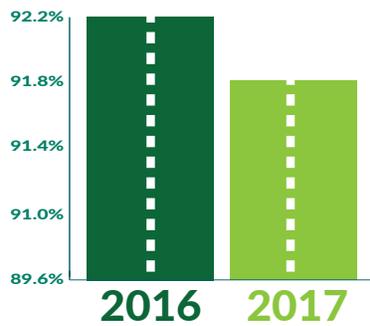


Gray Notebook Lite 72



PERFORMANCE HIGHLIGHTS reported for the quarter ending December 31, 2018

PERCENTAGE OF PAVEMENT LANE MILES IN FAIR OR BETTER CONDITION DECREASED TO 91.8% BETWEEN 2016 & 2017



382

of 421 projects completed with **Nickel or Transportation Partnership Account** funds

77 PERCENT

of **highway maintenance** asset condition targets were achieved by WSDOT in 2018

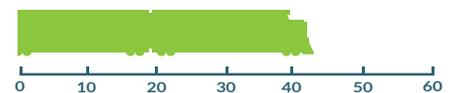
57 PERCENT

decrease in the number of **environmental violations** issued to WSDOT and its contractors in 2018 compared to 2017

52.7 MILLION

transactions were processed by **WSDOT toll facilities** during fiscal year 2018

WSDOT has 43 FREIGHT RAIL PROJECTS UNDERWAY in 2018



\$23.8 MILLION

in economic benefit provided by WSDOT's **Incident Response** teams clearing 13,984 incidents during the quarter

7.4 PERCENT

improvement in WSDOT's agency-wide **Recordable Incident Rate** from 2014 to 2018

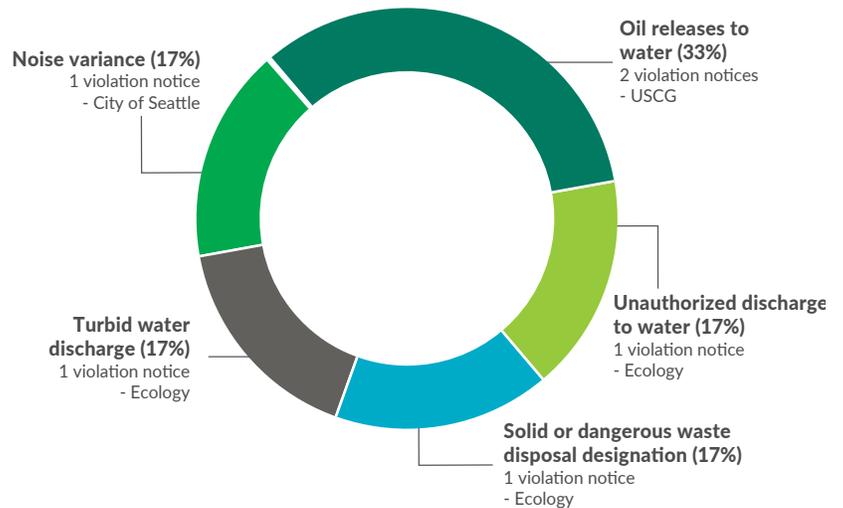
Environmental compliance at WSDOT improves in 2018

In 2018, WSDOT had 782 construction projects, performed nearly 2.5 million maintenance work hours and made over 161,000 ferry sailings.

During this time, WSDOT and its contractors received six formal environmental violation notices, eight fewer than the previous year (a decrease of 57%). This improvement is attributed to continued efforts by WSDOT and its contractors to improve environmental compliance throughout the project development process.

WSDOT activities receive six environmental violation notices in 2018

Number of notices by category and issuing agency



Data source: WSDOT Environmental Services Office.

Note: Percentages may not add to 100 due to rounding. USCG = United States Coast Guard Ecology = Washington State Department of Ecology.

Pavement conditions decline slightly in 2017

In 2017, 91.8% of WSDOT-managed pavement lane miles were in fair or better condition, declining slightly from the 92.2% reported in 2016. Despite this drop, the agency met its goal of having at least 90% of

pavement lane miles in fair or better condition. WSDOT determined that 91.5% of vehicle miles traveled in 2017 were on pavement in fair or better condition, a decrease from 91.7% in 2016.

Weighting pavement performance measures by vehicle miles traveled allows WSDOT to better capture the experience of the typical road user.

WSDOT meets targets for short-term pavement conditions despite decline; long-term measures improve 2016 and 2017

	PAVEMENT ANNUAL PERFORMANCE MEASURES ^{1,2}	2016	2017	Agency Target	Target ³	Trend	Desired trend
Short term	Percent of pavement in fair or better condition Measured for asphalt and concrete pavement (chip seal data was not collected in 2016 due to budget constraints; 2017 chip seal data was collected but has not yet been processed). Condition is shown by lane miles and by vehicle miles traveled to reflect road use.						
	Lane Miles	92.2%	91.8%	90.0%	✓	↓	↑
	VMT⁴	91.7%	91.5%				
	Asset Sustainability Ratio⁵ Years of pavement service life added to the pavement network through rehabilitation in a given year divided by the service life consumed in that same year.	0.68	0.90	0.90	✓	↑	↑
Long term	Remaining Service Life⁵ Average percentage of original total useful life remaining before rehabilitation or replacement is needed; average years remaining before rehabilitation or replacement is needed.	48.6%	47.4% ⁶	45% to 55%	✓	↓	↑
		(7.6 yrs)	(7.7 yrs)				
	Deferred Preservation Liability (backlog) An estimate of the accumulated cost (in current dollars) to fund the backlog of past-due (deferred) pavement rehabilitation work.	\$330 million	\$346 million	\$0	—	↑	↓

Data source: WSDOT Pavement Office.

Notes: **1** Calculations for all measures, excluding percent of pavement in fair or better condition, include all pavement types (asphalt, chip seal and concrete). **2** See GNB 72, p. 11 for additional discussion of short- and long-term measures. **3** Check indicates target met, dash indicates target not met. **4** VMT = vehicle miles traveled. **5** Measure is weighted by vehicle miles traveled to better capture the typical road user's experience. **6** Between 2016 and 2017, WSDOT updated its RSL calculations to reflect the increased use of strategic maintenance (see GNB 72, p. 13). This update caused both the RSL in years and the estimates of total expected pavement lifetime to increase. As a result, the RSL percentage decreased.

I-405 express toll lanes provide faster, more reliable trips

Drivers made about 44 million trips on the I-405 ETL during the first three years of operation (October 2015 through September 2018). Overall, the I-405 corridor (between Lynnwood and Bellevue) carried up to 23% more vehicles during weekday peak periods, compared to before tolling began. In FY2018, the I-405 ETL generally provided faster, more reliable trips each weekday for an average of more than 7,800

bus riders and 59,000 commuter vehicles, which included 40,000 toll-paying vehicles and 19,000 toll-exempt carpools and motorcycles.

In FY2018, ETL users paid an average toll of \$3.50 and saved 10 minutes during the northbound peak commute between Bellevue and Lynnwood compared to traffic in the general purpose lanes and 11 minutes on the southbound peak commute.

 **11 MINUTES**
southbound

 **10 MINUTES**
northbound

TRAVEL TIME SAVINGS in I-405 EXPRESS TOLL LANES

during peak commute periods from
July 2017 through June 2018

Plug-in electric vehicle registrations in state surge 42% from 2017 to 2018

Washington state had 42,542 plug-in electric vehicle registrations as of December 31, 2018. This is a 42% increase in PEV registrations from 30,025 in 2017 and a 443% increase from 7,831 in 2013. Washington state is third in the nation in terms of PEV market share, with more than nine PEVs per 1,000 registered vehicles. The total PEV count includes 28,423 battery electric vehicles and 14,119 plug-in hybrid electric vehicles.

With 42,542 plug-in electric vehicles registered at the end of 2018, Washington is on target to meet Gov. Jay Inslee's Results Washington goal of 50,000 by 2020. Increased electric vehicle adoption is expected

to help the state progress toward its goals to reduce greenhouse gases, protect public health and the environment and promote economic growth.

In an effort to reduce its environmental footprint, WSDOT cut its statewide passenger vehicle fleet by 18%, from 491 in 2013 to 401 in 2018. WSDOT also reduced the number of conventional vehicles in its fleet by 50%, from 409 in 2013 to 204 in 2018, while increasing purchases of EVs. As of 2018, plug-in hybrids and battery electric vehicles make up 17% of the fleet with 67 vehicles, up from one EV in 2013.

Highway conditions hold steady in 2018

WSDOT met 77% (20 of 26) of its highway maintenance asset condition targets in 2018—the same percentage as in 2017. During the 2017-2018 winter, freezing lowland temperatures caused frequent black ice situations and mountain passes received above average snowfall. As a result, \$2.5 million in funding was redirected from other planned maintenance activities to respond to these conditions.

WSDOT has a highway maintenance backlog of approximately \$98 million per biennium. While funding has remained relatively consistent, it does not keep pace with system additions or increases in unavoidable costs. This leads to deferring highway maintenance activities and reducing levels of service, making it more difficult for WSDOT to achieve performance targets.

To see a table that shows the desired results as indicated by the level of service and the task completion percentage for selected assets, go to <http://bit.ly/MaintTaskComp>.

Plug-in electric vehicle registrations charge forward in Washington

2013 through 2018; Includes battery electric vehicles and plug-in hybrid electric vehicles

Vehicle type	2013	2014	2015	2016	2017	2018
BEV	5,475	8,499	11,551	14,573	20,010	28,423
PHEV	2,356	3,797	5,028	7,424	10,015	14,119
PEV totals	7,831	12,296	16,579	21,997	30,025	42,542

Data source: Washington State Department of Licensing.

Notes: BEV = Battery electric vehicles. PHEV = Plug-in hybrid electric vehicles. PEV = Plug-in electric vehicles.

Statewide policy goal/ WSDOT performance measure	Previous period	Current period	Target	Target met	Five-year trend (unless noted)	Desired trend
Safety						
Rate of traffic fatalities per 100 million vehicle miles traveled statewide <small>(Annual measure: calendar years 2016 & 2017)</small>	0.88	0.92	<1.00 ¹	✓		↓
Rate of recordable incidents for every 100 full-time WSDOT workers <small>(Annual measure: calendar years 2017 & 2018)</small>	4.7	5.0	<5.0	—		↓
Preservation						
Percentage of state highway pavement in fair or better condition by vehicle miles traveled <small>(Annual measure: calendar years 2016 & 2017)</small>	92.2%	91.8%	≥ 90%	✓		↑
Percentage of state bridges in fair or better condition by bridge deck area <small>(Annual measure: fiscal years 2017 & 2018)</small>	91.8%	92.5%	≥ 90%	✓		↑
Mobility² (congestion relief)						
Highways: Vehicle Miles Traveled (VMT) on state highways <small>(Annual measure: calendar years 2016 & 2017)</small>	34.2 million	34.6 million	*	N/A		↓
Highways: Average incident clearance times for all Incident Response program responses <small>(Calendar quarterly measure: Q4 2017 & Q4 2018)</small>	13.5 minutes	13.6 minutes	*	N/A		↓
Ferries: Percentage of trips departing on time³ <small>(Fiscal quarterly measure: year to year Q2 FY2018 & Q2 FY2019)</small>	95.6%	93.6%	≥ 95%	—		↑
Rail: Amtrak Cascades on-time performance⁴ <small>(Annual measure: fiscal years 2017 & 2018)</small>	56.3% ⁵	53.9%	≥ 88%	—		↑
Environment						
Number of WSDOT stormwater management facilities constructed <small>(Annual measure: fiscal years 2017 & 2018)</small>	129	78	*	N/A		N/A
Cumulative number of WSDOT fish passage improvement projects constructed <small>(Annual measure: calendar years 2016 & 2017)</small>	316 ⁶	330	*	N/A		↑
Stewardship						
Cumulative number of Nickel and TPA projects completed⁷ and percentage on time⁸ <small>(Calendar quarterly measure: Q3 2018 & Q4 2018, trendline for percentage on time)</small>	380/ 87%	382/ 86%	≥ 90% on time	—		↑
Cumulative number of Nickel and TPA projects completed⁷ and percentage on budget⁸ <small>(Calendar quarterly measure: Q3 2018 & Q4 2018, trendline for percentage on budget)</small>	380/ 91%	382/ 91%	≥ 90% on budget	✓		↑
Variance of total project costs ⁷ compared to budget expectations⁸ <small>(Calendar quarterly measure: Q3 2018 & Q4 2018)</small>	Under budget by 1.5%	Under budget by 1.6%	On or under budget	✓		N/A

Data source: WSDOT Office of Strategic Assessment and Performance 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** The 2016 number differs from previous publications to reflect the most recent available data. **7** Construction projects only. **8** Budget and schedule expectations are defined in the last approved state transportation budget. See [p. 38](#) of GNB 72 for more information.