

Discussion of transportation infrastructure investment needs

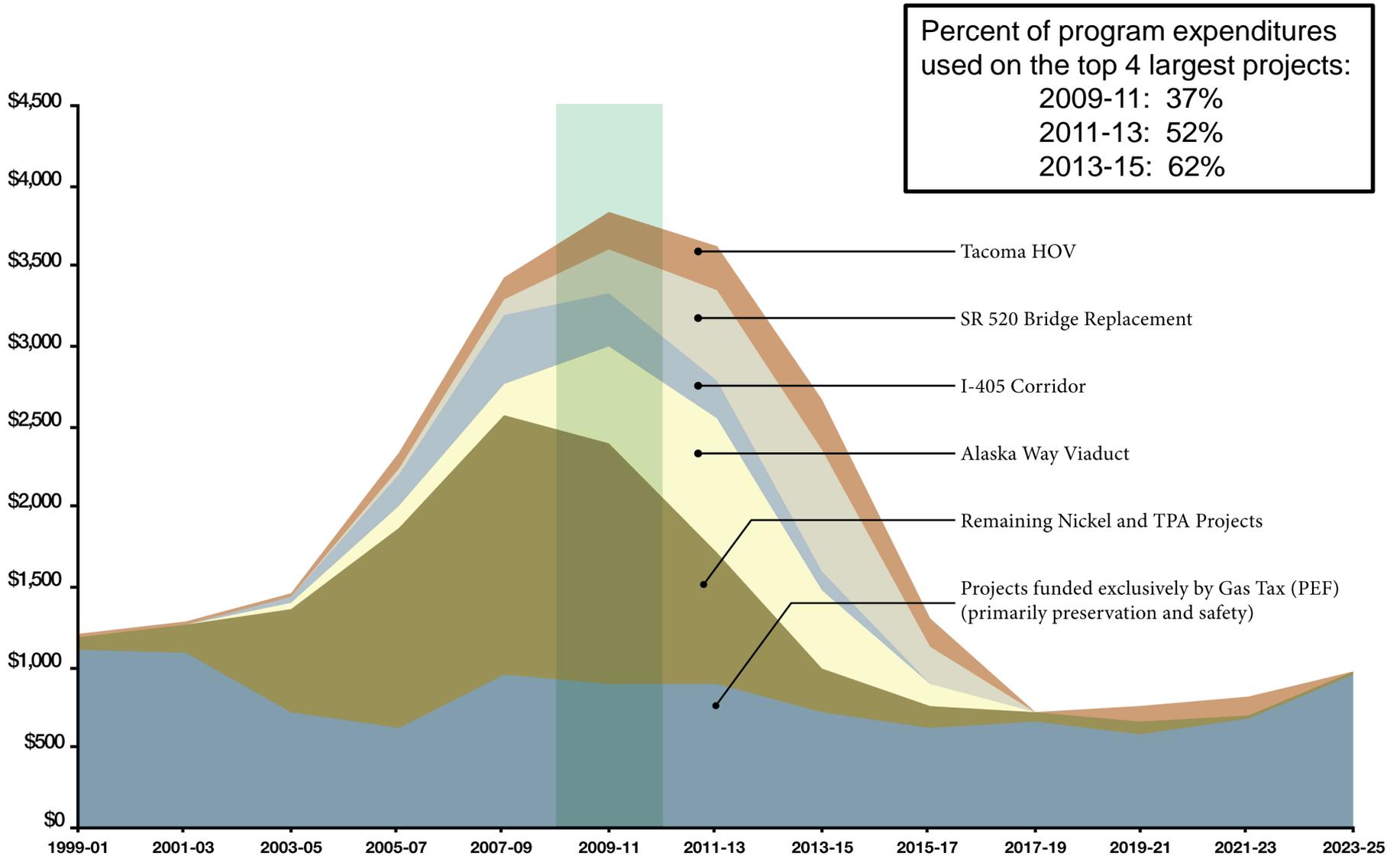
Paula Hammond, P.E.
Secretary of Transportation

Joint Transportation Committee
Olympia, Washington
January 5, 2010



Highway Construction Program: *Historical & Projected Spending*

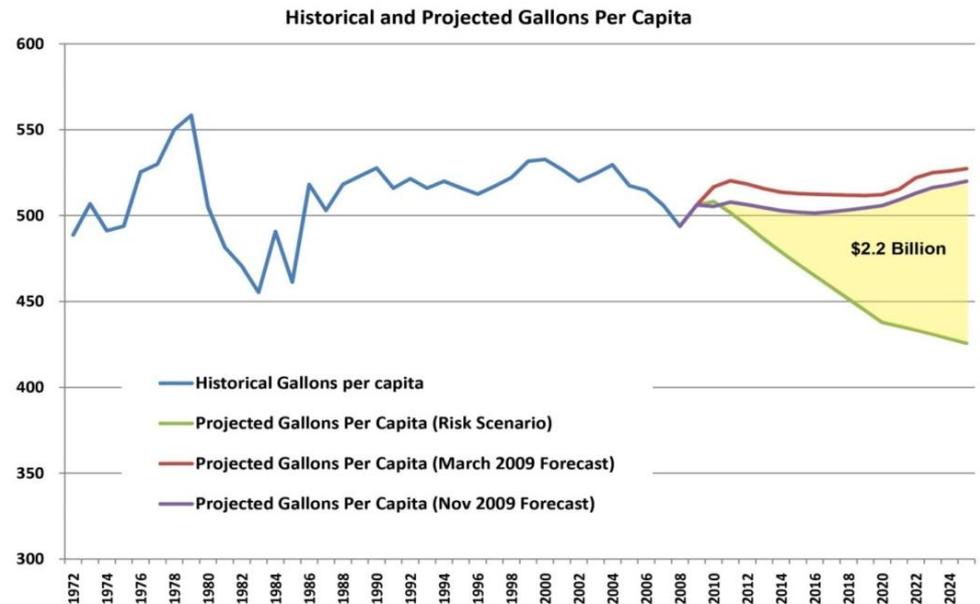
2009 Legislative Final Budget



Key Assumptions

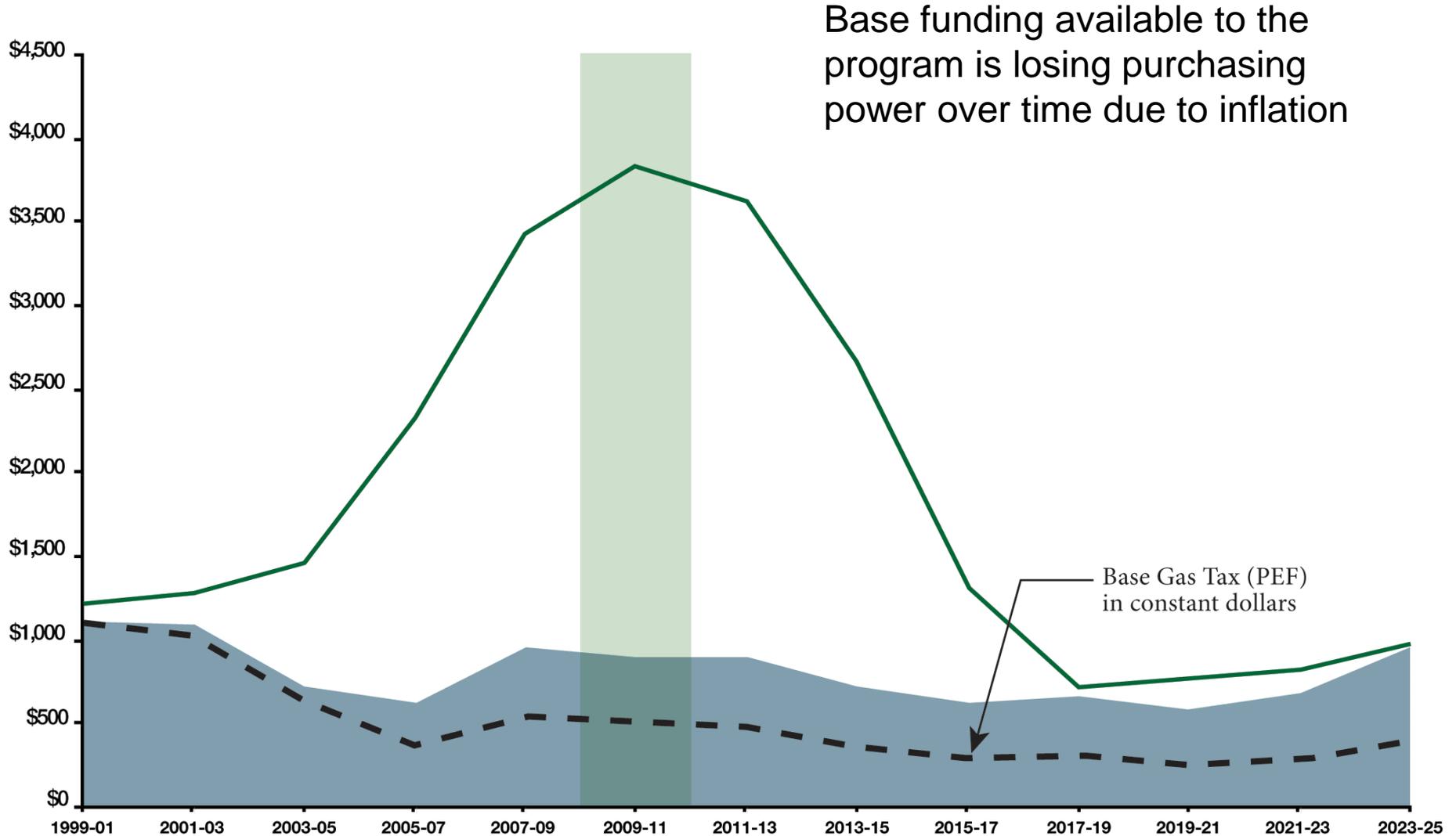
- Expenditure levels for highway construction consistent with 2009 legislative financial plan
 - Same bonding assumptions
 - Does not assume new tolling beyond TNB, SR 167, and SR 520.
- Federal revenues assumed to continue at roughly the same level

- State transportation funding levels do not assume drop assumed in JTC alternative transportation funding methods study risk scenario



WSDOT Highway Construction Program: *Historical & Projected Spending*

2009 Legislative Final Budget



System Needs

- Operations and Maintenance
- Preservation
 - Pavements
 - Bridges
- Improvements
 - Safety
 - Economic development
 - Congestion reduction
 - Demand management

2009-11 MAP Projected Delivery

\$16.8 million for Maintenance Backlog

Priority Rank	MAP Activity	2009-11 Planned Expenditures	2007-09 Targets	2008 Statewide Delivery	2009-11 Adjusted Targets and Delivery	2009-11 Adjusted for Maint. Backlog Investment
1	4B1 Movable & Floating Bridges	\$7,500,000	B+	A+	B+	B+
2	6B1 Signal Systems	\$11,200,000	C+	C-	C-	C*
3	5B1 Snow & Ice	\$73,600,000	A-	A	A-	A-
4	4B2 Keller Ferry	\$1,400,000	B	B	B	B
5	4B3 Urban Tunnels	\$3,700,000	B	B	B	B
6	4A2 Structural Bridge	\$10,300,000	C	D	D	C
7	6A4 Regulatory Signs	\$3,200,000	C+	C	C	C+
8	2A5 Slope Repair	\$5,100,000	B	A	B	B
9	6B3 ITS	\$8,400,000	B-	B	B-	B-*
10	2A3 Catch Basins	\$4,700,000	B	D+	D+	D+
11	1A1 Pavement Repair & Crack Seal	\$24,800,000	B	C+	C+	C+**
12	4A1 Bridge Decks	\$1,700,000	B-	C	C	C
13	6A7 Guardrail	\$2,400,000	A	B+	B+	B+*
14	6A1 Striping	\$12,600,000	C+	C	C	C
15	6A2 Raised/Recessed Markers	\$2,900,000	B	C	C	B
16	3A4 Veg Obstructions	\$8,100,000	B-	D+	D+	D+
17	7B1 Rest Areas	\$11,200,000	B	B	B	B
18	1A4 Sweeping	\$7,600,000	B+	A	B+	B+
19	2A1 Ditches	\$11,000,000	B	B	B	B
20	6B2 Hwy Lighting	\$12,100,000	B+	C+	C+	C+
21	6A6 Guide Posts	\$1,800,000	C-	D	D	D
22	1B1 Safety Patrol	\$5,500,000	C+	C	C	C
23	2A2 Culverts	\$5,800,000	C	D-	D-	D+*
25	6A3 Pavement Marking	\$2,300,000	C-	C	C-	C-
26	3A2 Noxious Weeds	\$5,700,000	B	A	B	B
27	1A3 Shoulder Maint	\$3,500,000	B-	B+	B-	B-
28	6A5 Guide Signs	\$3,700,000	B-	B	B-	B-
29	2A4 Detention Basins	\$600,000	C	C	C	C
30	4A3 Bridge Cleaning	\$2,400,000	C	B	C	C
31	3A3 Nuisance Weeds	\$8,200,000	B-	A	B-	B-
32	3A5 Landscape	\$3,900,000	C-	D+	D+	D+
33	3A1 Litter	\$7,600,000	C-	D	D	D

•\$4 million for signals: Catch-up with 50% of backlog

•\$1.5 million for bridges: Catch-up with repair backlog enough to achieve current MAP target

•\$0.9 million for regulatory signs: Catch-up with maintenance backlog enough to achieve current MAP target

•\$3 million for ITS: Catch-up with 50% of backlog

•\$4 million for pavement maintenance: Keep-up with increasing deterioration

•\$0.7 million for cable guardrail: Catch-up with 100% of backlog

•\$1.2 million for raised/recessed pavement markers: Catch-up with backlog enough to achieve current MAP target

•\$1.5 million for culvert maintenance: Catch-up with 60% of backlog to meet MAP target

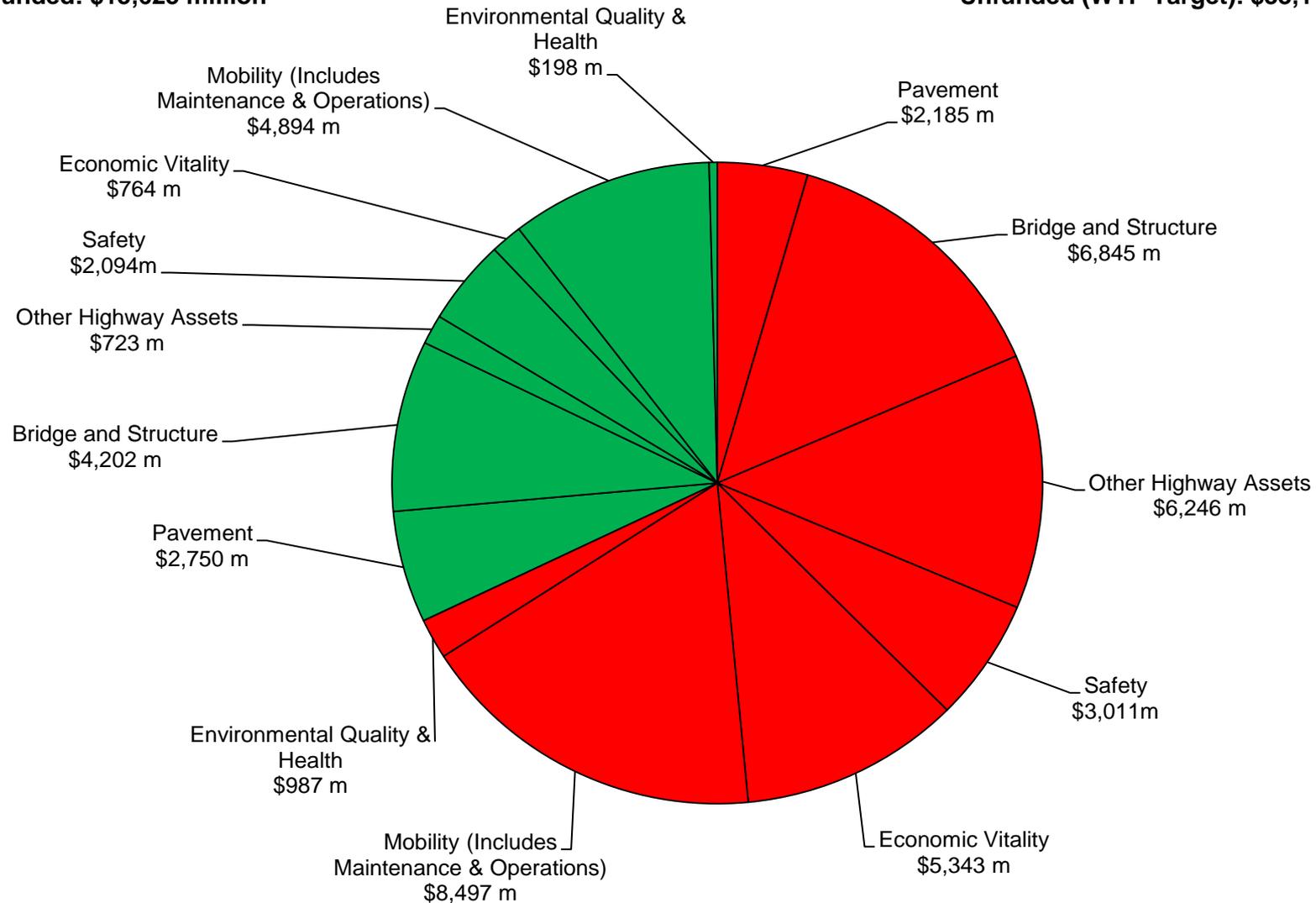
* 2009-11 budget funds catching up with a portion of the current maintenance backlog. Remaining backlog will be addressed in future biennia.

** 2009-11 budget funds pavement maintenance needed to keep up with current LOS. Pavements are deteriorating from past reduced maintenance and downturn in Preservation funding.

2007-2026 Highway System Plan

Funded: \$15,625 million

Unfunded (WTP Target): \$33,114 million

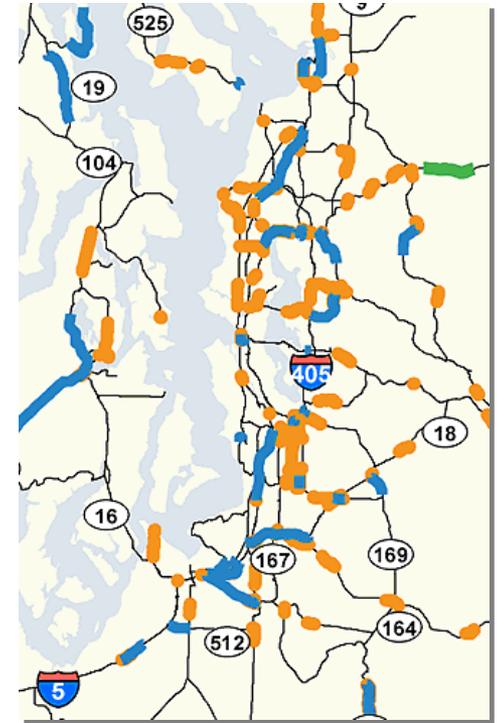
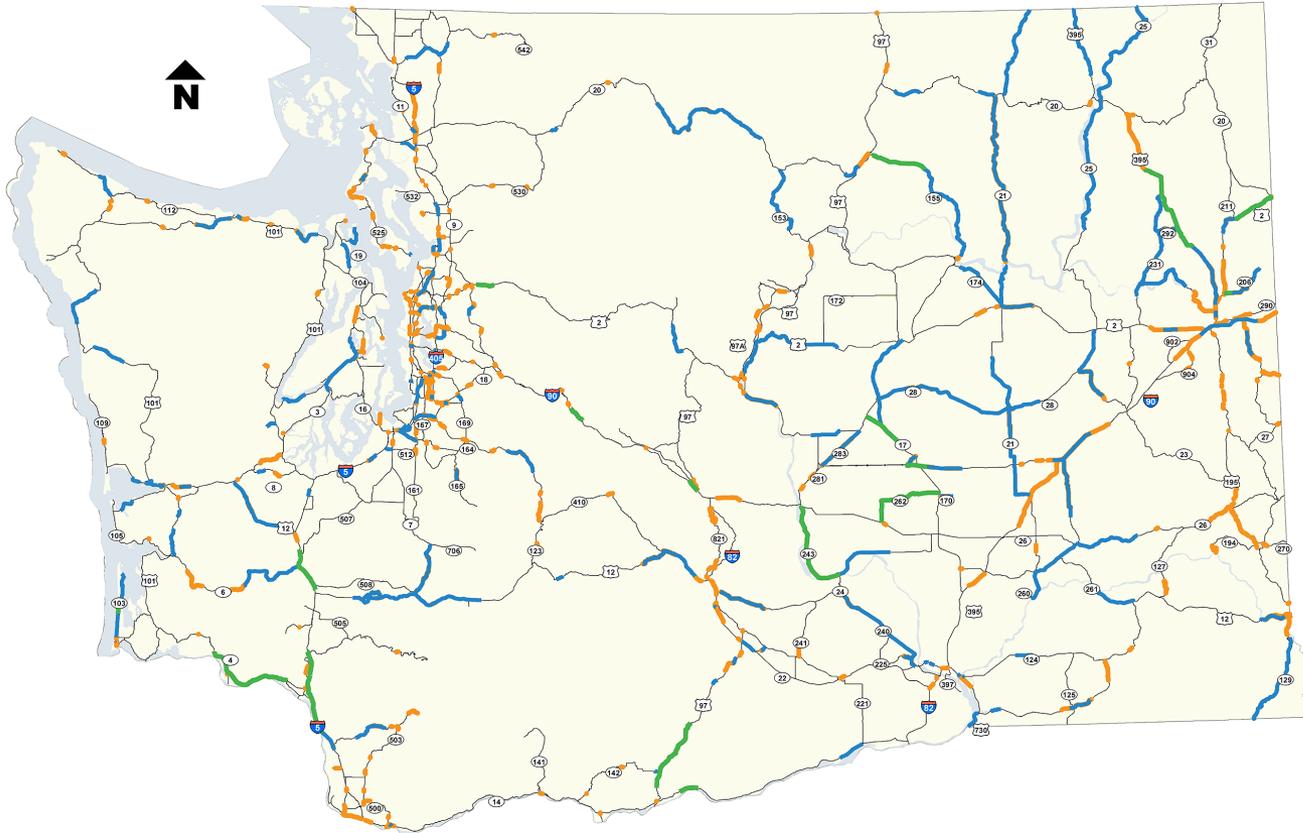


Highway Preservation Performance

Black Pavement Needs

Increased preservation needs in 2009-2011

The 2003 and 2005 programs did not contain funding for asphalt pavement¹ preservation.



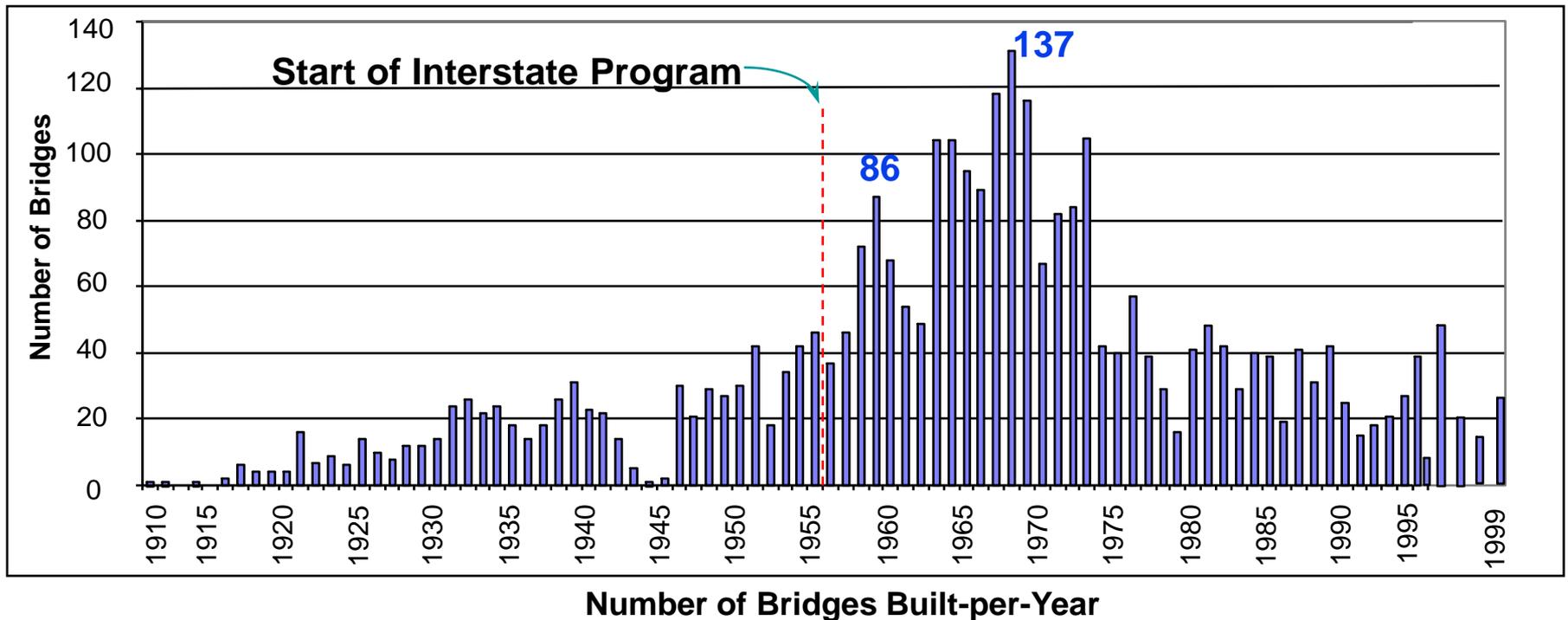
¹Hot mix asphalt and chip seal

Black Pavement Project by Funding



Aging Bridges

- WSDOT owns and maintains nearly 3,500 bridges
- The average age of state-owned vehicular bridges is now 40 years.
- WSDOT built a significant number of bridges during the Interstate Program in the 1950s and 1960s and many of these bridges are now more than 50 years old.
- The 2005 TPA included funding for the replacement of 25 bridges and funds for the Hood Canal Bridge.



Congestion is down, safety has improved

- Moving Washington, 2003 & 2005 investments are working.
 - Statewide, travel delay on state highways declined by 13% in 2008 compared to 2006.
- Crashes down: Before/after study of 25 completed projects shows 22% fewer fatal and serious injury crashes

Before and After results for 15 Nickel and TPA mobility projects*

15 completed projects: Changes in peak period travel

	Before	After	Change
Average speed	38 MPH	45 MPH	7 MPH (+20%)
Peak period travel times combined ¹	84 Minutes	71 Minutes	13 Minutes (-15%)
Volumes combined (vehicles) ²	28,152	32,124	3,972 (+14%)

Source: WSDOT Transportation Data Office

1. Before and after results measured for peak direction commutes only, either AM (6 AM-10 AM) or PM (3 PM-7 PM).

2. Volume data available for 14 projects.

* Note: Volume information is based on traffic counts and speed information is based on modelled data. These projects are those completed mobility projects with the necessary data to support a Before & After analysis. WSDOT received funding to purchase additional equipment to perform a greater number of and more precise Before & After studies in the future, and has been actively collecting data to conduct those studies.

Before and After results for 25 Nickel/TPA safety projects

Collisions annually: 24-36 months before and after construction

	Serious injury/Fatal	All injury (including fatal)	All types of collisions	Property damage only
Before period data	18.7	245.3	639.0	393.7
After period data	14.5	242.0	731.8	489.8
Percent change +/-	-22.3%	-1.4%	14.5%	24.4%

Data source: WSDOT Transportation Data Office.

Examples of Capital Needs

Preservation Projects

- WSF new vessels
- Aging concrete replacement statewide

Chokepoints and Safety Projects

- Selected interchange improvements
- SR 510 / Yelm bypass
- SR 167, new freeway
- SR 167 / HOV extension
- SR 28 / Wenatchee area

Major Corridor Completion Projects

- I-405
- I-5, Columbia River Crossing
- I-5, widening through Chehalis
- SR 509, freeway extension at Seatac
- SR 522, Bothel area widening
- SR 539, Guide Meridian widening
- US 395, North Spokane Corridor completion
- I-90, Snoqualmie pass
- US 12, Tri-Cities to Walla Walla
- SR 17, corridor widening