

State of Transportation

Moving Washington Forward

ROGER MILLAR, SECRETARY OF TRANSPORTATION
House Transportation Committee, Jan. 11, 2017

Overview

Transportation System – By the numbers

- State-owned system
- Multimodal system

Agency Emphasis areas

- Workforce
- Inclusion
- Practical Solutions

2016 Accomplishments

Connecting Washington



Washington's Transportation System – By the numbers



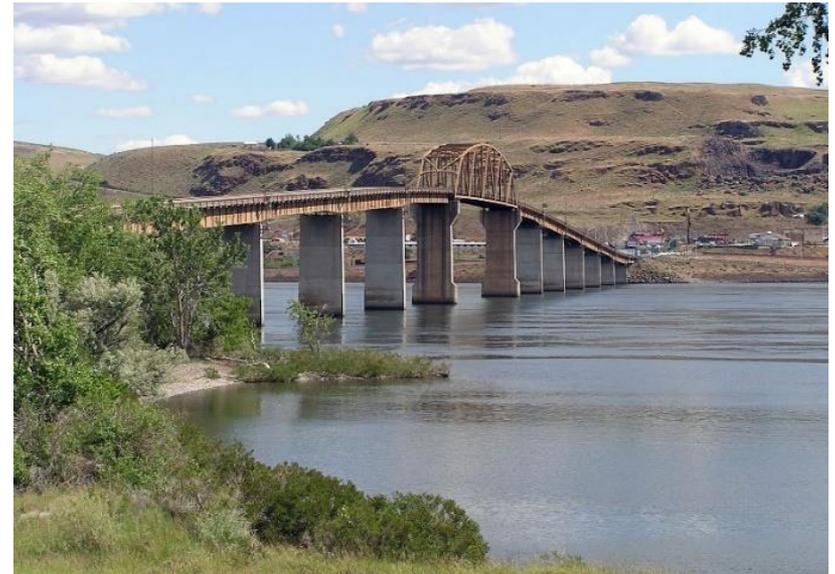
State-owned highways – only one part of the whole system that includes city streets, county roads, forest roads, private roads

- WSDOT-managed lane miles: 18,680
 - HOV: 244 lane miles completed of 369 planned
 - **Replacement value of all pavements: \$19 billion**
 - Replacement cycle varies by pavement type. Cost-effective asset management shows an average need of \$250 million per year to preserve; current funding averages \$202 million per year for stand-alone projects
- Toll facilities:
 - SR 16 Tacoma Narrows Bridge
 - SR 167 HOT lanes
 - SR 520 Bridge
 - I-405 express toll lanes
- Motorist Information Systems:
 - Traffic cameras: 1,146 (\$15,000 - \$30,000 per device)
 - Variable message signs: 319 (\$100,000 – \$250,000 per device)
 - Road/weather information systems: 113 (\$25,000 - \$50,000 per device)
 - Highway advisory radio transmitters: 86 (\$50,000 per device)



Washington's Transportation System – By the numbers (continued)

- **State-owned bridges: 3,294**
 - 91.2% deck area in fair or better condition
 - 223 bridges 80 years or older
 - 6 are 100 years or older
 - 126 bridges load restricted or posted
 - **Replacement value: estimated \$58.2 billion**
 - If all were new, based on 80-year replacement cycle: \$727 million needed annually.
 - The 223 bridges over 80 years old have a replacement value of \$2.5 billion
 - Asset management analysis shows an estimated need of \$270 million per year over the next 10 years to preserve these assets
 - Current funding averages \$118 million per year for stand-alone projects



Washington's Transportation System – By the numbers (continued)

- **Washington State Ferries**

- 23 vessels in the fleet; largest system in the U.S.
- Carries 23.88 million passengers per year
- Average age of vessels: 31 years
- **Replacement value: estimated \$2.9 billion**
 - If all were new, based on a 60-year replacement cycle, \$48.2 million needed annually to replace on time
 - Preservation backlog is \$269.4 million and growing



- **Terminals**

- **Replacement value: estimated \$1.6 billion**
 - Based upon a 50-year replacement cycle, \$32 million needed annually
 - Preservation backlog is \$54 million (not including Seattle and Mukilteo terminals)



The multimodal system – By the numbers

Transit

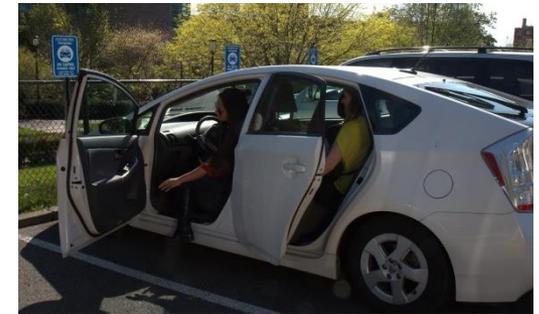
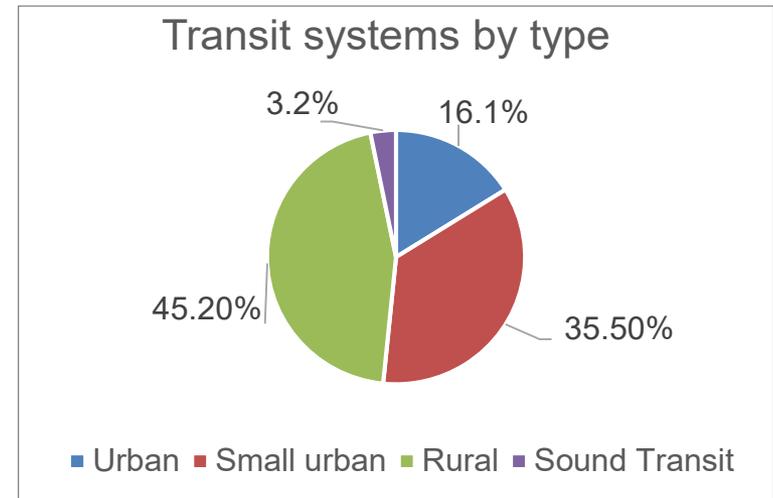
- 31 agencies across the state
- 229 million passenger trips in 2015
 - Peak period transit ridership on I-5 Central Puget Sound = four extra lanes of capacity
 - Rural transit systems cover 11 million miles annually, connecting people in rural areas to jobs, appointments and other services
- Sound Transit: 34 million passenger trips

Vanpools

- 2,920 vanpools statewide; 8 million passenger trips

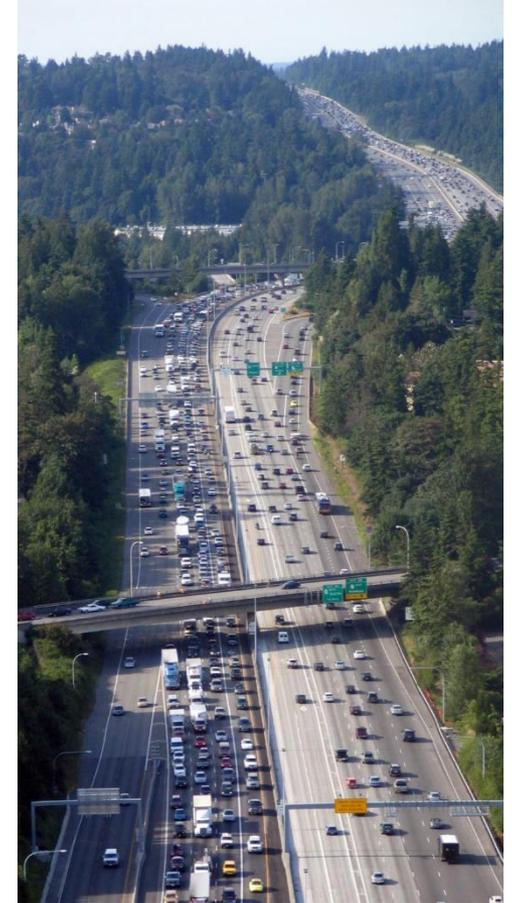
CTR Program

- Nearly 1,000 worksites across Washington



The multimodal system – By the numbers (continued)

- **Passenger vehicles**
 - 59.7 billion vehicle miles traveled on all state roads
 - 33.3 billion vehicles miles traveled on state highways
 - 567 roadway fatalities in 2015: fatality rate of 0.95 per 100 million vehicle miles traveled
- **Freight system**
 - 433 million tons moved into, out of, within and through Washington in 2015
 - Total imports and exports valued at \$137.5 billion
 - By tonnage, trucks move 64.3% of all freight in Washington (followed by pipeline, 14.1%; rail, 11.3%; marine, 4.7%; multiple modes, 4%; air, 0.1%; other 1.6%)
 - 300 miles of state-owned Palouse-Coulee City rail gives wheat growers a close-to-home option for shipping grain
- **Economic factors that influence increasing traffic**
 - Employment is up: 3.15 million workers in 2015 (up 5.6% from 2013)
 - Gas prices are down: 2.70 gallon in 2015 (down 27.2% from 2013)
 - Population is up: 7.06 million in 2015 (up 2.6% from 2013)
 - Taxable retail sales are up: \$135.4 billion in 2015 (up 13.5% from 2013)



The multimodal system – By the numbers (continued)



Amtrak Cascades

- Provides a travel option along I-5 corridor
- 672,000 passengers in 2015
- Other Amtrak options: Empire Builder, Coast Starlight

Ferries – the marine highway

- Third largest transit system in the state
- Connects with nine landside transit systems
- Multimodal terminals being built at Colman Dock and Mukilteo, enhancing seamless connections



Airports

- 6,519 registered aircraft
- 134 general use airports
- 16 state-managed airports

Bicycle and pedestrian

- 50 Pedestrian and Bicycle Grant projects underway
 - 90% of completed project locations with 3+ years of data have not had a collision
- 22% of state's K-8 students walk or bike to school
- 72 Safe Routes to School projects underway



2016 Agency accomplishments

- **SR 520 Bridge**
 - Grand opening April – 50,000 attended
 - World's longest floating highway 7,708.5 feet: Guinness World Record
 - Completed 95th and final column for the West Approach Bridge North – connects to Seattle's Montlake neighborhood
- **SR 99 Tunnel and Alaskan Way Viaduct Replacement**
 - One of the world's largest diameter tunneling machines at 57.5 feet
 - 70 percent of tunnel boring completed in December; laid 1,000th ring of 1,426
 - In zone 8 of 10 zones – Lenora to Bell streets
 - 21 of 32 total projects now completed



2016 Agency accomplishments (continued)

Washington State Ferries

- Responding to preservation needs in the fleet
 - Chimacum, 3rd Olympic Class Ferry, christened in September
 - Suquamish, 4th Olympic Class Ferry, keel laying in May
 - Terminal repairs (seismic) at Coupeville and Vashon
 - Design continues for Colman Dock and Mukilteo multimodal terminals
- Reliability and on-time performance
 - System-wide reliability: 99.5%
 - On-time performance: 94.4%
 - Missed sailings due to crewing issues reduced nearly 70% over previous 26 months
- Added benefit: saving lives
 - 17 WSF employees awarded Life Ring Awards in 2016 for aiding in life-critical events



Photo courtesy: Vigor Industrial

2016 Agency accomplishments (continued)

Interstate 90, Snoqualmie Pass

- Finished one of two avalanche bridges to reduce closures
- Completed first arch of the wildlife overcrossing to improve safety

Interstate 90, Vantage Bridge

- Completed painting to protect, preserve the 52-year old bridge; carries 14,000 vehicles a day

Interstate 90, Spokane

- Opened new westbound Freya Street ramp to reduce congestion

State Route 153, Pateros to Twisp

- Rehabilitated the deck of seven of 11 bridges
- Replace asphalt overlay, waterproof membrane and expansion joints



2016 Agency accomplishments (continued)



Tolling

- I-405 express toll lanes: drivers have taken 14.4 million trips in first year
 - \$17.5 million raised from tolls; after expenses, toll revenue goes back into corridor for improvements
 - Funded northbound peak use shoulder lane from SR 527 to I-5, scheduled to open spring 2017
 - About 1% of vehicles are transit, carrying about 15% of people
- SR 167 HOT lanes: 4,600 toll paying customers and 2,200 bus riders each weekday
 - SR 167 HOT lane extension project – added 6 miles southbound to Pacific
- One-time penalty waiver helped 92,000 customers; waived \$31 million in fees and penalties; WSDOT collected \$3.5 million in previously unpaid tolls
- RFP issued for new vendor for new *Good To Go!* billing system

Incident Response Program

- 10 new vehicles added in supplemental budget for a total of 69 Incident Response Teams
- Based on UW research, cost of delay is estimated at \$345 per minute for blocking incidents
- In 2015, IRT cleared 50,092 incidents; Contributed an estimated \$80.2 million in economic benefits; 628 incidents lasted more than 90 minutes
- In the first three quarters of 2016, IRT cleared 42,847 incidents; Contributed an estimated \$63.5 million in economic benefits; 435 incidents lasted more than 90 minutes

2016 Agency accomplishments (continued)

Interstate 5 Chamber Way Overpass

- This project demonstrated the importance and value of good community engagement
 - July 22 – over height load struck and damaged several girders beyond repair
 - July 27 – demolition of damaged section completed
 - August 4 – temporary span opened to vehicle traffic
- This is an important local corridor and business-hub access point
 - Engaged the community to find a solution to this emergency situation
 - Goodwill and relationships created will serve WSDOT well in finding long-term solution
- Tremendous amount of teamwork required for a successful project
 - Collaboration with Transportation Committee leadership: Idea to Request for Proposal (RFP) in four months



2016 Agency accomplishments (continued)

Fish Passage

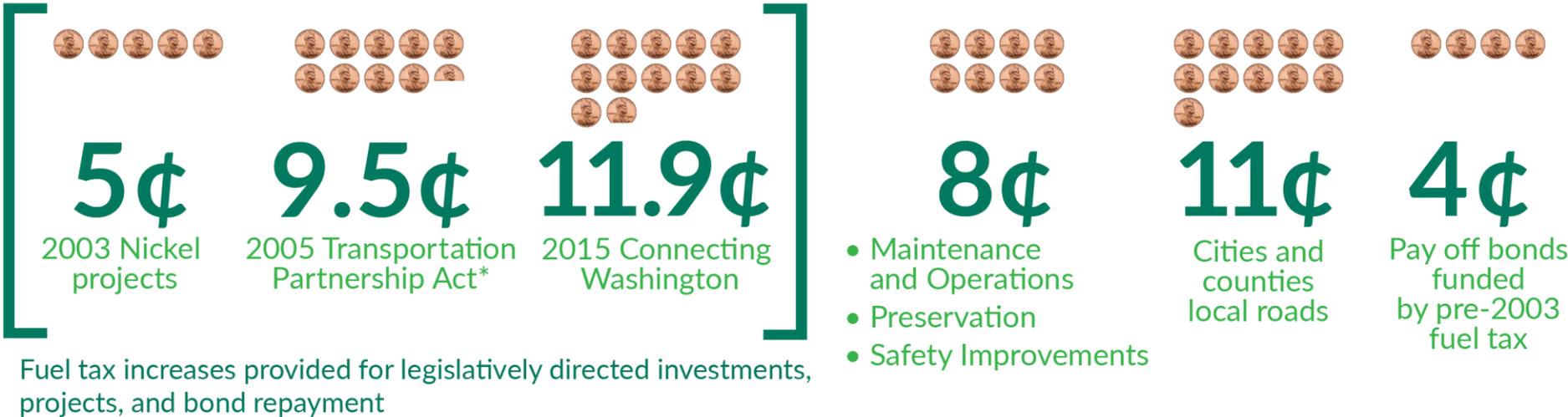
- U.S. Court injunction requires WSDOT to correct 825 barriers to fish by 2030
- Estimated \$2.4 billion needed to meet injunction; all funding sources provide \$640 million
- Funding for 2015-17 is \$88.7 million for stand-alone fish passage projects
- In 2016, corrected 20 fish passage barriers, opening additional 93 miles of stream habitat
- To gain efficiencies, WSDOT is:
 - Using designated fish passage design teams with specialized expertise
 - Working with permitting agencies to streamline permit process
 - Incorporating elements of practical design



Lake Creek on State Route 9 before and after.

Where Does the State Fuel Tax Go?

49.4¢ PER-GALLON STATE FUEL TAX

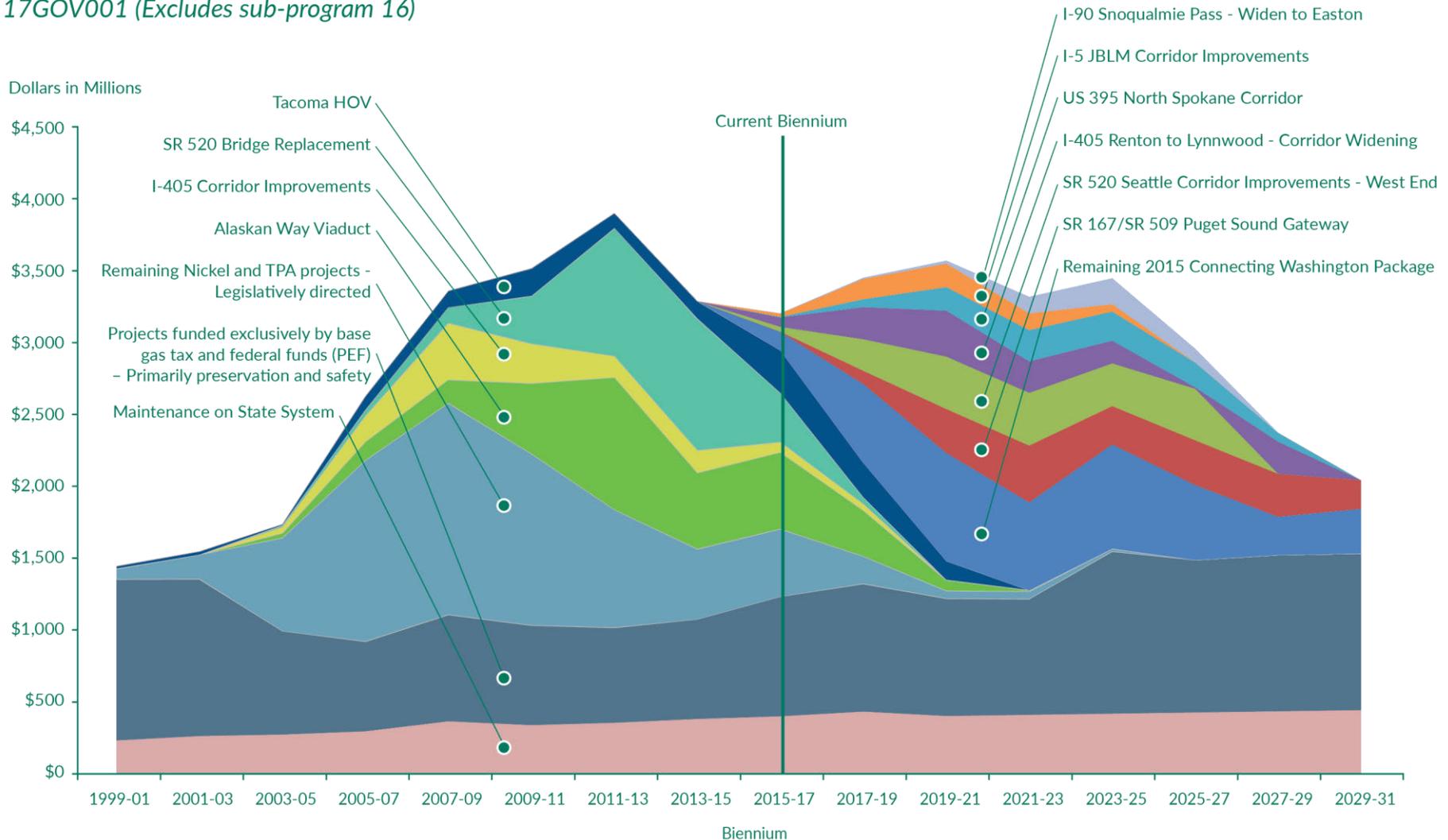


*Of the 9.5 cents, 8.5 cents is used by the state for highway projects, 1 cent goes to cities and counties for street and road improvements

WSDOT Highway Maintenance and Construction Program with Revenue Packages

2017 Governor's Proposed Budget

17GOV001 (Excludes sub-program 16)



Connecting Washington

\$16 billion transportation investment over 16 years

- First Connecting Washington project completed: I-82 Benton City Roundabout
- Broke ground on I-405/SR 167 interchange: first Connecting Washington project in Seattle area

High-level funding highlights

- \$9.4 billion – state and local road projects
- \$3 billion – debt service and contingency
- \$1.4 billion – state highway maintenance, operations and preservation
- \$602 million – 4th Olympic Class ferry, terminal construction and preservation



Connecting Washington project highlights

- **SR 167/SR 509 Puget Sound Gateway - \$ 1.9 billion**
 - Builds SR 167 from Puyallup to I-5 and on to SR 509 near Port of Tacoma; builds SR 509 near SeaTac Airport to I-5 in King County
 - Project will be built in stages, tolling starts as each stage is completed
 - Funding extends through 2031
- **SR 520 Rest of the West - \$1.6 billion**
 - Completes the SR 520 program by extending the six-lane corridor to I-5
 - Builds West Approach Bridge South and Montlake interchange and lid; includes a multimodal transit hub on the Montlake lid
 - Funding extends through the 2027-29 biennium
- **I-405 Renton to Bellevue - \$1.3 billion**
 - Funds next phase of the I-405 Master Plan
 - Includes I-405/SR 167 Direct Connector flyover ramp; scheduled to open late 2018
 - Renton to Bellevue widening and express toll lane construction 2019-2024

Connecting Washington project highlights (continued)

- **US 395 North Spokane Corridor - \$879 million**
 - Completes the final 5.5 miles of new north/south route
 - In total, 10.5 miles connecting US 2/US 395 on north end to I-90 on the south end
 - Funding extends through 2029
- **I-5 Joint Base Lewis McChord - \$494 million**
 - Funds congestion relief through JBLM; preferred alternative adds one lane each direction from DuPont-Steilacoom Road to Thorne Lane, with local connector road
 - Funding for design and construction through 2025; work to be done in stages
- **I-90 Snoqualmie Pass - \$426 million**
 - Finished the remaining 8 miles of a 15-mile-long project
 - Widens I-90 from four to six lanes; Expands chain-up areas; addresses wildlife connectivity
 - Funding extends through 2027

Connecting Washington project highlights (continued)

- **Preservation - \$1.2 billion**
 - Applying asset management principles across assets to maximize benefits to the transportation system. Assets include pavements, bridges, ferries, safety rest areas, agency facilities, communication systems, etc.
 - Targeted investments to manage the existing backlog of asphalt, upcoming concrete pavement needs and to preserve our aging bridge network
- **Multimodal - \$1.3 billion**
 - \$200 million: Regional Mobility Grant Program – supports local efforts to improve transit mobility
 - \$111 million: Transit-related grant projects such as park and ride lots, transit facilities, new buses
 - \$110 million: Rural Mobility Grant Program – improves public transportation in small cities and rural areas
 - \$41 million: Commute Trip Reduction Program – sustains a tax credit to businesses with employer-based commuter programs
- **Active Transportation (Bicycles/Pedestrians – part of multimodal funding)**
 - \$75 million for pedestrian and safety grants to local agencies statewide
 - \$56 million for Safe Routes to School Grants – projects intended to increase walking and biking to school

WSDOT is changing how it does business

WSDOT has demonstrated we're good at delivering projects and programs

- 374 of 421 Nickel/TPA construction projects
 - 87% on time
 - 92% on budget
- Managing maintenance and preservation backlog with existing resources

Now focusing on moving to the next level of integrated stewardship of the multimodal transportation system...





Practical Solutions approach

- Delivering Connecting Washington with Practical Solutions
 - Performance-based decision making, rather than standards-based
 - Data-driven approach to manage assets, improve the performance of the multimodal transportation system
 - Uses data and analysis tools to seek lower-cost solutions, efficiencies
- Executive oversight: Practical Solutions Roundtable
 - Reviews each project
 - Guides implementation of Practical Solutions approach
 - Forum for sharing best practices
- Community engagement is a key in developing transportation solutions
 - Collaborative decision making
 - Corridor Sketch Initiative
- Training is a crucial part of changing WSDOT culture



Framework for future investment decisions

Policy Direction

- RCW 47.04.280
- Results Washington
- Results WSDOT strategic plan

Manage Assets

- Operate and maintain multimodal system and agency resources to meet performance objectives at the lowest cost

Identify Needs

- Identify performance targets for all policy goals
- Understand critical corridors

Assess Alternative Strategies

- Build strategies with partners
- Consider least cost strategies first
 - Safety
 - Operations
 - Demand Management
 - Capital
 - Other

Refine Solutions

- Integrated scoping
 - Safety
 - Operations
 - Demand Management
 - Capital
 - Other

Assign Resources

- Investments reviewed across funding programs to synchronize for best performance

Develop Funded Solutions

- Solutions defined to address the performance gap at the lowest cost

Implement Solutions

- Implement or construct

Framework for future investment decisions (continued)

- Statewide Transportation Asset Management Plan is used to:
 - Identify performance measures and targets
 - Identify assets and their condition
 - Identify gaps between the existing condition and state performance targets
 - Perform lifecycle-cost and risk management analysis
 - Create a financial plan
 - Describe investment strategies to preserve the asset, using a Practical Solutions approach
- Corridor Sketch planning is used to assess system needs and changes over time

Manage
Assets

Identify
Needs

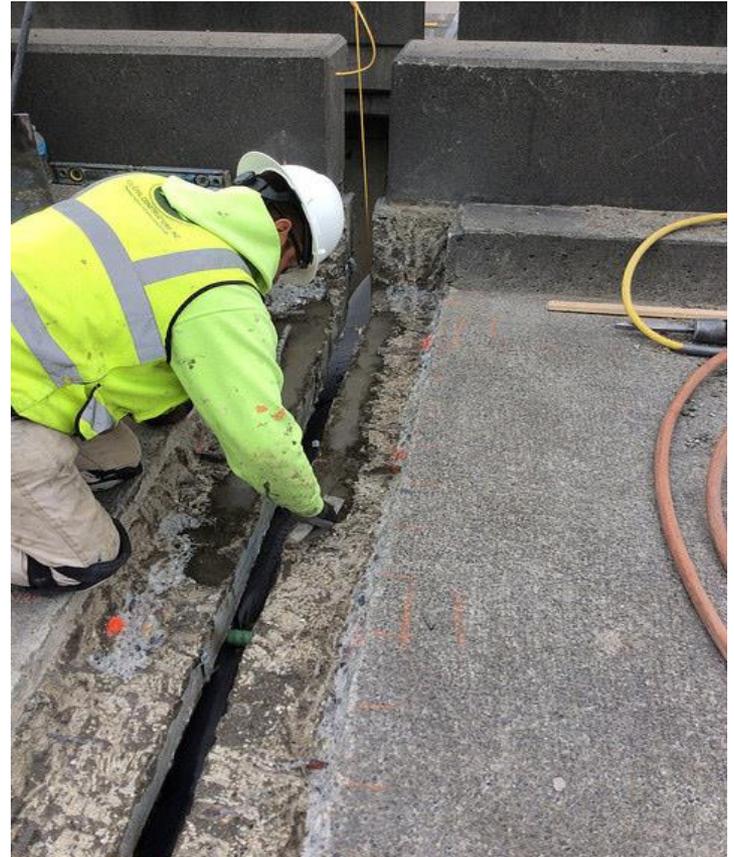


Framework for future investment decisions (continued)

- State of good repair
 - Preservation
 - Lifecycle-cost and risk management analysis
- Safety
 - Target Zero
 - MAP 21 national performance goals
- Transportation system management
 - Operate more efficiently
 - Low-cost, high-impact adjustments
- Demand management
 - CTR, public transportation, land use
- Capacity expansion
 - Capital program

Assess
Alternative
Strategies

Refine
solutions



Framework for future investment decisions (continued)



Assign
Resources

Develop
Funded
Solutions

Implement
Solutions

- Assign Resources
 - Examine how solutions rank across the state based on benefit/cost
 - Look across programs for best fit for resourcing
 - Develop prioritized list of investments
- Develop funded solutions
 - Assess design/development options for the proposed solution
 - Design/develop for the lowest cost that addresses the solution
- Implement solutions
 - Manage implementation/construction to address the performance gap

WSDOT's workforce

opportunities and challenges

- Downsizing as we neared the end of Nickel and TPA funded projects
 - Reduced workforce by 800 FTEs to meet projected project expenditures
- Now managing Connecting Washington
 - \$16 billion construction program over 16 years
 - Highly qualified, skilled staff needed to deliver innovative, cost-effective projects
- Experiencing increasing attrition
 - Expect 45% of engineering classifications to leave WSDOT in next five years due to retirements or better pay elsewhere
 - 75 – 80% of maintenance leadership retirement eligible in same period
- Regardless of how we deliver, need experienced workforce



Recruitment and Retention issues



- 2016 Recruitment and Retention study:
 - WSDOT lags as much as 33% behind marketplace in compensation, benefits
 - Losing WSDOT staff to private and public employers
 - Working to address salary disparity – engineering, technical, maintenance
- 2016 State Salary Survey
 - Pay disparity reaches across many positions in the agency
 - 99% of WSDOT general service employees are 25% to 67.5% behind market
- 2016 Marine Employee Compensation Survey
 - Workforce is covered by 11 different bargaining units
 - Depending on position, lag ranges from 4.9% to 21.8% behind market for base salary



Recruitment and Retention strategies

Efforts underway and under development

- Recruiting for entry level staff
 - Targeted outreach: military, minorities
 - Apprenticeship program
 - Reentry program
 - Internship program
- Keeping our experienced staff
 - Increased use of in-training and development plans
 - Retire/rehire
 - WSDOT Alumni network
 - Employee referral program



Our communities are changing

- Washington's communities are experiencing a minority/majority shift
 - U.S. Census: Percentage of non-Hispanic whites declined in all 39 counties
- Want our workforce to look like the communities we serve
 - Recruitment efforts can help us achieve diversity
 - Working with contracting community to create opportunities



	WSDOT	Washington
Women	25%	50%
Hispanic	3%	12%
African American	2%	4%
Native American	1%	2%
Asian-Pacific	5%	8%



WSDOT Inclusion goals

Be a leader in Inclusion

- Create fair and equal opportunity to participate
 - WSDOT employment, contracts, decision making
 - Work with any business willing and ready to work with us
- Improve access: Make sure every voice is heard
 - Reaching out to disadvantaged, underrepresented, underserved communities
- Provide tools and training for staff to be successful working with diverse cultures



Inclusion action plan

Increasing opportunities for participation

- Focused on Minority, Small, Veteran and Women's Business Enterprises
 - Intended to meet Governor's Goals:
 - Minority: 10 percent
 - Women: 6 percent
 - Small: 5 percent
 - Veteran: 5 percent
- Working with industry partners to develop Mentor/Protégé Program
 - Planned for 30 to 50 mentors and protégés – AGC and minority contractors
 - Building relationships and capacity
 - If not effective, will implement enforceable goals program
- Proposed Small and Veteran's Business Enforceable Goals Program
 - Condition of award goals, Good Faith efforts
 - Tiered participation – extra goal credits for firms new to WSDOT, based on firm size
 - If not effective, then consider race-conscious goals



Questions and suggestions?

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