

# Gray Notebook Lite **74**



## PERFORMANCE HIGHLIGHTS reported for the quarter ending June 30, 2019

**40,571**

**trips completed by WSF** in the fourth quarter of FY2019. This comprised 99.4% of the 40,835 regularly scheduled trips.

**12  
PERCENT**

increase in **air cargo** tonnage from 2016 to 2017

Construction projects completed with **Nickel or Transportation Partnership Account** funds

**382**

**280 BRIDGES**



**owned by WSDOT  
are currently over  
80 YEARS OLD**

**2,000 HOURS**

of WSDOT staff time saved by **General Hydraulic Project Approval permits** in 2018

**49  
percent**

of WSDOT employees **eligible to retire** with full benefits actually retired in FY2019

**\$25  
MILLION**

in economic benefit provided by WSDOT's **Incident Response** teams clearing 16,268 incidents during the quarter

**WSDOT COMPLETED**

**15 FISH  
PASSAGE  
PROJECTS**

**IN 2018, IMPROVING ACCESS**

**TO 105 MILES**



## WSDOT owns 280 bridges over 80 years old, expects a future of difficult tradeoffs

As of June 2019, WSDOT owned 280 bridges that were 80 years old or older. This is a 6% increase from the 266 bridges over 80 years old in June 2018, and represents 7% of the agency's 3,932 bridge structures.

### Delaying bridge preservation work increases total costs

As its infrastructure assets continue to age, WSDOT forecasts a future of difficult asset management decisions, each with an associated tradeoff. For example, building a new section of highway often means choosing to neglect rehabilitating a concrete bridge deck until years later, if at all.



The US 101 bridge over the Elwha River, west of Port Angeles. The Elwha River Bridge needs to be replaced due to bridge scour, which occurs when high volumes of water cause soil erosion around foundations. Foundation scour is the leading cause of bridge failure in Washington and nationwide.

If the deck deteriorates to the point of requiring replacement before it can be rehabilitated, then the cost of delaying rehabilitation becomes much higher. Rehabilitating decks with concrete overlay costs about \$100 per square foot, while replacing the deck entirely costs \$300 per square foot.

Within bridge preservation, WSDOT is faced with the challenge of balancing needs ranging from steel bridge painting to scour repair. As of June 2019, the agency's unmet bridge preservation needs were concentrated in three areas: bridge replacement and rehabilitation, concrete bridge deck repair, and steel bridge painting.

## WSDOT uses eight General Hydraulic Project Approval permits to streamline 500 maintenance activities

2016 through 2018; Number of maintenance activities and hours saved per GHPA permit

GHPA permit	2016		2017		2018	
	Activities	Hours	Activities	Hours	Activities	Hours
Bridge maintenance	308	1,232	243	972	180	720
Beaver dam removal	136	544	238	952	214	856
Culvert maintenance	30	120	50	200	49	196
Channelized stream maintenance	24	96	28	112	36	144
Bridge debris maintenance	6	24	13	52	14	56
Other <sup>1</sup>	9	36	13	52	7	28
<b>Total</b>	<b>513</b>	<b>2,052</b>	<b>585</b>	<b>2,340</b>	<b>500</b>	<b>2,000</b>

Data source: WSDOT Environmental Services Office.

Note: 1 "Other" maintenance activities include fishway structures maintenance and repair, freshwater and marine water sediment test boring, and removing, repairing and replacing piles at ferry terminals.

WSDOT used eight General Hydraulic Project Approval permits to complete 500 maintenance activities in 2018—a decrease of 15% from 585 in 2017—which saved WSDOT staff an estimated 2,000

hours. In general, GHPA permits save WSDOT four hours for every activity conducted by bypassing the requirement to apply for an individual HPA permit for each activity. Washington Department

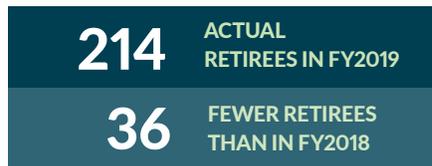
of Fish and Wildlife issued four GHPA permits to WSDOT in 2018 for beaver dam removal, bridge preservation and maintenance, fresh water geotechnical survey, and marine water sediment test boring.

## Washington was the seventh most trade-dependent state in the nation in 2018

Washington state's total imports and exports in 2018 were valued at \$132.6 billion, a 5.1% increase from \$126.2 billion in 2017. It was the seventh most trade-dependent state in the country per capita in 2018, according to the U.S. Census Bureau. Despite the overall increase in trade, the state's ranking dropped from 2017, when it was ranked fifth most trade-dependent state.

The change in ranking is mostly due to an 11.4% decline in exports to China, the state's top trading partner. Tariffs accounted for the majority of the decline—both United States tariffs that depressed imports coming through Washington ports to the American market, as well as retaliatory Chinese tariffs that increased the price of exporting products (such as soybeans and cherries) abroad. Washington exported \$18 billion worth of goods to China in 2017 compared to \$15.9 billion in 2018. Despite the ranking change in total imports and exports, the state's overall gross business income for freight-dependent industries continued to increase. In 2018, gross business income for freight-dependent industries was \$660 billion, up 10.9% from \$595 billion in 2017.

WSDOT supports the freight system and freight-dependent industries by directly managing the state's highway and ferry system, a short line railroad and several freight rail programs. WSDOT also provides policy analysis and planning coordination statewide for the movement of goods in commerce.



Data source: WSDOT Office of Human Resources and Safety.

Note: Number of employees and retirements are reported for FY2019.

## Workforce numbers remain steady, majority of eligible employees opt not to retire

In FY2019, WSDOT had an average of 6,632 permanent full-time employees, which is six more than the average in FY2018. Agency-wide, 20.7% (1,376) of employees were eligible for partial retirement in FY2019 and 6.6% (437) were eligible for full retirement. Of the 437 employees eligible for full retirement, only 214 (49%) actually retired in FY2019.

In FY2019, 619 employees separated from WSDOT, a decrease of 11.3% from 698 separations in FY2018. Separations occur as a result of abandonment of position, death, disability, dismissal, end of appointment, layoff, resignation and retirement.

## WSDOT completes 15 fish passage projects, improving access to 105 miles of potential upstream habitat in 2018

WSDOT completed 15 fish passage projects statewide in 2018, restoring fish access to 105 miles of potential upstream habitat. Ten of the 2018 projects corrected fish passage barriers applicable to a March 2013 injunction that requires WSDOT to restore access to 90% of blocked habitat within the case area shown in the map below by 2030 (for more information, visit <http://www.wsdot.wa.gov/Projects/FishPassage/>).

As of 2018, WSDOT has corrected 66 fish passage barriers applicable to the injunction. These corrections have restored access to about 316 miles, or roughly 26% of previously blocked habitat within the federal injunction case area. WSDOT must correct approximately 413 more barriers and restore access to an additional 795 miles of potential habitat within the case area by 2030 to comply with the injunction.

The total current funding is \$739 million for the fish passage program through the 2029-2031 biennium. However, in order to comply with the terms of the injunction, an additional \$3 billion is needed. A barrier correction project is applicable to the injunction if it corrects a highway culvert that is a documented barrier to salmon or steelhead and is within the case area.

# 74 STATEWIDE TRANSPORTATION POLICY GOALS

Statewide policy goal/ WSDOT performance measure	Previous period	Current period	Target	Target met	Five-year trend (unless noted)	Desired trend
<b>Safety</b>						
Rate of <b>traffic fatalities</b> per 100 million vehicle miles traveled statewide <small>(Annual measure: calendar years 2016 &amp; 2017)</small>	0.88	0.92	<1.00 <sup>1</sup>	✓		↓
Rate of <b>recordable incidents</b> for every 100 full-time WSDOT workers <small>(Annual measure: calendar years 2017 &amp; 2018)</small>	4.7	5.0	<5.0	—		↓
<b>Preservation</b>						
Percentage of state <b>highway pavement</b> in fair or better condition by vehicle miles traveled <small>(Annual measure: calendar years 2016 &amp; 2017)</small>	92.2%	91.8%	≥ 90%	✓		↑
Percentage of <b>state bridges</b> in fair or better condition by bridge deck area <small>(Annual measure: fiscal years 2018 &amp; 2019)</small>	92.5%	92.9%	≥ 90%	✓		↑
<b>Mobility<sup>2</sup> (congestion relief)</b>						
<b>Highways: Vehicle Miles Traveled (VMT)</b> on state highways <small>(Annual measure: calendar years 2016 &amp; 2017)</small>	34.2 million	34.6 million	*	N/A		↓
<b>Highways: Average incident clearance times</b> for all Incident Response program responses <small>(Calendar quarterly measure: Q2 2018 &amp; Q2 2019)</small>	12.5 minutes	12.3 minutes	*	N/A		↓
<b>Ferries: Percentage of trips departing on time<sup>3</sup></b> <small>(Fiscal quarterly measure: year to year Q4 FY2018 &amp; Q4 FY2019)</small>	86.8%	87.5%	≥ 95%	—		↑
<b>Rail: Amtrak Cascades on-time performance<sup>4</sup></b> <small>(Annual measure: fiscal years 2017 &amp; 2018)</small>	56.3% <sup>5</sup>	53.9%	≥ 88%	—		↑
<b>Environment</b>						
Number of WSDOT <b>stormwater management facilities</b> constructed <small>(Annual measure: fiscal years 2017 &amp; 2018)</small>	129	78	*	N/A		N/A
Cumulative number of WSDOT <b>fish passage improvement projects</b> constructed <small>(Annual measure: calendar years 2017 &amp; 2018)</small>	330	345	*	N/A		↑
<b>Stewardship</b>						
Cumulative number of Nickel and TPA <b>projects completed<sup>6</sup> and percentage on time<sup>7</sup></b> <small>(Calendar quarterly measure: Q1 2019 &amp; Q2 2019, trendline for percentage on time)</small>	382/ 86%	382/ 86%	≥ 90% on time	—		↑
Cumulative number of Nickel and TPA <b>projects completed<sup>6</sup> and percentage on budget<sup>7</sup></b> <small>(Calendar quarterly measure: Q1 2019 &amp; Q2 2019, trendline for percentage on budget)</small>	382/ 91%	382/ 91%	> 90% on budget	✓		↑
Variance of total project costs <sup>6</sup> compared to <b>budget expectations<sup>7</sup></b> <small>(Calendar quarterly measure: Q1 2019 &amp; Q2 2019)</small>	Under budget by 1.6%	Under budget by 1.6%	On or under budget	✓		N/A

Data source: WSDOT Transportation Safety & Systems Analysis.

Notes: (\*) = goal has not been set. Dash (—) = goal was not met in the reporting period. **1** The Statewide Transportation Policy Goal for this performance measure is different than the federal MAP-21 goal for the same measure. **2** Mobility does not yet include goals for people walking/biking for transportation. **3** Washington State Ferries' on-time departures include any trip recorded by automated tracking as leaving the terminal within 10 minutes of scheduled time. **4** Amtrak Cascades' on-time performance includes any trip arriving within 10 or 15 minutes, depending on the route, of scheduled arrival time. **5** Amtrak Cascades' 2017 on-time performance was reported for calendar year 2017 in GNB 70 and 71. **6** Construction projects only. **7** Budget and schedule expectations are defined in the last approved state transportation budget. See [p. 31](#) for more information.