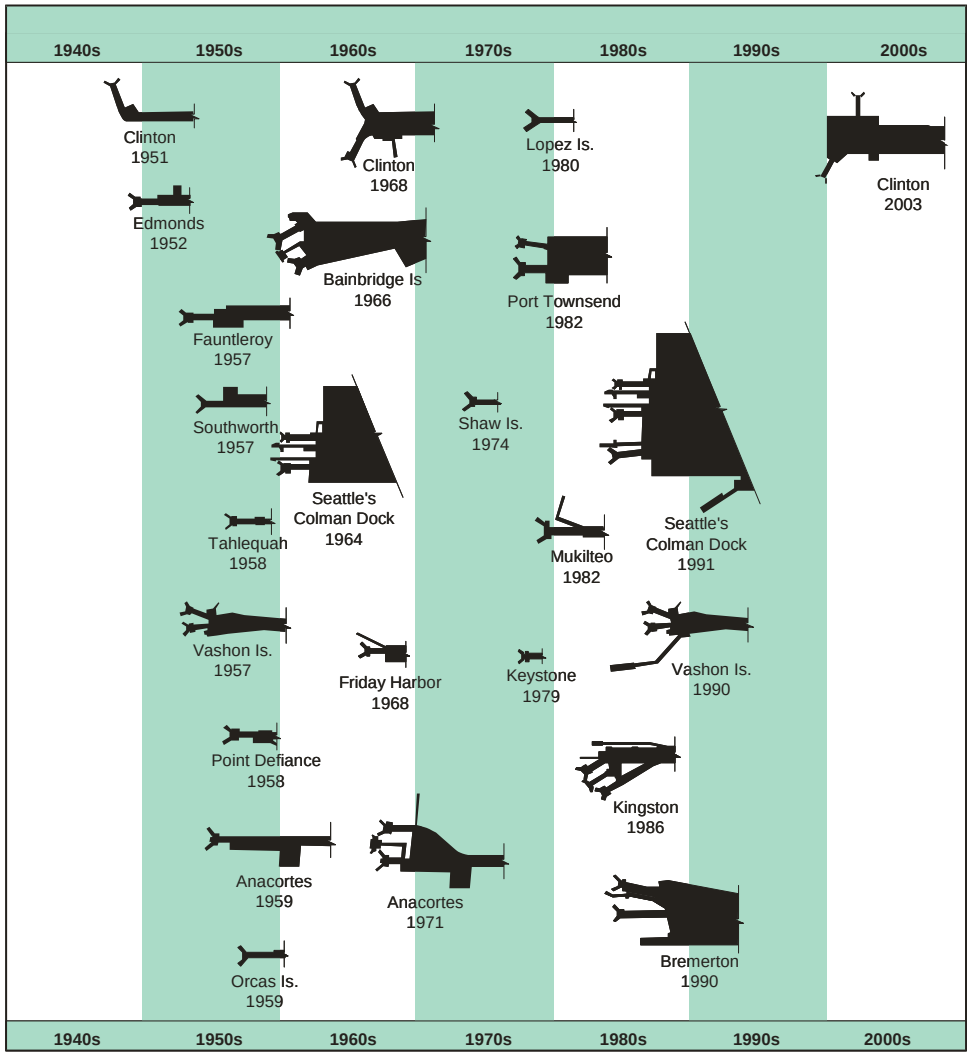
[x] All [ ] Part [ ] None

Funded in Current Law Budget

[x] All [ ] Part [ ] None

Preservation

Ferry Terminals



Historical Terminal Construction

	Cat 1 Life Cycle Rating	Cat 2 Life Cycle Rating	Projected Perf. Level
All Terminals	**73%**	**44%**	**D**
Clinton	100%	74%	B
Kingston	96%	77%	B
Edmonds	98%	66%	C
JTFF Sys-wide Goal	**90%-100%**	**60%-80%**	**(C+ to B-)**
Bainbridge Is.	95%	23%	D
Friday Harbor	85%	90%	D
Point Defiance	83%	42%	D
Bremerton	79%	92%	D
Shaw	79%	46%	D
Tahlequah	78%	52%	D
Orcas	75%	98%	D
Fauntleroy	73%	11%	D
Anacortes	72%	18%	D
Lopez	72%	51%	D
Mukilteo	63%	65%	D
Southworth	58%	14%	D
Eagle Harbor	57%	53%	D
Seattle	57%	7%	D
Vashon	54%	66%	D
Port Townsend	53%	63%	D
Keystone	26%	45%	D

Preservation Status of Terminals

Preservation

Ferry Vessels

What is the Problem?

- Construction of WSF's vessels has occurred over a period of more than 75 years. Age brings deterioration.
- The Legislature measures the preservation status of vessels in terms of the percentage of vessel systems (engines, propulsion controls, radars, etc.) that are operating within their life cycles.
- Currently, 11 vessels are above the Legislative system-wide preservation performance standard.
- The average life cycle ratings for all vessels are very close to the system-wide standard.

Description of Proposal

- WSF will meet the Legislature's system-wide preservation performance standard by 2015.
- Meeting this standard will require replacement or rehabilitation of 823 vessel systems.
- The Legislature is supporting WSF's preservation efforts with vessel preservation funding of $657 million during the 2003-2015 biennia.

Description of Benefit(s)/Impacts of Implementing the Proposal

- Protection of Public Investments
- Service Delivery
- Quality of Service
- Environmental Protection

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [x] Capital
- [ ] Operating

Expected Benefits

- [x] Preservation
- [ ] Safety
- [ ] Transportation Access
- [ ] System Efficiencies
- [ ] Future Visions
- [ ] Bottlenecks & Chokepoints
- [ ] Moving Freight
- [ ] Economy
- [ ] Health & Environment

All or Part Included in '05 – '07 Commission Funding Recommendation?

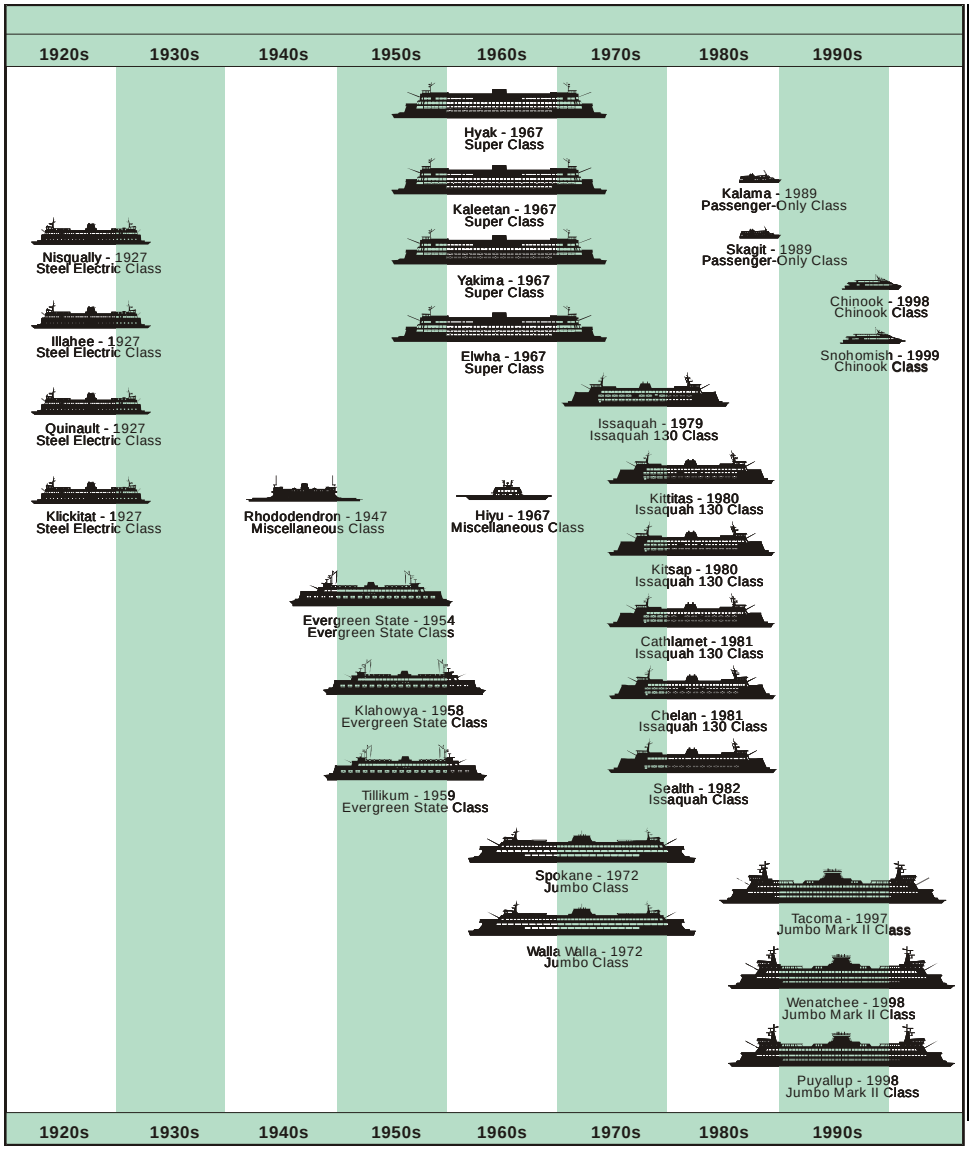
[x] All [ ] Part [ ] None

Funded in Current Law Budget

[x] All [ ] Part [ ] None

Preservation

Ferry Vessels



Historical Vessel Construction

	Cat 1 Life Cycle Rating	Cat 2 Life Cycle Rating	Projected Perf. Level
All Vessels	**91%**	**59%**	**C**
MV Tacoma	100%	91%	A
MV Wenatchee	100%	91%	A
MV Puyallup	100%	90%	A
MV Yakima	98%	96%	A
MV Snohomish*	93%	91%	A
MV Kaleetan	98%	75%	B
MV Klahowya	92%	73%	B
MV Chinook*	91%	85%	B
MV Cathlamet	90%	72%	B
MV Tillikum	99%	68%	C
MV Illahee**	91%	61%	C
JTFF Sys-wide Goal	**90%-100%**	**60%-80%**	**(C+ to B-)**
MV Spokane	100%	58%	C
MV Walla Walla	97%	54%	C
MV Kitsap	90%	56%	C
MV Kittitas	99%	39%	D
MV Sealth	96%	41%	D
MV Evergreen State**	94%	35%	D
MV Klickitat**	92%	23%	D
MV Issaquah	91%	44%	D
MV Rhododendron**	91%	16%	D
MV Elwha	90%	29%	D
MV Quinault**	90%	26%	D
MV Nisqually*	88%	22%	D
MV Chelan	87%	45%	D
MV Skagit**	86%	19%	D
MV Hiyu*	74%	14%	D
MV Kalama**	69%	15%	D
MV Hyak**	28%	42%	D

* Retired * Retiring within 10 years

Preservation Status of Vessels

Preservation

Public Transportation—Vehicle Replacement

Type of Proposal
☐ Policy ☐ Strategy ☑ Capital ☐ Operating
Expected Benefits
☑ Preservation ☐ Safety ☐ Transportation Access ☐ System Efficiencies ☐ Future Visions ☐ Bottlenecks & Chokepoints ☐ Moving Freight ☐ Economy ☐ Health & Environment
All or Part Included in '05 – '07 Commission Funding Recommendation? ☐ All ☑ Part ☐ None
Funded in Current Law Budget ☐ All ☑ Part ☐ None

What is the Problem?

There are 5,600 public transportation vehicles statewide. This fleet will need to be replaced in the next 10 years and because of the loss of funding, transit agencies are without the financial means to do so. Using the Federal Transit Administration (FTA) replacement cycle, it is projected to cost over $1 billion to replace the fleet. In order to maintain the current level of public transportation service, the fleet will also have to grow as the state population and employment grows.

Description of Proposal

Provide grant funds to transit agencies for vehicles. Transit vehicles include buses, paratransit, vans, and other vehicles.

Description of Benefit(s)/Impacts of Implementing the Proposal

Maintaining the levels of service of our transit agencies is not possible without vehicle replacement. Not all people have access to a vehicle. The transit fleet provides services that are vital to our communities and highway efficiencies.

Preservation

Public Transportation—Park & Ride Lot Preservation

Type of Proposal
☑ Policy
☐ Strategy
☑ Capital
☐ Operating

Expected Benefits
☑ Preservation
☐ Safety
☐ Transportation Access
☐ System Efficiencies
☐ Future Visions
☐ Bottlenecks & Chokepoints
☐ Moving Freight
☐ Economy
☐ Health & Environment

All or Part Included in '05 – '07 Commission Funding Recommendation?
☐ All ☑ Part ☐ None

Funded in Current Law Budget
☐ All ☐ Part ☑ None

What is the Problem?

There are 296 park and ride lots in Washington and WSDOT owns or leases nearly half of the lots. The department does not preserve and maintain the lots leaving many with failing pavement surfaces.

Description of Proposal

Development of a park and ride lot program to maintain and extend the life of park and ride lot facilities. The preservation program would be developed in coordination with a proposed park and ride lot expansion program. See System Efficiencies proposal.

Description of Benefit(s)/Impacts of Implementing the Proposal

Development of a park and ride lot program and new lot capacity is a critical factor to the highway system efficiency. It is much less expensive to preserve the existing park and ride lot capacity than siting and building replacement facilities.

Preservation

Aviation—Pavement Rehabilitation

What is the Problem?

The overall condition of airport pavement is declining in the state's aviation system due to inadequate funding under the current revenue structure. The largest impact occurs at smaller community airports that do not qualify for federal grants. A decline in pavement condition has increased safety risks and increased reconstruction and replacement pavement costs.

Description of Proposal

WSDOT Aviation has an established Airport Pavement Management Program with evaluations conducted on a 3 to 4 year cycle to determine pavement condition and capital costs to maintain airport pavements at the lowest life cycle cost.

Description of Benefit(s)/Impacts of Implementing the Proposal

Safety, cost efficiency, access, and economic contributions are the most important reasons to maintain pavements above critical condition levels.

Quincy Airport

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [x] Capital
- [ ] Operating

Expected Benefits

- [x] Preservation
- [x] Safety
- [x] Transportation Access
- [ ] System Efficiencies
- [ ] Future Visions
- [ ] Bottlenecks & Chokepoints
- [ ] Moving Freight
- [ ] Economy
- [ ] Health & Environment

All or Part Included in '05 – '07 Commission Funding Recommendation?

[ ] All [ ] Part [x] None

Funded in Current Law Budget

[ ] All [x] Part [ ] None

Preservation

Tribal Transportation Planning Initiative

What is the Problem?

Many tribal transportation planning departments are understaffed and in need of technical expertise. Only two tribes have a permanent full-time transportation planner and 17 of the 29 federally recognized tribes have a planner that addresses transportation issues perhaps 50 percent of his/her time. Results from a recent tribal survey indicate that services, projects, economic development, and participating in local planning organizations all suffer from lack of a fully functional, staffed transportation planning position in most tribal government offices.

Description of Proposal

This proposal will increase staffing levels within each of the 29 federally recognized tribes in Washington. It will also address the resounding need for tribes to closely coordinate with state and county jurisdictions regarding data collection, as well as other transportation planning needs analysis and solution development. At this time preliminary efforts are in data collection for all roads located within a reservation and those roads classified as Indian Reservation Roads (IRR). Generally road data for planning purposes is collected and sorted by jurisdictional ownership of the facility. It has never been collected or analyzed in relation to its proximity to tribal reservation boundaries. When implemented this proposal will provide a tribal staff member to use this new data to develop and update their tribal transportation plans, and coordinate with other transportation organizations, i.e. regional transportation planning organizations (RTPOs) and WSDOT on a statewide basis

Description of Benefit(s)/Impacts of Implementing the Proposal

Increased administrative capacity and technical expertise in transportation planning, especially in key problem areas, would be addressed. An increase in funding for these areas could result in more data that is less fragmented and more readily accessible to tribes. Economic development, public transportation, and traffic safety are high priorities for the tribes, and increased funding would allow them to better address these issues.

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [ ] Capital
- [x] Operating

Expected Benefits

- [x] Preservation
- [x] Safety
- [x] Transportation Access
- [x] System Efficiencies
- [x] Future Visions
- [x] Bottlenecks & Chokepoints
- [x] Moving Freight
- [x] Economy
- [x] Health & Environment

All or Part Included in '05 – '07 Commission Funding Recommendation?

[x] All [ ] Part [ ] None

Funded in Current Law Budget

[ ] All [ ] Part [x] None

Safety

Safety

Increase safety and security of the transportation system. **(23 CFR 135)**

Each county transportation authority shall submit a Rail Fixed Guideway System Safety and Security Program Plan to the state department of transportation. The plan must conform to the standards adopted by the department.
(RCW 36.57.120)

Priority programming for improvement program is to consider accident and accident risk reduction. Preservation program to restore existing safety features considering lowest life cycle costs. **(RCW 47.05.051)**

Improving safety. **(RCW 47.01.012)**

The improvement of traveler safety. **(RCW 47.06, 47.05.030, 47.05.035)**

Preservation program to restore existing safety features. Improvement program to improve safety. **(RCW 47.05.030)**

Continuously reduce injuries, fatalities and risk. Increase transportation system safety and security. **(TC)**

Emphasize traveler safety and security as a primary consideration in the planning, designing, constructing, maintaining, and operating of all transportation systems. **(TC)**

Support comprehensive transportation safety programs that target improving operator behavior and vehicle design and condition. **(TC)**

Summarized

Each county transportation authority shall submit a Rail Fixed Guideway System Safety and Security Program Plan to the state department of transportation. The plan must conform to the standards adopted by the department.
(RCW)

Increase traveler safety and system security. **(CFR, RCW, TC)**

Continue to participate in programs that target improving operator behavior and vehicle design. **(TC)**

Priority programming for improvement program is to consider accident and accident risk reduction. **(RCW)**

Preservation program to restore existing safety features considering lowest life cycle costs. **(RCW)**

Safety

Improved Safety Data and Sharing Strategy

What is the Problem?

For any analysis to be useful, the data must be complete and accurate, and must be recorded in a consistent manner. Data quality and data sharing is most important in the area of traffic safety. Washington currently employs a variety of methods to locate traffic related events. These methods have varying degrees of accuracy and often cannot be appropriately analyzed in relation to one another.

Description of Proposal

This proposal would implement a series of 7 goals from the State Traffic Records Strategic Plan which includes:

- Replace paper-based data collection processes with automated electronic systems
- Replace paper-based exchanges among traffic records systems and stakeholders
- Develop statewide Emergency Medical Services (EMS) registry
- Create a more accurate statewide system for roadway feature and event location
- Improve the timeliness, utility, and accessibility of statewide collision data
- Design a new Police Traffic Collision Report (PTCR) and citizen report
- Enhance the structure and activities of the Traffic Records and Oversight Committees

Description of Benefit(s)/Impacts of Implementing the Proposal

State: New electronic data collection processes, shared data, better data timelines, and better oversight of collision data to identify safety problems and concerns.
Federal: Opportunities for automated electronic systems and shared data.
Tribes: Opportunities for shared data for tribes.

Type of Proposal

- [ ] Policy
- [x] Strategy
- [ ] Capital
- [ ] Operating

Expected Benefits

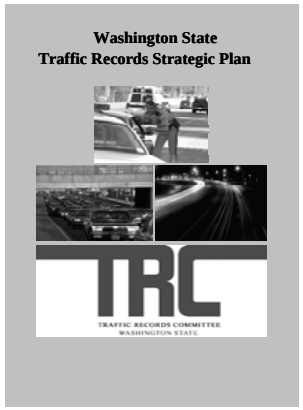
- [ ] Preservation
- [x] Safety
- [ ] Transportation Access
- [ ] System Efficiencies
- [ ] Future Visions
- [ ] Bottlenecks & Chokepoints
- [ ] Moving Freight
- [ ] Economy
- [ ] Health & Environment

All or Part Included in '05 – '07 Commission Funding Recommendation?

[ ] All [ ] Part [x] None

Funded in Current Law Budget

[ ] All [x] Part [ ] None



Safety

Motorcycle Safety Strategy

What is the Problem?

Preliminary data for motorcycle traffic deaths for Washington State show that numbers have increased by 22% from 58 deaths in 2003 to 71 deaths in 2004 (preliminary data for 2004). This indicates that motorcycle riding correlates with a disproportionately bad record for fatality or disabling injury. Between 2003 and 2004 motorcycle registration increased by 12% while passenger vehicle increased by 3.3%.

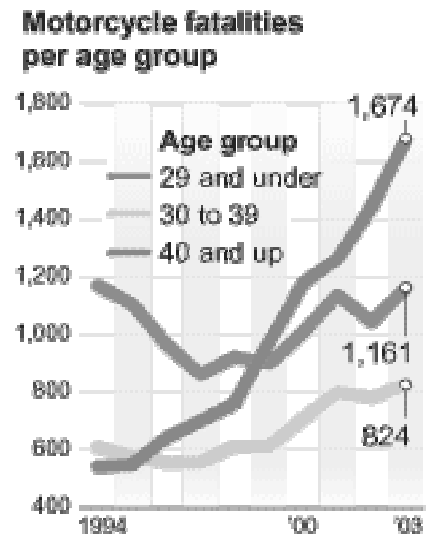
Description of Proposal

- Recommend more stringent motorcycle license testing.
- Support legislation for stricter helmet laws.
- Support lower Blood Alcohol Content level for motorcycle drivers.

Description of Benefit(s)/Impacts of Implementing the Proposal

Reduction in motorcycle related injuries and fatalities.

National Statistics



NOTE: Age of two 2003 fatalities are unknown

SOURCE: National Center for Statistics & Analysis; National Highway Transportation Safety Administration AP

Type of Proposal
☐ Policy
☑ Strategy
☐ Capital
☐ Operating

Expected Benefits
☐ Preservation
☑ Safety
☐ Transportation Access
☐ System Efficiencies
☐ Future Visions
☐ Bottlenecks & Chokepoints
☐ Moving Freight
☐ Economy
☐ Health & Environment

All or Part Included in '05 – '07 Commission Funding Recommendation?
☐ All ☐ Part ☑ None

Funded in Current Law Budget
☐ All ☐ Part ☑ None

Safety

Behavioral Programs

What is the Problem?

Driving Under the Influence (DUI), Not wearing seatbelts, and Aggressive drivers

Description of Proposal

- Pursue (support) legislation to implement a comprehensive sobriety checkpoints programs.
- Enhanced enforcement initiatives/campaigns - frequent and well publicized.
- Media campaigns to increase awareness and knowledge of impaired driving issues - Don't Drink and Drive campaigns.
- Enhance DUI awareness for younger drivers especially under 21.
- Conduct highly publicized enforcement campaigns to maximize restraint use.
- Provide enhanced public education to population groups with lower than average use rates (including non-English speaking groups).
- Conduct high-profile child restraint inspections events at multiple community locations.
- Provide grants to increase usage of child restraints.
- Assist law enforcement agencies in identifying area for emphasis enforcement activities.
- Identify and pursue photo enforcement opportunities.
- Support enhanced enforcement of speeding and other significant traffic violation especially in school zones, work zones and other identified areas.

Description of Benefit(s)/Impacts of Implementing the Proposal

Reduce overall fatal and disabling collisions. Reduce the number of traffic fatalities related to DUI. Reduce the number of underage motorists drinking and driving. The programs will help to increase seatbelt use statewide and reduce collision related fatalities on all roadways. The program will help reduce statewide aggressive driving related collisions and associated injuries and fatalities on all highways.

Type of Proposal

- [ ] Policy
- [ ] Strategy
- [ ] Capital
- [x] Operating

Expected Benefits

- [ ] Preservation
- [x] Safety
- [ ] Transportation Access
- [ ] System Efficiencies
- [ ] Future Visions
- [ ] Bottlenecks & Chokepoints
- [ ] Moving Freight
- [ ] Economy
- [ ] Health & Environment

All or Part Included in '05 – '07 Commission Funding Recommendation?

[ ] All [ ] Part [x] None

Funded in Current Law Budget

[ ] All [ ] Part [x] None