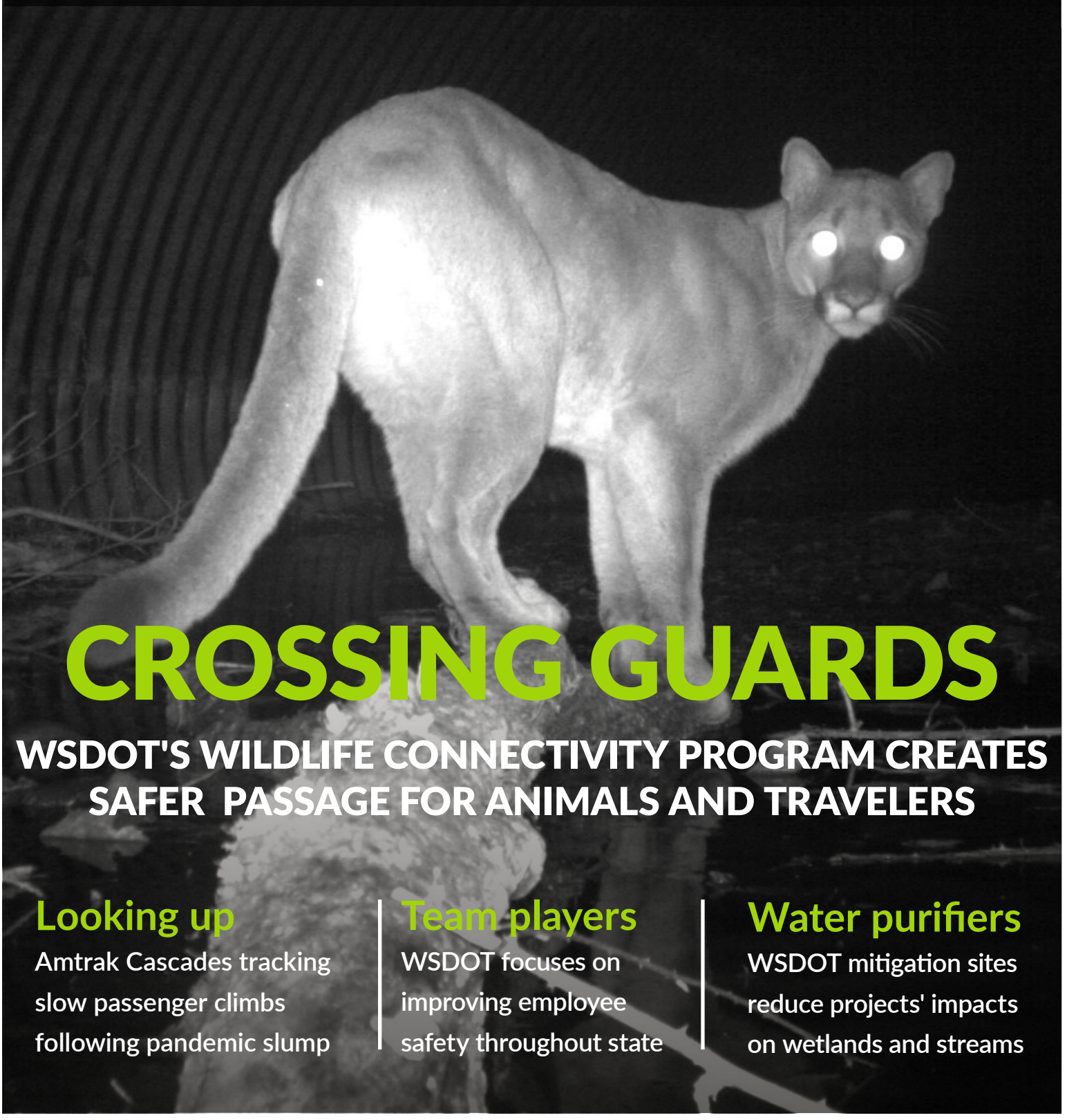
GRAY NOTEBOOK GNB

Washington State Department of Transportation

Quarterly performance analysis of WSDOT's multimodal systems and programs

Roger Millar, Secretary of Transportation, PE, FASCE, FAICP

Edition 85 ▪ March 2022



CROSSING GUARDS

WSDOT'S WILDLIFE CONNECTIVITY PROGRAM CREATES SAFER PASSAGE FOR ANIMALS AND TRAVELERS

Looking up

Amtrak Cascades tracking slow passenger climbs following pandemic slump

Team players

WSDOT focuses on improving employee safety throughout state

Water purifiers

WSDOT mitigation sites reduce projects' impacts on wetlands and streams

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The Gray Notebook team

WSDOT's Gray Notebook is produced by the Performance Management and Strategic Management offices of the Transportation Safety & Systems Analysis Division: Hide Aso, Elena Brunstein, Hui Dong, Sreenath Gangula, Mani Goudarzi, Joe Irwin, Dustin Motte and Michele Villnave. TSSA is directed by John Milton.

PERFORMANCE HIGHLIGHTS reported for the quarter ending March 31, 2022

NINE SITES that included **32.7 ACRES** added to WSDOT's **WETLAND & STREAMS** inventory in 2021

98.8 PERCENT of **WSF's scheduled trips** were completed during the third quarter of FY2022

29.5% increase in the agency-wide **recordable incident rate** in 2021

$28.9 MILLION in operating costs avoided by the trucking industry in 2021 due to WSDOT's **electronic screening system**

58 of 143 WSDOT **Pre-existing Funds** projects advertised during the quarter

91% decrease in deer-vehicle collisions on a 12-mile stretch of US 97 due to **Habitat Connectivity** improvements

$21.3 MILLION in economic benefit provided by WSDOT's **Incident Response** teams clearing 10,286 incidents during the quarter

46% increase in ridership on **Amtrak Cascades** in 2021 compared to 2020

On the cover: A cougar makes its way through one of WSDOT's wildlife connectivity routes that allow wildlife to safely pass over and beneath Washington's busy highways while reducing the potential for collisions with vehicles.

85 WSDOT'S STRATEGIC PLAN

WSDOT's Strategic Plan has three goals: Inclusion, Practical Solutions and Workforce Development. This plan continues WSDOT's focus on how the agency makes investments and delivers projects with limited resources.

Under the strategic plan, WSDOT engages employees, communities and partners to collaboratively deliver its Inclusion goal. Practical Solutions allows WSDOT to leverage finite funding to get the most capacity and safety out of the entire multimodal transportation system. WSDOT's focus on Workforce Development ensures the agency attracts and retains a quality workforce to meet its legislative, regulatory, service and public expectations.

WSDOT's Practical Solutions goal has become embedded in the agency's business practices. WSDOT has worked to avoid jumping directly into costly expansion projects and instead has sought to identify the right investment, at the right place and the right time. This approach allows the agency and its partners to focus on operational efficiency and demand management for mobility needs within a constrained fiscal environment.

WSDOT plans to build on the foundation of Practical Solutions to focus on giving Washington a more resilient transportation system. This approach will help the agency strategically address issues associated with climate change and natural disasters, social inequity in the transportation system, Washington's growing population and the economy.

The agency will continue efforts to decrease transportation related fatalities and injuries as well as the decline in assets that are in a state of good repair.

WSDOT's strategic plan remains adaptable

WSDOT is making changes to its strategic plan to ensure the agency remains flexible in the face of change while continuing to deliver its mission of providing safe, reliable and cost-effective transportation options to improve communities and economic vitality for people and businesses.

The agency is expanding its Inclusion goal to cover Diversity, Equity and Inclusion. The Practical Solutions goal will become Resilience. These changes will help the agency remain efficient and effective.

WSDOT's Vision

Washington travelers have a safe, sustainable and integrated multimodal transportation system.

WSDOT's Mission

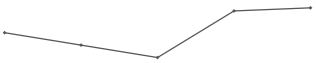
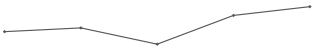
We provide safe, reliable and cost-effective transportation options to improve communities and economic vitality for people and businesses.

- **Inclusion Goal**
  Strengthen commitment to diversity and engagement in every aspect of our work.
- **Practical Solutions Goal**
  Prioritize innovative, timely and cost-effective decisions, with our stakeholders and partners.
- **Workforce Development Goal**
  Be an employer of choice by hiring, training and retaining skilled workers to meet Washington's transportation needs.

WSDOT's Values

- Safety
- Engagement
- Innovation
- Integrity
- Leadership
- Sustainability

85 STATEWIDE TRANSPORTATION POLICY GOALS DASHBOARD

Statewide policy goal/ WSDOT performance measure	Previous period	Current period	Goal	Goal met	Five-year trend (unless noted)	Desired trend
Safety						
Rate of traffic fatalities per 100 million vehicle miles traveled statewide[1] (Annual measure: calendar years 2019 & 2020)	0.86	1.04	<1.00	—		↓
Total pedestrian and bicyclist fatalities (Annual measure: calendar years 2019 & 2020)[1]	116	117	0	—		↓
Rate of recordable incidents for every 100 full-time WSDOT workers (Annual measure: calendar years 2020 & 2021)	4.4	5.7	<5.0	—		↓
Preservation						
State highway pavement in fair or better condition by lane miles (minus chip seal)[2] (Annual measure: calendar years 2019 & 2020)	92.9%	93.0%	≥ 90%	✓		↑
WSDOT-owned bridges in fair or better condition by bridge deck area (Annual measure: fiscal years 2020 & 2021)	93.8%	93.2%	≥ 90%	✓		↑
Mobility[2]						
Average clearance times for Incident Response (Calendar quarterly measure: Q1 2021 & Q1 2022)	15.8 minutes	16.3 minutes	*	N/A		↓
Highway Maintenance Accountability Process funded Level of Service targets made (Annual measure: calendar years 2020 & 2021)	68%	56%	*	N/A		↑
Washington State Ferry trips departing on time[3] (Fiscal quarterly measure: Q3 FY2021 & Q3 FY2022)	92.1%	88.5%	≥ 95%	—		↑
Amtrak Cascades on-time performance[4] (Annual measure: calendar years 2020 & 2021)	62%	51%	≥ 88%	—		↑
Environment						
Number of WSDOT stormwater management facilities constructed (Annual measure: fiscal years 2020 & 2021)	106	72	*	N/A		Not applicable
Cumulative number of WSDOT fish passage improvement projects constructed (Annual measure: calendar years 2019 & 2020)	352	365	*	N/A		↑
Cumulative number of Zero Emission Vehicles registered in Washington (Annual measure: calendar years 2020 & 2021)	63,259	87,685	*	N/A		↑
Stewardship						
Number of Connecting Washington projects and contracts completed (on time/on budget)[5] (Biennial quarterly measure: Q2 2021-2023 & Q3 2021-2023)	4 1/3	0	*	N/A	 (Five-quarter trend)	Not applicable
Pre-existing Funds projects advertised (Biennial quarterly measure: Q2 2021-2023 & Q3 2021-2023)	51	58	*	N/A	 (Five-quarter trend)	Not applicable

Data source: WSDOT Transportation Safety & Systems Analysis.
Notes: (*) = goal has not been set. Dash (—) = goal was not met in the reporting period. **1** The goal for this performance measure differs from the federal Transportation Performance Management goal for the same measure. **2** Excludes chip seal pavement. **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** Projects and contracts are on time if they are completed within the quarter planned in the last approved schedule, and on budget if costs are within 5% of the budget set in the last approved state transportation budget.

85 TRANSPORTATION PERFORMANCE MANAGEMENT

WSDOT reports its federally-mandated 2022 TPM highway safety baselines, targets

WSDOT reported its Transportation Performance Management (formerly MAP-21) highway safety baselines and targets for 2022 to the Federal Highway Administration on August 31, 2021.

FHWA previously determined WSDOT did not make significant progress toward achieving its 2020 targets for highway safety (also referred to as PM1). States that did not make significant progress on PM1 must develop a strategic Highway Safety Implementation Plan and obligate federal HSIP funds based on the previous year's allocations. WSDOT outlines how it will address these efforts in its 2021 HSIP.

Washington's Strategic Highway Safety Plan (Target Zero) aims to achieve the goal of zero fatalities and serious injuries by 2030, which differs from the federal TPM targets listed below.

WSDOT established its federally-required TPM baselines and targets for bridges and pavement (PM2), and highway system performance, freight, and Congestion Mitigation and Air Quality (PM3) on May 20, 2018. Like the PM1 targets, WSDOT is required to show significant progress toward meeting the PM2 and PM3 targets.

WSDOT and Metropolitan Planning Organizations collaborated to establish four-year targets for PM2 and PM3 and submitted them to FHWA on October 1, 2018. This began a four-year reporting cycle for PM2 and PM3 performance measures, which included WSDOT producing a Mid-Performance Period Progress Report (submitted October 1, 2020) as well as a Full-Performance Period Progress Report (due October 1, 2022).

TPM safety reporting on annual cycle

Targets for the highway safety rules (included in PM1) are on an annual reporting cycle, which differs from the two-year and four-year reporting cycles for PM2 and PM3. The safety targets established for 2021 represent the third annual reporting cycle since the initial reporting of TPM safety targets for 2018.

TPM performance measures by program area	2015-2019 baseline	2021 target[1]	Penalty[2]
Highway Safety (PM1) 23 CFR Part 490 ID No. 2125-AF49			
Number of traffic fatalities on all public roads[3]	≤ 542.8	≤ 444.1	Yes
Rate of traffic fatalities per 100 million vehicle miles traveled (VMT) on all public roads[3]	≤ 0.885	≤ 0.724	Yes
Number of serious traffic injuries on all public roads[3]	≤ 2,208.6	≤ 1,807.0	Yes
Rate of serious traffic injuries per 100 million VMT on all public roads[3]	≤ 3.599	≤ 2.944	Yes
Number of non-motorist traffic fatalities plus serious injuries	≤ 577.0	≤ 472.1	Yes
Special Rules (Safety)			
Rate of per capita traffic fatalities for drivers and pedestrians 65 or older	Show yearly progress		No
Rate of fatalities on high-risk rural roads[3]	Show yearly progress		Yes
Highway-railway crossing fatalities[4]	Show yearly progress		No

Data source: WSDOT Transportation Safety & Systems Analysis.

Notes: The PM1 targets for 2021 were submitted on August 31, 2020, using the five-year rolling average of 2015-2019 for current baseline data. The term "target" is required for federal reporting of the five-year rolling average; the figure does not represent the state's goal. **1** The Strategic Highway Safety Plan for Washington (Target Zero) aims to achieve the goal of zero fatalities and serious injuries by 2030. **2** Penalties will not be assessed if WSDOT shows significant progress on four of five PM1 targets. Significant progress is achieved if the five-year rolling average is less than or equal to the target or less than or equal to the baseline level. Yes/No does not mean a penalty has been assessed but rather whether a penalty is associated with the measure. **3** Performance metric includes all individuals (for example, pedestrians and bicyclists) who died or were seriously injured as a result of a crash with a motorist in Washington. **4** Includes bicyclists and pedestrians.

The 2020 mid-performance period progress report on PM2 and PM3 included updates on two-year condition/performance and investment strategy discussions as well as target adjustment discussions. WSDOT had the option to adjust four-year targets at that time but determined they did not need adjusting and should remain unchanged.

In 2022, FHWA will use the full-performance period progress report to determine whether WSDOT has made significant progress toward its PM2 and PM3 targets. Not showing significant progress toward targets requires an explanation to FHWA of what WSDOT will do to make progress in the future, and may also trigger a financial penalty if targets are not met (refer to table below). These penalties require redistributing federal monies to help ensure significant progress toward specific targets in the future.

TPM folios helping stakeholders

WSDOT has developed informational folios to ensure the agency and its partners are aligned as TPM work progresses.

TPM performance measures by program area	Current data/ 2-year actuals	2-year target[1,2]	4-year target[1,2]	Penalty[3]
Pavement and Bridges (PM2) 23 CFR Part 490 ID No. 2125-AF53				
Pavement				
Percent of Interstate pavement on the NHS in good condition	39.8%[4]	N/A	30%	No
Percent of Interstate pavement on the NHS in poor condition	1.7%[4]	N/A	4%[5]	Yes
Percent of non-Interstate pavement on the NHS in good condition	45.2%[4]	45%	18%	No
Percent of non-Interstate pavement on the NHS in poor condition	17.4%[4]	21%	5%	No
Bridges				
Percent of NHS bridges classified in good condition (weighted by deck area)	32.8%	30%	30%	No
Percent of NHS bridges classified in poor condition (weighted by deck area)	7.0%	10%	10%[5]	Yes
Highway System Performance, Freight, and Congestion Mitigation & Air Quality (PM3) 23 CFR Part 490 ID No. 2125-AF54				
Highway System Performance (Congestion)				
Percent of person-miles traveled on the Interstate System that are reliable	77%	70%	68%	No
Percent of person-miles traveled on the Non-Interstate NHS System that are reliable	80.8%	N/A	61%	No
National Freight Movement Program				
Truck Travel Time Reliability (TTTR) Index	1.54	1.70	1.75	No
Congestion Mitigation & Air Quality Program				
Non-Single Occupancy Vehicle (SOV) travel in Seattle urbanized area (NHS)	33.1%	32.8%	33.2%	No
Peak hours of Excessive Delay per capita in Seattle urbanized area (NHS)	23.2	N/A	28	No
All Pollutants (kg/day)[2]	1,222.870	366.285	658.300	No
Carbon Monoxide (CO) (kg/day)[2]	714.710	309.000	309.060	No
Particulate Matter less than 10 microns (PM_{10}) (kg/day)[2]	274.640	0.305	224.000	No
Particulate Matter less than 2.5 microns ($PM_{2.5}$) (kg/day)[2]	56.750	2.100	8.700	No
Nitrogen Oxides (NOX) (kg/day)[2]	176.770	54.880	116.540	No

Data sources: WSDOT Pavement Office, WSDOT Bridge and Structures Office, WSDOT Transportation Safety & Systems Analysis, WSDOT Rail, Freight, and Ports Division, WSDOT Environmental Services Office.

Notes: Federal rule allows state and MPOs to adjust four-year targets during the mid-performance period progress report. **1** Two-year and four-year reports for PM2 and PM3 are due October 1, 2020, and October 1, 2022. **2** Base emissions are for the four-year period 2013-2016 as reported in the CMAQ Public Access System. **3** Yes/No does not mean a penalty has been assessed but rather whether a penalty is associated with the measure. **4** Current data refers to 2019. **5** The National Highway Performance Program (NHPP) targets require the percentage of Interstate pavement on the NHS in poor condition not exceed 5% and the percentage of NHS bridges classified in poor condition (weighted by deck area) not exceed 10%. **5** Current data refers to 2-year actuals.

85 WORKER SAFETY ANNUAL REPORT

Notable results

- *From 2020 to 2021, the agency-wide recordable incident rate worsened 29.5%*
- *From 2020 to 2021, the agency-wide days away, restricted or transferred rate worsened 33.3%*
- *Agency-wide between 2017 and 2021, the RIR worsened by 21.3% while the DART rate worsened by 56.5%*

Agency-wide program aims to modify employee safety behaviors

The agency-wide safety program has been working to modify employee safety behaviors based on leading indicator strategies that can shed light on the effectiveness of safety activities and reveal potential problems in programs.

Leading indicators are proactive, preventative and predictive measures that provide processes to identify, mitigate and control risks that have the potential to lead to on-the-job incidents in the workplace. The agency is monitoring the performance outcomes of these leading indicators to assess its progress in changing its safety culture.

WSDOT as a whole will be focusing on hearing safety because 19.9% of 2021 recordable claims were related to hearing loss. The agency has implemented specialized equipment to test the effectiveness of employees' hearing protection devices in the field.

Agency-wide recordable incident rate worsens 29.5% from 2020 to 2021

WSDOT and Washington State Ferries' combined agency-wide recordable incident rate worsened by 29.5% from 4.4 recordable injuries per 100 workers in 2020 to 5.7 in 2021. The agency-wide "days away, restricted or transferred" rate worsened by 33.3%, from 2.7 in 2020 to 3.6 in 2021. The DART rate is a subset of the RIR and includes only injuries that resulted in days away from work, restricted work activities or required a transfer of job duties. Between 2017 and 2021, the agency-wide RIR worsened by 21.3%, while the DART rate worsened by 56.5%.

Not including Washington State Ferries', WSDOT's RIR from 2020 to 2021 worsened by 22.8% from 3.5 to 4.3 and the DART rate worsened by 31.6% from 1.9 to 2.5 (refer to p. 8). For the five-year period between 2017 and 2021, the RIR for WSDOT was 0.0% and its DART rate worsened by 47.1%.

Washington State Ferries RIR between 2020 and 2021 worsened by 20.0% from 7.0 to 8.4, and its DART rate worsened by 34.7% from 4.9 to 6.6. Due to its marine work environment, WSF has experienced more substantial five-year changes to its injury rates than the rest of WSDOT. For the five-year period between 2017 and 2021, the RIR for WSF worsened by 42.4% and its DART rate worsened by 78.4%.

Agency-wide, the focus is on improving safety efforts like adding new signage, updating the hearing conservation program, having more frequent communications about safety awareness, and stretching and flex exercising to reduce sprain and strain injuries.

WSDOT's agency-wide RIR and DART rates worsen in 2021

2017 through 2021; Recordable incident rate and days away, restricted or transferred rate for every 100 full-time employees per year

Recordable Incident rate[1]	2017	2018	2019	2020	2021	1-year % change[2]	5-year % change[2]
WSDOT	4.3	4.3	3.8	3.5	4.3	+22.8%	0.0%
WSF[3]	5.9	7.0	7.1	7.0	8.4	+20.0%	+42.4%
Agency-wide[4]	4.7	5.0	4.7	4.4	5.7	+29.5%	+21.3%
DART rate[1]							
WSDOT	1.7	2.4	2.1	1.9	2.5	+31.6%	+47.1%
WSF[3]	3.7	5.1	4.8	4.9	6.6	+34.7%	+78.4%
Agency-wide[4]	2.3	3.1	2.8	2.7	3.6	+33.3%	+56.5%

Data source: WSDOT Office of Human Resources and Safety.

Notes: Rates and percentages are rounded to the nearest tenth. **1** The recordable incident rate is calculated as the number of recordable incidents multiplied by 200,000 hours and divided by the total hours worked. The "days away, restricted or transferred," or DART rate is the count of recordable incidents involving days away, restricted duty, or job transfer, multiplied by 200,000 hours and divided by the total hours worked. **2** Rates: (-%) = improve; (+%) = worsen. **3** Washington State Ferries is reported separately due to its marine work environment. **4** Agency-wide rates include WSDOT and WSF.

Recordable incident rate decreases in 2020, but sees increase in 2021

The 18.6% improvement to the Occupational Safety & Health Administration (OSHA) recordable incident rate at WSDOT from 4.3 in 2019 to 3.5 in 2020, can be attributed to the lost time due to the shutdowns at the beginning of the COVID-19 pandemic.

Even after employees returned to work, they did so in limited numbers across the state. This resulted in a decrease of approximately 600,000 actual work hours that can be attributed to the initial COVID response. As the number of hours decreases, increases to the number of recordable injuries has a dramatic effect on the final recordable incident rates.

Following the 22.8% increase in RIR from 3.5 in 2020 to 4.3 in 2021, WSDOT reviewed its safety data and discovered recordable issues that either had not been as prevalent in the past or were fairly new and had surfaced during this time, including:

- Additional ergonomic injuries from employees teleworking for a year in environments that were not conducive to their wellbeing
- A rise in vehicle incidents that stemmed from so much of the public being back on the road, and
- An upswing in COVID-19 claims that were transmitted in the workplace and therefore counted as an OSHA recordable illness.

Emphasis on hearing loss, sprains and strains

In 2021, 19.9% of WSDOT's OSHA recordable claims in 2021 were due to hearing loss. Because this was determined to be a recurring trend (with approximately 20-23% of annual OSHA recordable claims attributed to hearing loss), WSDOT is emphasizing hearing testing, fit testing of hearing protection devices, and education. This education includes being fully equipped to field test employees hearing protection devices and show them how to properly wear and/or insert these devices.

WSDOT's sprain and strain injuries are up as well, resulting in higher numbers of days away from work or restricted duty. In 2021, 32% of the OSHA recordable incidents were sprain and strain related, (not occurring in a fall or a vehicle incident). WSDOT's stretch and flex program is paramount in reducing these numbers.

When employees are not prepared to lift a heavy object, the potential for injury increases. While the stretch and flex program is not mandatory for all employees, it has been shown to decrease the number of injuries. In 2022, South Central Region put an even larger emphasis on the program, making it an expectation for employees to participate in the program daily. WSDOT's Safety Division will be monitoring this effort to determine whether it is effectively reducing the number of these injuries regionwide and will then determine if this approach can be utilized in the other regions.

WSDOT looks to address third-party vehicle incidents

Third-party vehicle incidents—in which state vehicles were struck by other drivers—accounted for 15% of WSDOT's OSHA recordable incidents in 2021. Employees involved in these incidents are typically on restricted duty or away from work longer than from other incidents.

WSDOT found that inattentiveness and driving under the influence were the major contributors to these third-party incidents, and as a result is beta testing traffic control devices that transmit data to the public's navigation systems. This is expected to help reduce these types of incidents.

WSDOT working to shift employees' safety mindset

While there is no one thing driving WSDOT's OSHA recordable numbers up, the agency is doing its best to keep up with the incidents and develop ways to prevent/reduce them from occurring in the future. In the regions, WSDOT has an average of one safety professional per 230 employees, making it improbable for them to handle work areas that can be hundreds of miles apart.

This makes it imperative that employees change the way they think of safety. WSDOT is working to shift employees' mindset to ensure they want to work safely and develop better ways to do the work of the state while maintaining that level of safety for themselves and for each employee working with them.

Contributors include John Gancel, Joe Irwin and Michele Villnave

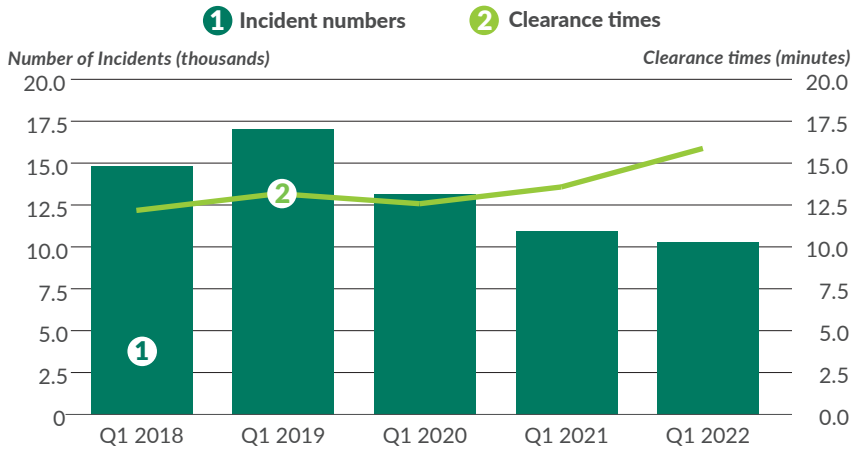
85 INCIDENT RESPONSE QUARTERLY UPDATE

WSDOT Incident Response teams help improve driver safety at 10,286 incidents

WSDOT's Incident Response teams assisted at 10,286 incidents during the first quarter (January through March) of 2022. On average, the IR teams responded to an incident scene every 12 minutes and 28 seconds during the quarter. There were 682 (6.2%) fewer incidents during the first quarter of 2022 than in the first quarter of 2021 (10,968).

Average clearance times increase slightly over the past five years

First quarters; 2018 through 2022; Number of incident responses in thousands; Clearance times in minutes



Data source: Washington Incident Tracking System.

Notes: The data above only accounts for incidents to which an IR unit responded. IR data reported for the current quarter (Q1 2022) is considered preliminary. In the previous quarter (Q4 2021), WSDOT responded to 9,664 incidents, clearing them in an average of 17 minutes and 24 seconds. Data for Q4 2021 has been confirmed and finalized.

On average, IR teams cleared each of the 10,286 incidents in 16 minutes and 18 seconds. This was 30 seconds (3.2%) slower than the average incident clearance time for the same quarter in 2021.

Of the 10,286 total incidents, 7,297 (70.9%) lasted less than 15 minutes, 2,793 (27.2%) lasted 15-90 minutes and 196 (1.9%) incidents lasted more than 90 minutes. During the first quarter of 2022, compared to the same quarter in 2021, there was a 7.1% decrease in the number of incidents lasting more than 90 minutes, while there were 5.1% fewer incidents lasting 15-90 minutes, and 6.6% fewer incidents lasting less than 15 minutes.

WSDOT teams respond to 196 over-90-minute incidents

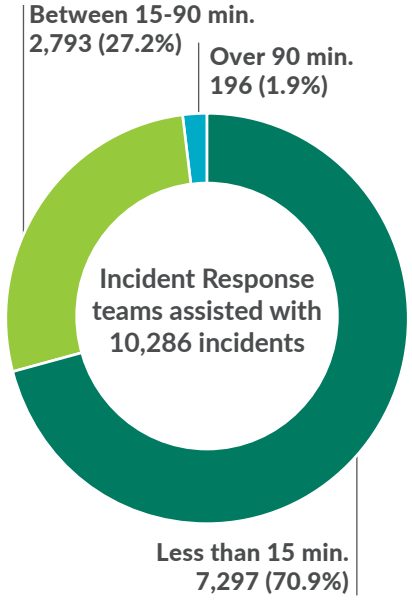
IR teams assisted at the scene of 196 incidents that lasted more than 90 minutes during the first quarter of 2022. This was 15 fewer incidents—a 7.1% decrease—than the same quarter in 2021. While these over-90-minute incidents accounted for 1.9% of all incidents, they resulted in 24.7% of all incident-related delay costs (refer to chart on p. 11).

Notable results

- *WSDOT responded to 10,286 incidents during the first quarter of 2022, 682 (6.2%) fewer than during the same quarter in 2021*
- *WSDOT cleared incidents in an average of 16 minutes and 18 seconds during the first quarter of 2022, 30 seconds (3.2%) slower than the same quarter in 2021*
- *In the first quarter of 2022, IR teams provided an estimated $21.3 million in economic benefit by reducing the effects of incidents on drivers*
- *For every $1 spent on WSDOT's IR program, $14.20 was returned in economic benefit to the traveling public during the quarter*

WSDOT clears majority of traffic incidents in 15 minutes or less

First quarter 2022; Times to clear incidents; Number and percentage of incidents



Data source: Washington Incident Tracking System.

Incident Response helps reduce congestion

The mission of WSDOT's Incident Response program is to clear traffic incidents safely and quickly, minimizing congestion and the risk of secondary incidents. The statewide program has a biennial budget of $12 million, about 59 full-time equivalent positions and 69 dedicated vehicles. Teams are on-call 24/7 and actively patrol approximately 1,300 centerline miles (3,400 lane miles) of highway on major corridors around the state during peak traffic hours. This covers approximately 18% of all state-owned centerline miles.

Eleven of the 196 over-90-minute incidents took six hours or more to clear (referred to as extraordinary incidents). This was three more extraordinary incidents than the same quarter in 2021. Each of the 11 extraordinary incidents in first quarter of 2022 took an average of nine hours and 50 minutes to clear, accounting for 18.7% of all incident-induced delay costs for the quarter.

The average incident clearance time for all over-90-minute incidents was three hours and three minutes. This was about 16 minutes slower than the same quarter in 2021. Excluding the 11 extraordinary incidents, WSDOT's average clearance time for over-90-minute incidents was two hours and 39 minutes.

WSDOT focuses on safety when clearing incidents, working to reduce incident-induced delay as well as the potential for secondary incidents. Secondary incidents occur in the congestion resulting from a prior incident and may be caused by distracted driving, unexpected slowdowns or debris in the roadway.

Incident Response program provides $21.3 million in economic benefit during the quarter

The IR teams help alert drivers about incidents and clear roadways to reduce the likelihood of additional incidents. WSDOT's assistance at incident scenes

WSDOT's Incident Response teams provide an estimated $21.3 million in economic benefit

First quarter 2022; Incidents by duration in minutes; Time in minutes; Costs and benefits in millions of dollars

Incident duration	Number of incidents[1]	Percent blocking[2]	Average incident clearance time[3] (all incidents)	Cost of incident-induced delay	Economic benefits from IR program[4]
Less than 15 min.	7,297	19.2%	5.0	$9.4	$4.3
Between 15 and 90 min.	2,793	57.2%	33.2	$27.3	$11.9
Over 90 min.	196	86.7%	183.6	$12.0	$5.1
Total	10,286	31.0%	16.3	$48.7	$21.3
Percent change from the first quarter of 2021	**↓6.2%**	**↓2.0%**	**↓3.2%**	**↓2.4%**	**↓2.5%**

Data source: Washington Incident Tracking System.

Notes: Some numbers do not add up to 100% due to rounding.

1 Teams were unable to locate 527 of the 10,286 incidents. Because an IR team attempted to respond, these incidents are included in the total incident count. Other performance measures do not include incidents that were not located.

2 An incident is considered blocking when it shuts down one or more lanes of travel.

3 Incident clearance time is the time between an IR team's first awareness of an incident and when the last responder has left the scene.

4 Estimated economic benefits include benefits from delay reduction and prevented secondary incidents. Refer to WSDOT's Handbook for Corridor Capacity Evaluation, 2nd edition, pp. 45-47 for the IR program's methods for calculating benefits.

provided an estimated $21.3 million in economic benefit during the first quarter of 2022 by reducing the impacts of incidents on drivers. This benefit was provided in two ways:

- WSDOT reduces the time and fuel motorists waste in incident-induced traffic delay by clearing incidents quickly. About $12.2 million of IR's economic benefit for the quarter resulted from reduced traffic delay.
- WSDOT helps prevent secondary incidents by proactively managing traffic at incident scenes. About $9.1 million of IR's economic benefits resulted from preventing an estimated 1,952 secondary incidents and resulting delay. This figure is based on Federal Highway Administration data that estimates 20% of all incidents are secondary incidents.

Based on WSDOT's budget for IR, every $1 spent on the program during the first quarter of 2022 provided drivers $14.20 in economic benefit.

Incident numbers do not correlate with the cost of incident-induced delay

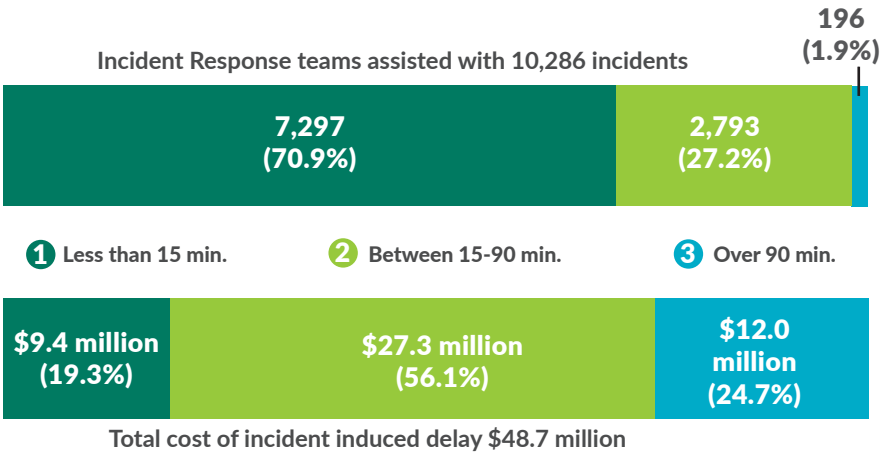
The 10,286 incidents during the quarter had a total incident-induced delay cost of $48.7 million. Incidents lasting less than 15 minutes accounted for 70.9% of total incidents but only 19.3% of total costs. Incidents lasting 15-90 minutes accounted for 27.2% of all incidents, but 56.1% of total costs. Incidents lasting more than 90 minutes made up 1.9% of all incidents for the quarter but accounted for 24.7% of total costs (refer to chart below).

Performance data reported in this article is from WSDOT's Washington Incident Tracking System, which tracks incidents to which a WSDOT IR team responded. For information on how WSDOT calculates these figures and all IR performance metrics, refer to WSDOT's Handbook for Corridor Capacity Evaluation, 2nd edition, pp. 45-47.

Contributors include Vince Fairhurst, Tony Leingang, Michele Villnave, Takahide Aso

Cost of incident-induced delay not proportional to response numbers

First quarter 2022; Number and percentage of incidents; Time to clear incidents; Cost and percentage of incident-induced delay



Data source: Washington Incident Tracking System.

Customer feedback:

- "I was on the phone trying to contact my auto roadside help, when Aruy D. stopped and approached my passenger side window with a broad smile. He offered to replace the shredded tire. What a God send!"
- "The rain was very heavy on SR 500. Matt was very friendly, quick and professional with his help. Thank you kindly!"
- "After our tire was flat on the freeway, Rachel appeared 10 minutes later. She was immediately helpful and changed our tire. God Bless you."

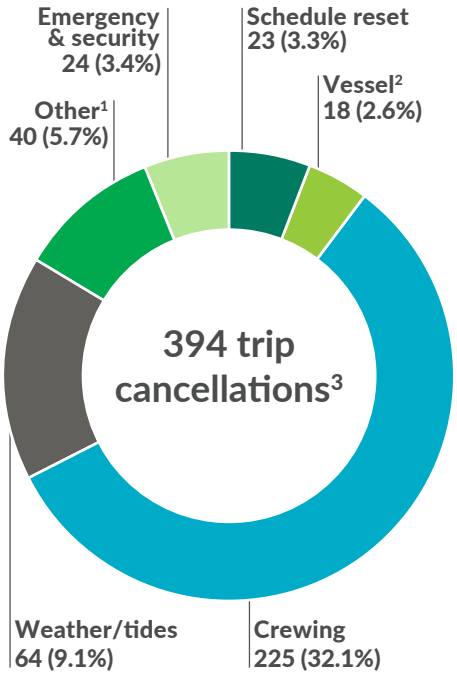
85 WASHINGTON STATE FERRIES QUARTERLY UPDATE

Notable results

- *WSF completed 27,955 (98.8%) of its 28,306 regularly scheduled trips in the third quarter of fiscal year 2022*
- *WSF ridership was approximately 3.26 million in the third quarter of fiscal year 2022, which was 125,600 (4%) more than in the corresponding quarter in FY2021*

Crewing causes most cancellations for the quarter

Third quarter (January - March) FY2022; Number of cancellations and percentage of total cancellations per category



Data source: Washington State Ferries.

Notes: Fiscal years run from July 1 through June 30. As a result, January through March 2022 represents the third quarter of FY2022. **1** The category for "Other" includes issues at terminals, and events like disabled vehicles, environmental reasons and incidents that can impact operations. **2** The category "Vessel" refers to cancellations due to mechanical issues. **3** WSF replaced 43 of the 394 canceled trips for a total of 351 net missed trips.

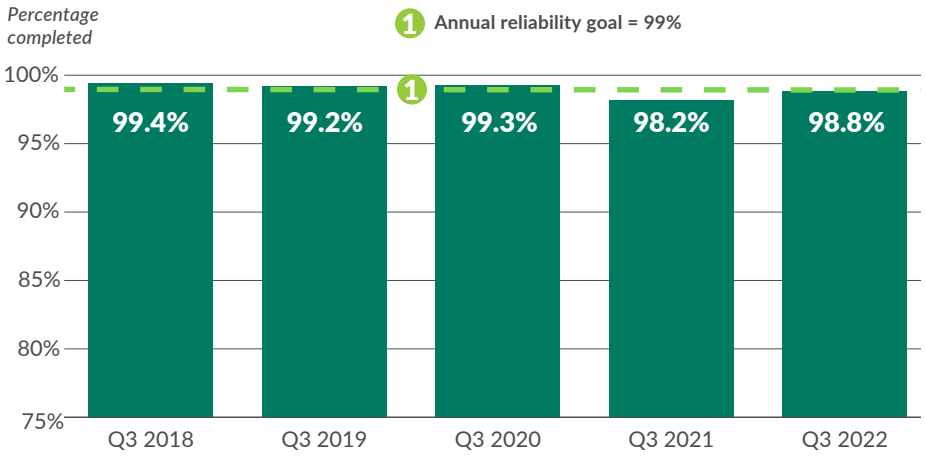
WSF service reliability improves to 98.8%

There were 28,306 regularly scheduled ferry trips during the third quarter of fiscal year 2022, 21.8% (7,910) fewer than the same quarter of FY2021 (36,216). WSF completed 98.8% (27,955) of these scheduled trips in the third quarter of FY2022, a 0.6% improvement compared to the same quarter in FY2021 (98.2%), but missed the annual service reliability performance goal of 99% by 0.2 percentage points.

In the third quarter of FY2022, WSF canceled 394 trips and replaced 43 of them, resulting in 351 net missed trips. This was 309 (46.8%) fewer than the 660 net missed trips during the same quarter in FY2021.

WSF service reliability improves, narrowly misses goal

Third quarters; Fiscal years 2018 through 2022; Percentage of scheduled ferry trips completed



Data source: Washington State Ferries.

Notes: Fiscal year = July 1 through June 30. As a result, January through March 2022 represents the third quarter of FY2022.

WSF Service Restoration Plan outlines process to restore ferry service to pre-pandemic levels

Since the start of the COVID-19 pandemic, WSF has been continually adjusting its service to provide reliability and predictability for customers while facing a shortage of crewing and vessel resources. The ferry system has been operating on an Alternate Service Plan since October 2021. In March 2022, WSF released its COVID-19 Service Restoration Plan, outlining the process it will use to restore full service on each of its routes as it continues to recover from the pandemic.

During the third quarter of fiscal year 2022, WSF sailed between 12 and 15 vessels each day: one on each route except the Fauntleroy/Vashon/Southworth route (two vessels) and the full, four-boat service in the San Juan Islands. WSF restored full service to the Seattle/Bainbridge route on a trial basis and added individual trips back on the Mukilteo/Clinton and Edmonds/Kingston routes based on vessel and crew availability.

Of the 394 trips canceled during the quarter, the highest number of cancellations (225) was related to crew availability. Exposure to COVID-19 could result in a crew member having to quarantine and other potentially-affected crew, identified through contact tracing, having to do the same. Thus, one case of COVID-19 could affect an entire deck crew (up to 11 people).

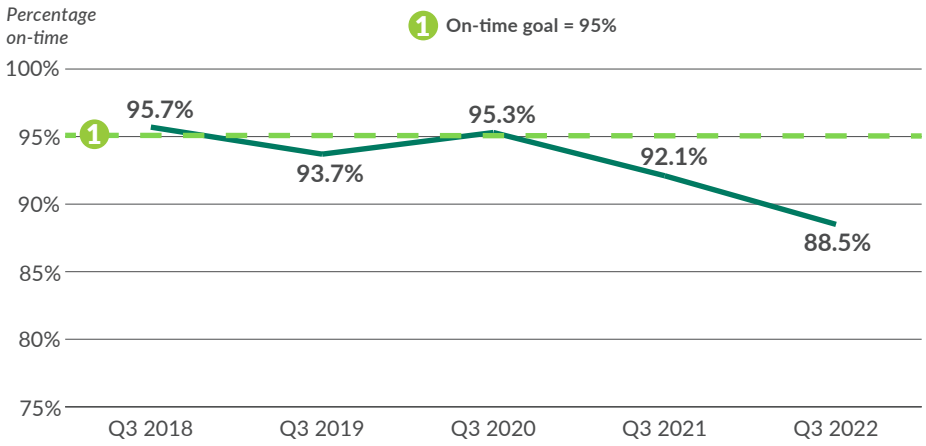
Tides accounted for 38 canceled trips and weather caused 26 cancellations. There were 23 schedule resets that occurred when vessels were so late it was necessary to cancel their trips to re-establish an on-time schedule. The majority (19 of 24) of emergency and security cancellations were for medical emergencies. There were 18 trips canceled on various vessels due to vessel mechanical breakdowns. The remaining 40 cancellations occurred for a variety of reasons and resulted in no more than six cancellations for any one event.

WSF misses annual on-time performance goal

On-time performance was 88.5% in the third quarter of FY2022; this is 3.6 percentage points lower than the same quarter in FY2021. WSF's quarterly performance was 6.5 percentage points below the annual on-time performance goal of 95%.

On-time performance for WSF down in five-year trend

Third quarters; Fiscal years 2018 through 2022; Percentage of ferry trips reported as on-time[1]



Data source: Washington State Ferries.

Notes: Fiscal year = July 1 through June 30. As a result, January through March 2022 represents the third quarter of FY2022. **1** A trip is considered delayed when a vessel leaves the terminal more than 10 minutes after the scheduled departure time.

WSF on-time performance worsens and reliability improves in the third quarter of fiscal year 2022

January through March, FY2021 and FY2022; Annual on-time goal = 95%; Annual service reliability goal = 99%

	On-time performance (third quarter)				Service reliability (third quarter)			
Route	**FY2021**	**FY2022**	**Status**	**Trend**	**FY2021**	**FY2022**	**Status**	**Trend**
San Juan Domestic	71.0%	71.9%	0.9%	↑	99.2%	97.7%	-1.5%	↓
Anacortes/Friday Harbor/Sidney, B.C.[1]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Edmonds/Kingston	98.8%	94.6%	-4.2%	↓	98.4%	99.8%	1.4%	↑
Fauntleroy/Vashon/Southworth	92.5%	90.7%	-1.8%	↓	98.6%	99.7%	1.1%	↑
Port Townsend/Coupeville	98.0%	98.2%	0.2%	↑	92.6%	96.4%	3.8%	↑
Mukilteo/Clinton	98.7%	90.7%	-8.0%	↓	98.5%	99.6%	1.1%	↑
Point Defiance/Tahlequah	98.6%	98.7%	0.1%	↑	100%	97.6%	-2.4%	↓
Seattle/Bainbridge Island	94.7%	85.3%	-9.4%	↓	98.6%	99.4%	0.8%	↑
Seattle/Bremerton	97.8%	93.2%	-4.6%	↓	94.1%	99.1%	5.0%	↑
Total system	**92.1%**	**88.5%**	**-3.6%**	↓	**98.2%**	**98.8%**	**0.6%**	↑

Data source: Washington State Ferries.

Notes: FY = fiscal year (July 1 through June 30). As a result, January through March 2022 represents the third quarter of FY2022. A trip is considered delayed when a vessel leaves the terminal more than 10 minutes after the scheduled departure time. Numbers shown in the table have been rounded to the nearest tenth and may not add up. **1** The Anacortes/Friday Harbor/Sidney, B.C. route was closed during the quarter due to COVID-19.

On-time performance decreased on five of the eight routes compared to the third quarter of FY2021. Of the 30,331 performed trips, 3,488 (11.5%) trips did not leave the terminal within 10 minutes of the scheduled departure time. The Mukilteo/Clinton route had the largest percentage decrease (8.0%) from 98.7% to 90.7%. The route with the greatest improvement in on-time performance was the San Juan Domestic route with an improvement of 0.9% as compared to the same quarter in the previous year.

Ridership increases in the third quarter of FY2022

WSF ridership was approximately 3.26 million in the third quarter of FY2022. This was about 125,600 (4%) more passengers than the corresponding quarter in FY2021 and 21.2% fewer riders than the projected ridership of 4.14 million. This reduction in ridership is primarily due to WSF's reduced service schedule that provided fewer sailings. The Seattle/Bainbridge Island route had the highest volume of passengers at approximately 792,000 and also experienced the largest increase in ridership (203,000 riders, or 34.5%) compared to the third quarter of FY2021.

Revenue follows ridership, trends up for the quarter

Farebox revenue was just under $31 million for the third quarter of FY2022. This was $190,000 (0.6%) more than the same period in FY2021, however, it was nearly $6.7 million (17.8%) under the $37.7 million projection. Revenue projections were made in June 2021 when vehicle ridership was returning at a faster rate than walk-on passengers. As of October 2021, fewer vessels were in service, which meant less vehicle capacity, causing a gap between projected and actual revenue for vehicles.

Rate of passenger injuries increases, rate of employee injuries decreases

The rate of passenger injuries per million riders increased from 1.27 in the third quarter of FY2021 to 4.72 in the same quarter of FY2022. This represents an increase in the raw number of injuries from four to six, and missed WSF's goal of one or fewer injuries per million riders.

The rate of Occupational Safety and Health Administration recordable crew injuries per 10,000 revenue service hours was 6.7 in the third quarter of FY2022, down from 10.1 in the third quarter of FY2021. There were 16 crew injuries in FY2022, 12 fewer than 28 in FY2021—this achieved WSF's goal of 7.6 employee injuries or fewer per revenue service hour.

Rate of passenger complaints increases

There were 371 customer complaints in the third quarter of FY2022 compared to 208 in the corresponding quarter of FY2021. This is an increase in the rate per 100,000 riders from 6.6 in FY2021 to 11.4 in FY2022.

The category with the highest rate of complaints was the schedule, with 3.7 complaints per 100,000 riders. Schedule complaints are related to a reduction in scheduled service, such as the alternate service plan and the inclement weather plan activated in the same quarter last year. The category with the second-highest rate of complaints was employee behavior with 2.9 complaints per 100,000 riders. There were 22 compliments in the third quarter of FY2022 compared to 10 in FY2021.

Contributors include Matt Hanbey, Donna Thomas, Joe Irwin and Dustin Motte

WSF staff remain dedicated to customer service during pandemic

"Good morning, This is a long overdue expression of appreciation to the … workers at the Bainbridge Island terminal. They are always—always—helpful and good-natured when times are good and we're on our two-boat service. But the grace with which they handle cranky commuters on one-boat service days is really admirable. I imagine they get static when we drivers see the "one boat only" sign and turn our wrath on the messenger. But tempted as they might be to call time-outs on our complaints, they somehow remain polite, displaying a level of courage and forbearance I for one couldn't pull off. Please thank them for me."

85 AMTRAK CASCADES ANNUAL REPORT

Amtrak Cascades annual ridership increases 46% in 2021, but still down from 2019

A total of 251,000 people rode Amtrak Cascades trains in 2021. This was a 46% increase from 172,000 in 2020 but was 70% lower than the 824,000 riders in 2019, prior to the COVID-19 pandemic.

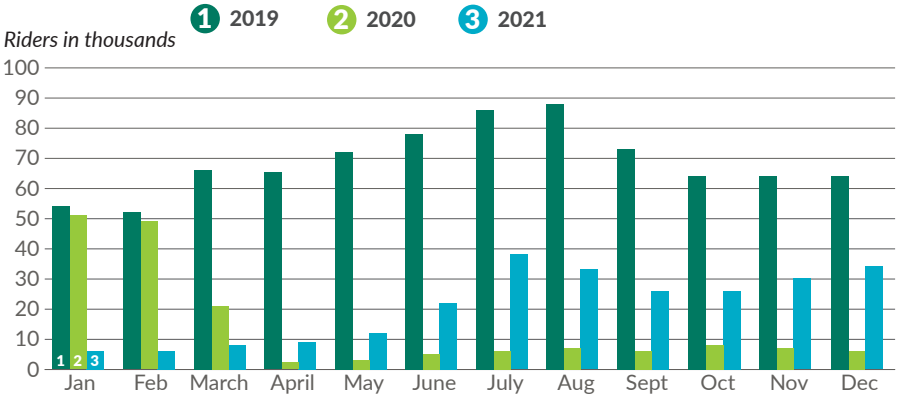
In May 2021, Amtrak Cascades trains returned to two daily round trips between Seattle and Eugene, Oregon and three daily round trips between Seattle and Portland, Oregon. Seattle to Eugene was reduced to one trip daily and all other services were suspended in March 2020 due to COVID-19. All Amtrak Cascades service between Seattle and Vancouver, B.C. continued to be suspended throughout 2021.

Pre-pandemic Amtrak Cascades train service consisted of four daily round trips between Seattle and Portland; two daily round trips between Seattle and Vancouver, British Columbia; and two daily round trips between Portland and Eugene.

Monthly trends for 2021 saw the highest ridership occurring in July with 38,494 passengers, an increase of nearly 500% compared to 6,425 in July 2020. Even with the increase, 2021 ridership was still 55% below the 85,647 passengers who rode in July 2019 (refer to chart below).

Amtrak Cascades ridership increases in 2021, still down from 2019

Amtrak Cascades monthly ridership; 2019, 2020 and 2021



Data source: WSDOT Rail, Freight and Ports Division.
Note: Beginning in March 2020, all Amtrak Cascades service between Seattle and Vancouver, B.C. was suspended, and service between Seattle and Portland, Oregon was reduced from four daily round trips to one.

Notable results

- *Amtrak Cascades ridership increased 46% to 251,000 passengers in 2021 compared to 172,000 in 2020*
- *Amtrak Cascades ticket revenue increased 47% from $6.5 million in 2020 to $9.6 million in 2021*
- *On-time performance worsened four percentage points from 62% in 2020 to 58% in 2021, and remained below the target of 88%*

Measuring station use

Amtrak Cascades measures use at each station by "on-offs," or the number of riders who get on or off trains at a given station. For example, someone who rides Amtrak Cascades from Kelso to Seattle is counted as one passenger using the Kelso station and as one passenger using the Seattle station.

Passenger on-offs break down ridership at the station level, reflecting which stations are most heavily used by Cascades riders. This station-level usage information helps determine staffing levels and resource needs at individual stations.

Amtrak updates ridership reporting methods

Effective on October 1, 2019, Amtrak revised their ridership reporting policy by excluding riders who purchased a ticket but did not cancel or board the train from official reported ridership. Cascades ridership reported for 2019 and 2020 have been adjusted in this edition of the Gray Notebook to reflect the policy change.

Passenger on-offs increase by 45% in 2021

The total number of passengers getting on or off Amtrak Cascades trains increased 45% from 346,000 in 2020 to 501,100 in 2021. The two busiest stations on the Amtrak Cascades corridor—King Street Station in Seattle and Union Station in Portland—saw increases in passengers with approximately 62% and 69% higher on-offs in 2021 than in 2020, respectively (refer to table below).

Having no trains operating north of Seattle in 2021 resulted in no passengers using the six train stations in that area. The suspended service started March 2020 for these six stations. This and other COVID-19 related issues resulted overall in 70% less on-offs in 2021 than in 2019.

Total number of passengers getting on or off trains at Amtrak Cascades stations up in 2021 compared to 2020 but down from 2019

Passengers getting on-off trains, rounded to the nearest thousand; 2019, 2020 and 2021

Station	2019[1]	2020	2021	Percent Change 2021 vs 2020	Percent Change 2021 vs 2019
Vancouver, B.C.[2]	169,000	19,000	N/A[3]	-100%	-100%
Bellingham[2]	54,000	9,000	N/A[3]	-100%	-100%
Mount Vernon[2]	16,000	3,000	N/A[3]	-100%	-100%
Stanwood[2]	6,000	1,000	N/A[3]	-100%	-100%
Everett[2]	23,000	4,000	N/A[3]	-100%	-100%
Edmonds[2]	22,000	3,000	N/A[3]	-100%	-100%
Seattle	508,000	97,000	157,000	62%	-69%
Tukwila	35,000	10,000	15,000	52%	-57%
Tacoma	84,000	24,000	36,000	48%	-58%
Olympia	55,000	15,000	23,000	51%	-59%
Centralia	21,000	7,000	9,300	33%	-56%
Kelso	26,000	8,000	11,000	38%	-58%
Vancouver, WA	78,000	21,000	35,000	66%	-55%
Portland[4]	419,000	90,000	152,000	69%	-64%
Oregon City[4]	13,000	4,000	7,300	83%	-44%
Salem[4]	36,000	11,000	17,000	55%	-53%
Albany[4]	19,000	6,000	11,000	83%	-42%
Eugene[4]	46,000	13,000	28,000	116%	-39%
Other[5]	17,000	1,000	N/A	-100%	-100%
Total	**1,647,000**	**346,000**	**501,000**	**45%**	**-70%**

Data source: WSDOT Rail, Freight and Ports Division.

Notes: From March 2020 all Amtrak Cascades service between Seattle and Vancouver, B.C. was suspended, and service between Seattle and Portland was reduced from four daily round trips to one. Starting in May 2021 service returned twice daily from Portland to Eugene and three daily trips between Seattle and Portland. **1** Amtrak made a change to its methods for reporting ridership in October 2019 (refer to box at left). **2** Station is located between Seattle and Vancouver, B.C. **3** From March 2020 through 2021, all Amtrak Cascades service between Seattle and Vancouver, B.C. was suspended. **4** Station is located in Oregon. **5** Other includes RailPlus passengers, riders whose origin and destination was unknown, and passengers who deferred their trip to another day.

Amtrak Cascades' on-time performance declines

Washington's Amtrak Cascades trains arrived on time for 51% of their trips in 2021, down 11 percentage points from 62% in 2020. Amtrak Cascades' on-time performance goal is 88%—as contractually negotiated by WSDOT, Amtrak, Sound Transit and BNSF in 2018—but it has not yet been achieved (refer to chart at right).

Amtrak Cascades trains between Portland and Seattle (the portion of the Amtrak Cascades corridor which WSDOT oversees and operates) experienced 50,578 minutes (almost 843 hours) of delay, negatively impacting the system's on-time performance in 2021. Although each minute of train delay is separated into one of 25 categories, 45% of all delay times were due to three causes:

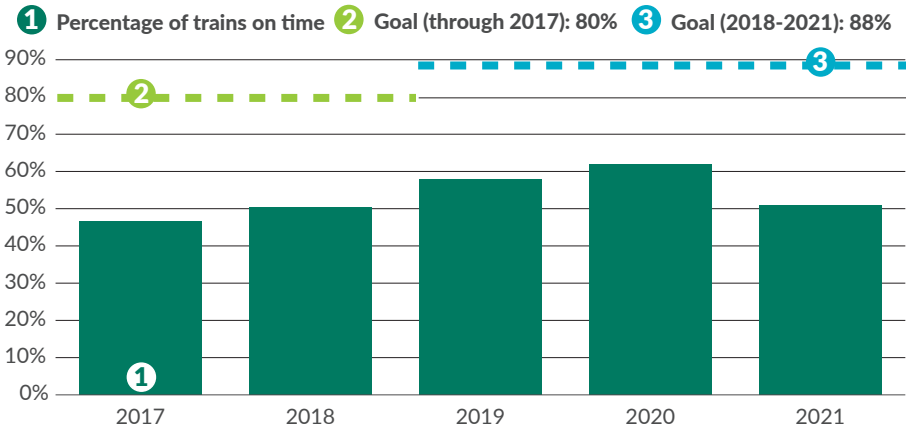
- Freight train interference caused 23% (11,653 minutes) of delay
- Slow speed restrictions due to track conditions including congestion, raised bridges and weather caused more than 12% (6,141 minutes) of delay
- Signal delays accounted for 10% (5,093 minutes) of the delay

The on-time performance goal of 88% is being tracked in accordance with contracts that WSDOT negotiated with BNSF, Amtrak and Sound Transit. The agencies use a shared database system to report delays, assign responsibility, and indicate that corrective actions are required if the goal is not reached.

Because BNSF dispatchers in Fort Worth, Texas determine the movement of both freight and passenger trains along the Amtrak Cascades corridor, the company is tasked with minimizing delays due to train interference. In keeping with contractual commitments, WSDOT requires BNSF to submit corrective action plans to mitigate these other delays that are under its purview.

Amtrak Cascades on-time performance declines in 2021

2017 through 2021; Percentage of trains on time



Data source: WSDOT Rail, Freight and Ports Division.

Note: Data is for trains on Washington segments only. In 2017, trains operating on the Vancouver, British Columbia to Seattle and Seattle to Portland, Oregon segments were considered on time if they arrived within 10 minutes of scheduled arrival, while trains operating on the Vancouver, British Columbia to Portland segment were considered on time if they arrived within 15 minutes of scheduled arrival. Beginning in 2018, all trains overseen by WSDOT are considered on time if they arrive within 10 minutes of scheduled arrival.

Amtrak Cascades

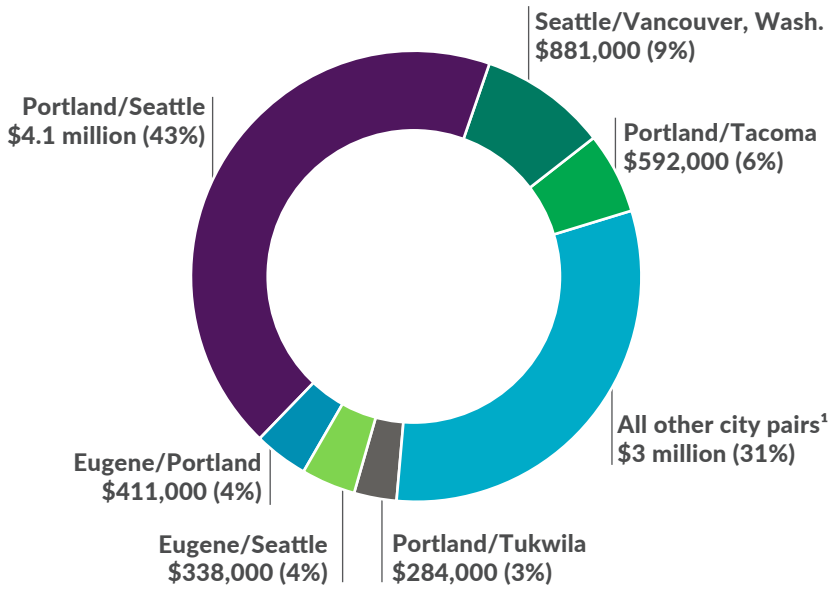
Amtrak Cascades is an intercity passenger rail service that operates between Vancouver, B.C. and Eugene, Oregon.

The service is jointly funded and managed by WSDOT and the Oregon Department of Transportation. WSDOT oversees the portion of the Amtrak Cascades corridor between Vancouver, B.C. and Portland, Oregon, while ODOT has primary responsibility for service between Portland and Eugene. WSDOT and ODOT pay Amtrak to operate the service.

Amtrak Cascades operates on privately owned tracks; BNSF owns the tracks in Washington and British Columbia, and Union Pacific owns the tracks in Oregon. Dispatching services are provided by BNSF in Washington, Union Pacific in Oregon and Canadian National in British Columbia. Stations along the Amtrak Cascades route are owned by a variety of entities, including cities, transit agencies, and railroads.

Top six city pairs account for 69% of ticket revenue in 2021

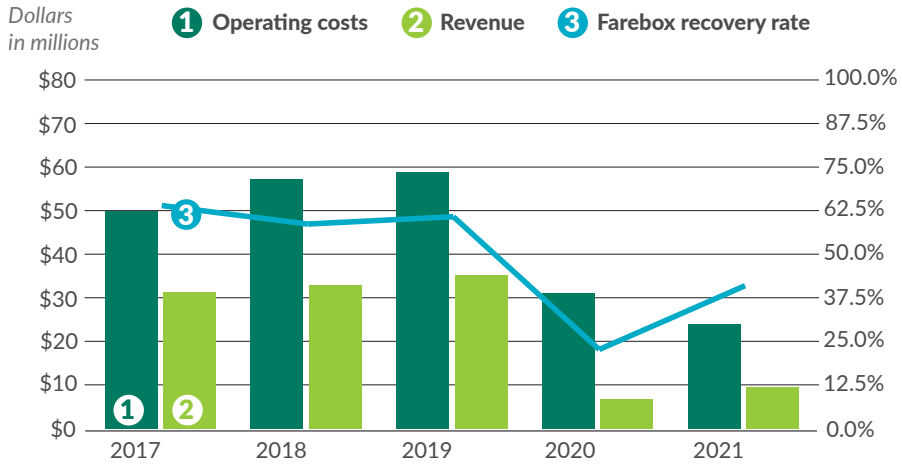
2021; Dollar value and percent of total dollar value by segment



Data source: WSDOT Rail, Freight and Ports Division.
Notes: Amtrak Cascades runs 467 miles from Vancouver, B.C. to Eugene, Oregon. Percentages may not add to 100 due to rounding. **1** The category "All other city pairs" includes over 60 additional city pairs as well as riders not associated with a specific city pair.

Amtrak Cascades operating costs decrease, while revenue and farebox recovery rate increases in 2021

2017 through 2021; Amtrak Cascades annual operating costs and revenues in dollars; Amtrak Cascades annual farebox recovery rate



Data source: WSDOT Rail, Freight and Ports Division.
Note: Prior to Gray Notebook 77 (for the quarter ending March 31, 2020), Amtrak Cascades operating costs, revenue and farebox recovery rate were reported on the fiscal year.

Ticket revenue increases 47% to $9.6 million in 2021

Amtrak Cascades experienced a 47% increase in ticket revenue in 2021, from $6.5 million in 2020 to $9.6 million in 2021. This was approximately 71% below the 2019 level of $33.2 million.

The Seattle-to-Portland travel segment accounted for $4.1 million (43%) of 2021 ticket revenue, the largest share of any city pair. The Seattle-to-Vancouver, Wash. segment was second with $881,000 (refer to chart at left).

Washington Amtrak Cascades farebox recovery rate increases in 2021

The farebox recovery rate for WSDOT-funded Amtrak Cascades was 40.0% in 2021 up 18.3 percentage points from 21.7% in 2020.

The farebox recovery rate is the ratio between total revenue and total operating costs for WSDOT trains. Total revenue (tickets, food and beverage, and other fees) in 2021 was $9.6 million, up $2.8 million from $6.7 million in 2020.

In 2021 total operating costs were approximately $23.9 million, down almost $7.2 million from $31.1 million in 2020. This decrease in operating costs reflects the lower number of daily trains operating during all 12 months of 2021, whereas there were three months in early 2020 with full service (refer to chart at left).

Contributors include Janet Matkin, Cara Motte, Wenjuan Zhao, Joe Irwin and Michele Villnave

85 WETLANDS PROTECTION ANNUAL REPORT

WSDOT adds 32.7 acres of wetland and stream mitigation sites in 2021

WSDOT began monitoring nine new compensatory wetland and stream mitigation sites on 32.7 acres in 2021. Mitigation sites compensate for the effects of transportation projects and help offset climate change impacts. WSDOT is actively monitoring 107 sites (1,043 acres) until the sites meet initial permit requirements.

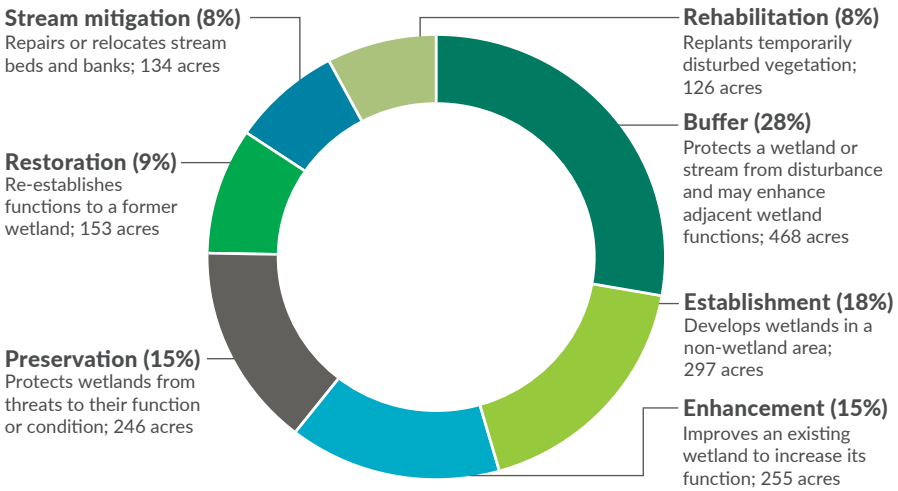
The agency started issuing monitoring reports on compensation sites in 1988 and has since transferred 214 of the total 321 sites (636 of the total 1,679 acres) to long-term stewardship, where WSDOT and partners—including local government agencies—will monitor the sites after initial permit requirements are met.

WSDOT's statewide inventory of the total 321 compensation sites includes:

- 79 compensation sites in the 10-year monitoring period;
- Three sites past the initial 10-year monitoring period that have not yet met all permit requirements;
- 19 sites being evaluated by the U.S. Army Corps of Engineers and Washington State Department of Ecology for completion of their permit requirements;
- Six compensatory mitigation banks; and
- 214 sites in long-term stewardship that have met their permit requirements.

WSDOT's mitigation site inventory reaches 1,679 acres in 2021

Total acreage (and percentage of total) of replacement wetlands and stream mitigation sites by type



Data source: WSDOT Environmental Services Office.
Notes: Percentages may not total 100 due to rounding. WSDOT started issuing monitoring reports in 1988.

Notable results

- *WSDOT began monitoring nine new wetland and stream mitigation sites on 32.7 acres in 2021*
- *WSDOT completed monitoring work at six mitigation sites on 11.48 acres that were at the end of their final-year monitoring periods in 2021*
- *WSDOT's mitigation banks earned 0.20 credits and debited 0.22 credits in 2021*

How mitigation banks work for WSDOT

Guidance from the Environmental Protection Agency and the U.S. Army Corps of Engineers' on compensatory mitigation for construction projects recommends mitigation banking. Mitigation banking is like a "savings account" for WSDOT's future capital projects and mitigation needs. These banks create credits based on the number of acres and their value. These credits can be withdrawn from the account (or used) by projects as compensation for unavoidable wetland impacts within the bank's specified service area.

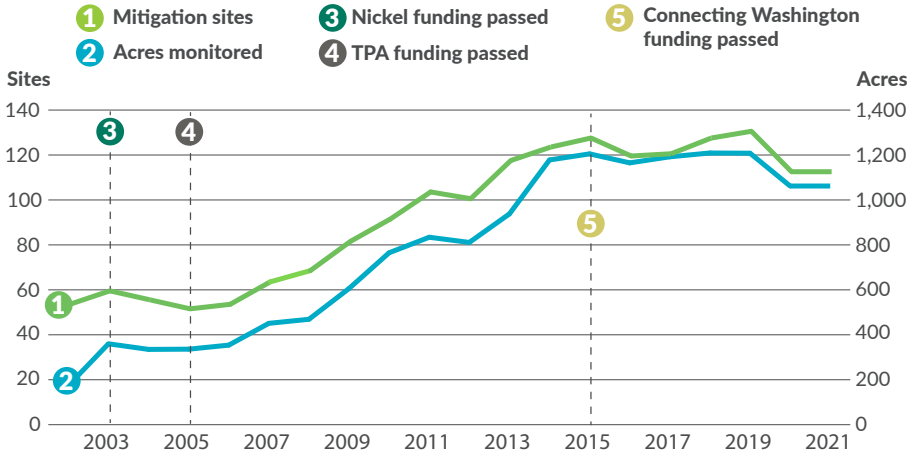
WSDOT actively monitors 107 mitigation sites in 2021

From 2002 through 2021, the number of WSDOT-monitored mitigation sites increased from 53 to 107 (102%) and total acreage increased from 174 to 1,043 (499%). These increases are primarily a result of construction projects funded by the 2003 Nickel, the 2005 Transportation Partnership Account and Connecting Washington revenue packages.

To ensure these sites meet permit requirements, WSDOT monitors hydrology, vegetation, and wildlife as they develop—typically for 10 years—before transferring them to agency partners for long-term stewardship.

WSDOT's monitored mitigation site acreage up 499% from 174 acres in 2002

2002 through 2021; Number of sites and acres monitored



Data source: WSDOT Environmental Services Office.

Notes: Of the 107 sites above, 79 were active mitigation sites, 19 sites had been submitted for closeout and were being evaluated, three were sites beyond the initial monitoring period and six were bank units.

WSDOT strives to meet completion requirements for mitigation sites

In 2021, seven compensatory mitigation sites were at the end of the monitoring period. WSDOT completed monitoring work at six of these sites (11.48 acres) and will seek approval from regulatory agencies to transfer the sites to long-term monitoring with WSDOT's partners. One site (0.30 acres) will require an iterative process and additional monitoring to determine if the desired condition is achieved.

Mitigation options help WSDOT and the environment

WSDOT's six mitigation bank sites earned 0.20 credits and debited 0.22 in 2021.

Mitigation banks preserve, enhance, restore or create wetlands to offset impacts on existing wetlands from future construction projects. WSDOT mitigation banks meet future project needs and maximize environmental benefits. They do this by restoring ecological functions—like creating amphibian habitats and providing floodwater storage areas—before any damage that project activity would cause to those ecological functions. Creating mitigation sites beforehand, gives the site time to mature and provide ecological functions that has less impact on the ecosystems. The agency's mitigation banks save time and money by consolidating work efforts and banking credits for future projects.

WSDOT restarts wetlands monitoring internship

WSDOT hired six interns in 2021 after pausing the Wetlands Ecology and Monitoring Techniques internship in 2020 due to COVID-19.

Historically, WSDOT hired between 16-22 interns every summer to help biologists monitor vegetation at the mitigation sites. By reducing the number of interns, WSDOT was able to maintain safety protocols while completing the monitoring work.

WSDOT partnered with the Doris Duke Foundation to hire two of the six interns. The Doris Duke Conservation Scholars Program supports under-represented students in the fields of science by arranging applied internships. This process aligns with WSDOT's strategic goal of creating a more inclusive workforce.

WSDOT's environmental drone program was able to continue collecting images for monitoring reports. These images support data collected by the interns. They efficiently communicate compensatory mitigation site progression to the regulatory agencies.

Contributors include Kristen Andrews, Jennie Husby, Dustin Motte and Michele Villnave

85 WILDLIFE HABITAT CONNECTIVITY ANNUAL UPDATE

Notable results

- *WSDOT and partners recorded a minimum of 8,683 animal crossings in the Snoqualmie Pass East Project area in 2020 and 2021*
- *WSDOT's Butler Creek wildlife crossing project reduces wildlife-vehicle collisions by 81% in the area*
- *WSDOT's Janis Bridge wildlife crossing project reduces deer-vehicle collisions by 91% in the area*
- *WSDOT removed 41,151 wildlife carcasses from state highways from 2017 to 2021*

Wildlife crossing structures in Washington

Washington's first wildlife crossing structures were built in 1976 on Interstate 90, outside North Bend. Since then, WSDOT has constructed over two dozen wildlife crossings and has become a leader in the habitat connectivity world.

Ongoing projects target locations most in need of habitat connectivity or reduction in wildlife-vehicle collisions and work to include wildlife crossing and fish passage structures within the footprints of other projects.

For more information about wildlife crossing structures in the Snoqualmie Pass East area, watch the video Cascade Crossroads.

WSDOT aims to increase habitat connectivity and decrease wildlife-vehicle collisions

Habitat connectivity is how the landscape facilitates or impedes animal movement and other ecological functions. Roadways alter landscapes and can create barriers to these movements, which are crucial to survival for many species. Wildlife-vehicle collisions represent an ongoing danger to the traveling public, and typically result in an animal's death.

WSDOT is working to increase habitat connectivity and reduce wildlife-vehicle collisions. Watch this video to see animals using WSDOT's crossing structures.

Most deer and larger animals can cross roads with low traffic volume (fewer than 2,000 vehicles per day) without issue. These roads still pose a significant risk to smaller, slower animals, which take longer to cover the same distance. Such species are usually too small to be recorded as vehicle-related mortalities and are not listed in carcass removal data (refer to chart on p. 25).

Rural highways with moderate traffic volumes (between 5,000-10,000 vehicles per day) tend to have the highest rates of wildlife-vehicle collisions because animals still attempt to cross, but the frequency of traffic increases the likelihood they will get hit. Eventually, avoidance becomes the animals' main response to busy roads and those living on either side can become isolated from one another—this is known as the barrier effect. Roadways with traffic volumes greater than 10,000 vehicles per day are practically complete barriers to most species.

Isolated wildlife populations lead to weaker genetics over time, and possible extinction of species unable to adapt to the change quickly enough. Recent studies indicate the cougars on the Olympic Peninsula are already suffering from genetic deficiencies, potentially because of the barrier effect created by Interstate 5, which sees up to 121,000 vehicles per day between Olympia and Oregon. Improving habitat connectivity supports stable wildlife populations and significantly reduces the chance of dangerous wildlife-vehicle collisions.

At right: A mule deer jumps onto US 97 between Riverside and Tonasket. A vehicle collision with this deer would have an estimated economic impact of $9,175. In Okanogan County, US 97 cuts directly through their migration path.

WSDOT prioritizes connectivity investments using two-pronged approach

WSDOT uses Habitat Connectivity Investment Priorities to guide its two-pronged approach to addressing habitat connectivity through increasing the ability of animals to safely move across roads by eliminating or reducing barriers and by reducing the number of wildlife-vehicle collisions. The HCIP ranks the state highway system, in one-mile segments, based on two categories that reflect our two-pronged approach to habitat connectivity:

- Ecological Stewardship, and
- Wildlife-related Safety

Ecological Stewardship reflects a highway segment's overlap with the habitat ranges of select endangered or threatened wildlife, as well as its proximity to connected networks of habitat identified by the Washington Wildlife Habitat Connectivity Working Group.

Wildlife-related Safety prioritizes areas with higher carcass removal and wildlife collision rates.

Snoqualmie Pass East Project improves wildlife habitat connectivity

The Snoqualmie Pass East (SPE) Project is located along a 15-mile stretch of I-90 between Hyak and Easton. This corridor passes through the Okanogan-Wenatchee National Forest and is a critical connectivity zone for Pacific Northwest wildlife populations. The project aims to fulfill multiple objectives, including reducing avalanche and rock fall impacts, replacing failing concrete pavement, adding lanes to reduce congestion, and improving ecological connectivity across I-90. The project will enhance ecological connectivity for multiple wildlife species at 14 connectivity emphasis areas. Ecological connectivity components include more than 20 large wildlife crossing structures, including two major overpasses, and continuous wildlife fencing installed throughout most of the project area.

Within the completed portions of the Snoqualmie Pass East Project, WSDOT and partners built 11 large wildlife crossing structures.

WSDOT recorded a minimum of 8,683 wildlife crossings by camera in 2020 and 2021. These included 3,202 elk crossings, 4,382 deer crossings, 764 coyote crossings and several low-density and rare species like cougar, American marten, fisher, and American pika taking advantage of the structures to safely cross I-90.

Above: A highlight of the Snoqualmie Pass East Project is the design of the overpass and underpass proximity, allowing for increased wildlife habitat connectivity for a wide array of species.
Below: A bull elk uses the I-90 Snoqualmie Pass East overcrossing at sunset.

Monitoring teams from Central Washington University additionally documented many small mammals, amphibians and fish utilizing the crossing structures, including a radio-tracked western toad that crossed using the overpass.

The final phases of the project will address the remaining portions of the corridor by installing seven more large wildlife crossing structures and many smaller culverts and bridges for water and low-mobility species passage.

Above: A bear in the Snoqualmie Pass East Project area near Price Creek.
Below: A raccoon family uses the combined fish and terrestrial wildlife crossing structure on US 97 at Butler Creek. WSDOT's restoration team tended the vegetation so well that small animals can sometimes be difficult to spot.

Butler Creek project combines terrestrial and aquatic connectivity efforts

The Butler Creek Undercrossing project on US 97 was completed in 2012 and improved habitat connectivity for aquatic and terrestrial wildlife alike. The project replaced a 10-foot diameter culvert, which was a fish passage barrier, with a 65-foot span bridge that allows passage for all animals. This section of two-lane highway historically experienced high deer-vehicle collision rates, which provided an opportunity to improve aquatic and terrestrial habitat connectivity while also reducing the potential for dangerous wildlife-vehicle collisions.

To create a successful safe crossing for terrestrial wildlife, features were included such as wildlife barrier fencing and multiple wildlife jump-outs (safe exits for animals that find their way inside the fencing).

Since this project was completed, the annual number of wildlife-vehicle collisions has decreased by 81% within a half mile of the fence ends in both directions. In addition, fish are able to access habitat upstream of the highway. There are roughly 500 recorded deer crossings per year at this location, and many other species also use the underpass, including black bear, bobcat, coyote, cougar, California ground squirrel, endangered western gray squirrel, wild turkey, raccoon, and great blue heron.

Terrestrial habitat connectivity and fish passage overlap

The concepts of fish passage and terrestrial wildlife habitat connectivity are linked. Riparian corridors—where aquatic and terrestrial environments meet—comprise small portions of the landscape but provide disproportionately important ecosystem functions. These areas are commonly used by wildlife to travel between patches of suitable habitat, and in highly fragmented urban landscapes, represent some of the last remaining travel routes available.

Completing terrestrial wildlife habitat connectivity and fish barrier removal work simultaneously leads to engineering efficiencies and ultimately cost-savings. Combining these types of projects typically results in only minor cost increases over the fish passage-only plans, while constructing standalone wildlife crossing structures would be significantly more expensive.

Proactively addressing terrestrial wildlife and fish connectivity needs simultaneously will protect valued wildlife resources for future generations and enable a holistic view of the wildlife corridor planning process.

Janis Bridge project reduces deer-vehicle collision rate by 91% in the area

On US 97 near the Canadian border, the 12-mile stretch between Riverside and Tonasket is one of the worst deer-vehicle collision areas in the state. In addition to large mule deer herds, this stretch of highway is adjacent to habitat that supports many low-density, rare, or at-risk species—such as all three of Washington's native cats (Canada lynx, cougar and bobcat)—as well as endangered grouse. Furthermore, species long absent from the landscape, such as pronghorn, are being reintroduced and will live in close proximity to this highway.

Few safe crossing opportunities currently exist for wildlife here, and 452 large animals were hit and killed on this corridor between 2017-2021, most of them mule deer. With the average cost of a deer-vehicle collision estimated around $9,175, the 452 large animal collisions recorded in this 12-mile corridor represent over $4.15 million of economic impact.

In 2019, Conservation Northwest and WSDOT installed one mile of wildlife barrier fencing attached to a pre-existing crossing structure over the Okanogan River, Janis Bridge (at the northern end of the US 97 problem area). This wildlife barrier fencing helps prevent animals from crossing at unsafe locations and guides them to the crossing at Janis Bridge.

In 2020, the first year after the wildlife barrier fence was installed, WSDOT recorded 2,194 mule deer crossings at the Janis Bridge structure. That number increased to 2,432 in 2021 (cameras were down for 40 days, so actual numbers were

A herd of mule deer uses Janis Bridge to safely pass beneath US 97. Retrofitted wildlife barrier fencing, which guides animals to the pre-existing structure and keeps them off the roadway, is visible in the background.

higher). In addition, 18 other species were recorded using the Janis Bridge crossing in the two years since the fence was completed.

Average annual deer-vehicle collisions in the vicinity of Janis Bridge decreased by 91% (11 per year in 2017 down to one deer-vehicle collision in 2021) since the completion of the one mile of wildlife barrier fence.

Providing safe passage for wildlife in this 12-mile corridor (between Riverside and Tonasket) is a top habitat connectivity priority in Washington. Realizing this, the legislature recently awarded $2.7 million to begin addressing these needs.

WSDOT uses carcass data to identify wildlife-vehicle collision hotspots

WSDOT collects data when a wildlife carcass is removed from the roadway. Wildlife carcass removals are considered the results of wildlife-vehicle collisions.

WSDOT uses this data, which it has collected since 1973, to identify wildlife-vehicle collision hotspots and determine high priority locations in which to invest limited resources to benefit wildlife connectivity. Providing wildlife crossing structures and wildlife barrier fencing is the best way to reduce collisions and increase habitat connectivity.

From 2017 to 2021, WSDOT removed 41,151 wildlife carcasses from state highways. Deer species accounted for about 56% (23,207) of the wildlife carcass removals recorded during this five year period (refer to table at left). Many animals involved in wildlife-vehicle collisions die outside of the right of way, so they may never be recorded. Multiple peer-reviewed studies suggest around three times as many collisions with large animals occur than are reported in carcass removal data.

In addition to the life and death circumstances of these collisions, each carcass removal has an economic impact. According to a 2007 study (adjusted to 2022 dollars), the average economic impact of wildlife-vehicle collisions is:

- Deer, $9,175 per collision
- Elk, $24,242 per collision
- Moose, $42,652 per collision

Contributors include Sarah Croston, Marc Hershfield, Glen Kalisz, Takahide Aso, Dustin Motte

WSDOT removes 41,151 wildlife carcasses from state highways in five-year span

Number of carcasses by species removed from 2017 through 2021

Species	Quantity
Deer[1]	23,207
Raccoon	7,660
Coyote	3,007
Elk	1,314
Skunk	1,245
Porcupine	1,206
Rabbit	840
Beaver	700
Owl	642
Turkey	389
Hawk	268
Badger	264
River Otter	132
Moose	84
Black Bear	76
Bobcat	60
Bighorn Sheep	33
Cougar	18
Fisher	2
Wolf	2
Wolverine	2
Total	**41,151**

Data source: WSDOT Environmental Services Office.

Notes: **1** Includes mule, black-tailed, white-tailed, Columbian white-tailed, and unidentifiable deer species.

85 COMMERCIAL VEHICLE SERVICES ANNUAL REPORT

Notable results

- *WSDOT's Electronic Screening System helped the trucking industry avoid 230,000 travel hours and $28.9 million in operating costs in 2021*
- *Approximately 84% (144,711) of all permits for oversize and overweight loads were self-issued in 2021*

WSDOT screens commercial vehicles for violations

WSDOT's Electronic Screening System designs, implements and maintains the electronic screening systems used by the Washington State Patrol for commercial vehicle enforcement. The program uses technology along state highways to identify, weigh, and examine vehicles for violations while in motion to assist officers with targeted enforcement of high-risk carriers.

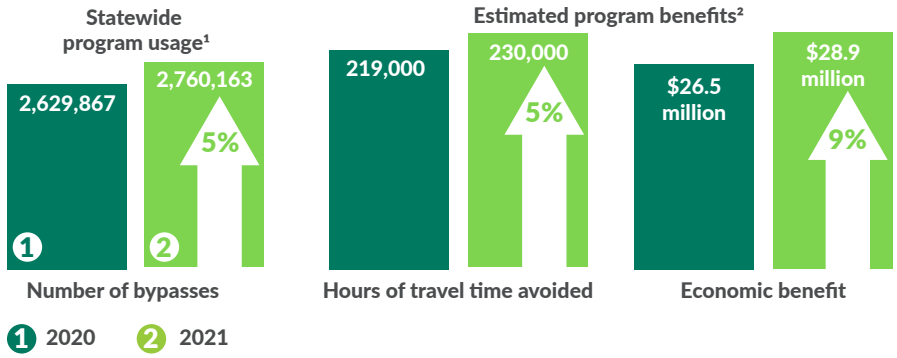
Restricting vehicles pulling into weigh stations to primarily high-risk carriers increases the likelihood of WSP finding the vehicles that need to be put out of service. It also saves both time and money for safe and legal carriers who are required to stop less frequently.

Weigh station e-screening provides $28.9 million in economic benefit in 2021

Weigh station bypasses created $28.9 million in economic benefit in 2021 by helping commercial vehicle drivers avoid an estimated 230,000 hours of travel time and an estimated 1.5 million gallons of diesel fuel (refer to chart below). On average, each bypass saved freight carriers five minutes and approximately $10.49 in operating and fuel costs by allowing truck drivers to keep traveling at highway speeds instead of pulling off the highway to stop at weigh stations. The amount of diesel saved cut carbon dioxide emissions by approximately 34.1 million pounds in 2021.

WSDOT's Electronic Screening System screened over 5.5 million commercial trucks and directed commercial trucks equipped with a transponder or identified by license plate to bypass open weigh stations over 2.7 million times in 2021. This was about 5% more than the 2.6 million green lights given in 2020 (refer to chart below).

WSDOT's Electronic Screening program usage, benefits up in 2021



Data source: WSDOT Commercial Vehicle Services Office.
Notes: **1** A truck's transponder or license plate is read each time it nears an open weigh station. **2** WSDOT assumes five minutes, 0.55 gallons of fuel and $8.68 in operating costs saved per bypass, based on a 2007 report. Based on these assumptions, each bypass provided an average economic benefit of $10.08 in 2020 and $10.49 in 2021.

WSDOT to replace aging self-serve permit system

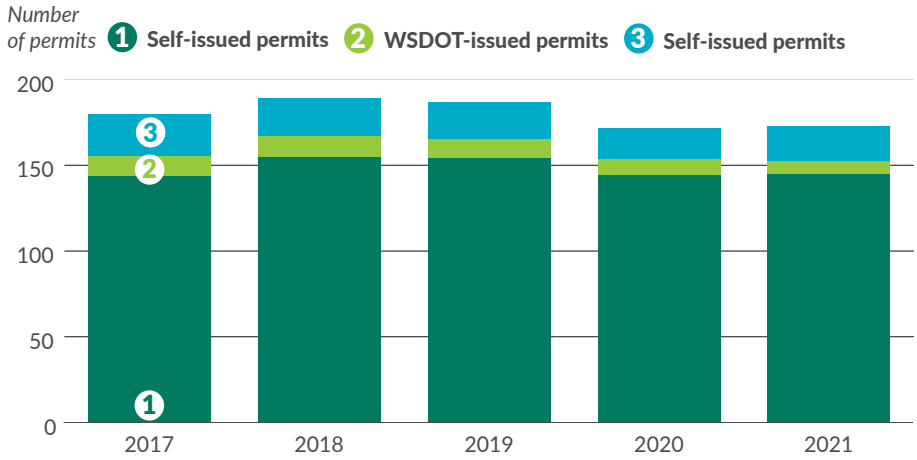
WSDOT is replacing its outdated self-service system used to issue oversize and overweight permits. The new system will be designed for the general public and use advances in technology to make obtaining self-issued permits easier while helping prevent errors.

WSDOT cannot process credit card payments on the internal network, leaving customers with three options for obtaining oversize or overweight permits: 1) Self-issue a permit online 2) Apply in person at a WSDOT office or 3) Pay a fee to a third-party agent.

In 2021, approximately 84% of permits were self-issued using a system designed in 1999 as a data entry form for highly-trained expert users.

Nearly 84% of permits for oversize or overweight loads self-issued in 2021

2017 to 2021; Number of permits for oversize and/or overweight loads issued by group in thousands



Data source: WSDOT Commercial Vehicle Services Office.

In 2021 and 2020, approximately 84% of permits were self-issued and the five-year average for self-issued permits was 82% (refer to chart above).

WSDOT receives federal grant to replace self-serve permit system

In 2020, WSDOT received a federal Innovative Technology Deployment grant to support the replacement of its current self-serve permit system.

The Federal Motor Carrier Safety Administration grant provides $2.2 million and supports three years of maintenance with an end date of September 30, 2025.

WSDOT selects vendor for self-service permit system

WSDOT has selected a vendor for the self-service permit system. The new system will perform all the functions of the current system and will include carrier validation, automated routing and manage roadway restrictions.

Carrier validation: will check for and prevent out-of-service carriers from purchasing permits. The system will also provide the commercial vehicle registration information to help prevent errors on the plate, vehicle identification number, or gross vehicle weight.

Automated routing: will automate the routing process providing connecting highways and mileposts to make it easier for self-issuers select their route.

The current system requires self-issuers to know and input their highways and mileposts manually and does not check for connecting routes or missing sections. Users have to know how to read a milepost map.

The new system will also provide a more intuitive self-issue permit system with connections to tools like the Bridge Vertical Clearance Trip Planner. The new self-service permit system is scheduled to be completed in July 2023 and cost around $1.4 million with maintenance fees averaging $185,000 a year. The cost and some of the maintenance fees are covered by the federal grant.

Oversize and overweight load permits

In general, an oversize/overweight load permit is required for vehicles or loads over 14 feet in height, 8 feet 6 inches in width, or 40 feet in length (for a single unit). There are a number of exceptions, including some for log trucks. The maximum legal weight (including the load) depends on a vehicle's length and the number of axles it has. Detailed information on maximum legal dimensions is available on WSDOT's Commercial Vehicle-Oversize and Overweight Permits page.

Recovery credit card transaction fees

The 2022 legislative session determined that WSDOT can start recovering credit card transaction fees associated with purchasing oversize and overweight permits in 2023.

Approximately 160,000 oversize and overweight permits are issued each year with 83.5% of the permits being paid for by credit cards. WSDOT paid over $260,000 in credit card fees in 2021. WSDOT will start a credit card fee cost recovery process in 2022 with assistance from the Office of Financial Management.

Superload permits

Vehicle loads exceeding 125 feet long, 16 feet wide, 16 feet high or 200,000 pounds are considered superloads. Because of their size and the effects these loads can have on state highways and traffic, superloads require special permits, that must be obtained from WSDOT in advance of travel. Approving superload permits requires special analysis, and approved superload permits include specific travel conditions.

- **Regular** superload permits include single loads, such as an excavator or bulldozer.
- **Project** permits can include multiple larger loads, such as girders, or refinery or windmill components.

Virtual Weigh-in-Motion

VWIM sites consist of sensors in the roadway, electronics, and detection equipment (cameras). They can be installed anywhere on a highway. Washington State Patrol troopers can view the data collected at VWIM sites in real time from their patrol vehicles.

Superload applications increase 3% in 2021

WSDOT issued 3,535 superload permits in 2021, a 7% decrease from the 3,785 issued in 2020 (refer to table below). The number of superload applications increased 3% from 1,284 in 2020 to 1,318 in 2021. From 2017 to 2021, the number of superload permit applications increased by 11%, from 1,186 to 1,318, while the number of superload permits issued increased 136%, from 1,495 to 3,535. Multiple permits can be issued as part of one application.

While project superloads (refer to box at left) continued to increase during the COVID-19 pandemic, the number of regular superloads decreased. In 2021, WSDOT received 806 regular superload permit applications—down 16% from an average of 927 regular superload permit applications received annually during the three-year span before the pandemic (2017-2019).

WSDOT receives more applications for projects superload permits, fewer for regular superload permits in 2021 than before the COVID-19 pandemic

2017 to 2021; Number of superload applications by type; Superload permits issued

Applications	2017	2018	2019	2020	2021
Regular	981	918	1,090	839	806
Project[1]	205	206	280	445	512
Total	**1,186**	**1,124**	**1,370**	**1,284**	**1,318**
Permits	1,495	1,616	2,562	3,785	3,535

Data Source: WSDOT Commercial Vehicle Services Office.

Note: **1** Applications for project superload permits, such as an application to move multiple windmills to a windmill farm, may result in multiple permits being issued (one for each separate load).

WSDOT completes electronic screening software upgrades

WSDOT has been working on upgrading its older, out-of-date legacy sites with new weigh-in-motion equipment for several years with state funding and has completed this work by finishing the last two legacy sites in 2021. The 11 existing weigh stations with electronic screening capabilities have all been upgraded with more reliable software and hardware that requires less maintenance and includes the ability for enforcement to monitor remotely.

WSDOT finishes upgrades to all legacy weigh stations in 2021

2017 to 2021; Number of weigh stations with electronic screening capabilities by type

Weigh station type	2017	2018	2019	2020	2021
Virtual Weigh-in-Motion sites	0	0	0	3	3
Upgraded weigh stations	1	3	5	9	11
Legacy weigh stations	10	8	6	2	0
Total	**11**	**11**	**11**	**14**	**14**

Data Source: WSDOT Commercial Vehicle Services Office.

WSDOT begins construction on new VWIM on US 2

WSDOT started construction on a fourth VWIM site near Gold Bar on US 2 in April 2022. Work is planned for completion in June 2022.

The VWIM site will replace an existing westbound weigh station on US 2 in Sultan that does not have electronic screening capabilities. The new site will include cameras to identify and electronically screen commercial vehicles.

WSDOT has VWIM sites on SR 221, SR 730 and SR 9. When complete, WSDOT will have four VWIM sites and 11 upgraded weigh stations, for a total of 15 locations with electronic screening capabilities.

New I-90 weigh station near Cle Elum in development

WSDOT is working to develop a new weigh station on I-90 near Cle Elum.

Washington does not have an eastbound I-90 weigh station with electronic screening and also lacks an inspection facility to check commercial vehicles leaving the Port of Seattle.

The project, in partnership with the Washington State Patrol, will provide a safe location for WSP to screen commercial vehicles while checking for out-of-service carriers heading east on I-90.

WSDOT plans to advertise for the project in December 2023 and complete work by October 2025.

WSDOT to rebuild Plymouth weigh station

WSDOT and WSP in 2020 identified the Plymouth Port of Entry, where I-82 crosses the Columbia River, as a location where improvements are needed to ensure safe inspection and enforcement of commercial carrier operations.

The agencies obtained funding to design and rebuild the station through the Commercial Vehicle Enforcement Systems Station Strategic Plan. The project is scheduled to be advertised in October 2022 and tentatively expected to be operational in late 2023. The rebuild will include:

- A new operations building
- Approaches with scales on both sides of the building
- An inspection building with two bays and one inspection pit
- Enhancements to include the I-82 and SR 14 interchange
- An upgraded parking area for commercial vehicles with new illumination and two, vault toilet rest rooms

WSDOT completes I-5 Fort Lewis weigh station study in 2021

The I-5 Fort Lewis weigh station is the second busiest in the state; only the I-5 Ridgefield Port of Entry weigh station sees more truck traffic.

WSDOT completed the I-5 Fort Lewis Weigh Station Study in 2021, identifying congestion factors, freight traffic needs, and existing weigh station issues. The study also identified weigh station issues and recommended:

- Adding restroom facilities
- Expand truck parking using existing undeveloped state right of way
- Add vehicle inspection building
- Clearer signage
- Add hazardous materials containment area
- Larger administrative building
- Southbound I-5 virtual weigh-in-motion
- Lengthen weigh station off-ramp

WSDOT will work with partners to communicate the study results and identify various funding opportunities.

WSDOT expands commercial safety program

WSDOT works with the Department of Licensing, Washington State Patrol and Federal Motor Carrier Safety Administration to further commercial vehicle safety.

In December 2021, Washington became the first state-certified as an Expanded Performance Registration Information Systems Management participant. The program is designed to reduce commercial vehicle crashes, injuries, and fatalities by exchanging real-time information regarding commercial vehicles with serious safety deficiencies.

Full participation in PRISM includes meeting six requirements that apply to commercial vehicles that are 26,001 pounds or more. The expanded program includes the full participation requirements plus six additional requirements and commercial vehicles 26,000 pounds and under. Other states can now identify safety records for any Washington commercial vehicle weighing over 10,000 pounds.

If warranted, these states can deny registration and enable enforcement to execute federal out-of-service orders that cite the violations that may prohibit a driver, vehicle or both from operating.

WSDOT applies for federal grants in 2022

WSDOT is applying for over $1.8 million in federal grants to replace electronic signs that are past their life expectancy and beginning to fail. These two grants address signs that have changeable messages and deal with sorting are typically awarded in August, and if received, will be 100% federally funded in 2022.

Changeable message signs are critical for communicating information to drivers during the commercial vehicle electronic screening process.

The new open/closed signs grant will allow WSDOT to replace aging signs at all 11 electronic screening equipped weigh stations. Open/closed signs are essential for directing traffic into the correct lane and helping prevent sudden lane changes when commercial vehicles exit the highways to access the weigh stations.

The grant for sorting signs will allow WSDOT to replace old signs at nine electronic screening equipped weigh stations. Two of the current 11 stations have already been updated.

Sorting signs direct traffic by notifying the commercial vehicle drivers to use or bypass the weigh station. Sorting signs decrease pollution by helping commercial vehicles avoid idling time and enhance safety by preventing commercial vehicles from lining up on the ramps and blocking traffic on the roadway.

WSDOT receives $2 million for truck parking pilot

In 2021, WSDOT received a $2 million grant to implement a commercial vehicles pilot project at weigh stations and rest areas along I-5 and I-90. The goal is to inform commercial vehicle drivers about parking availability, allowing them to better plan for rest stops to avoid fatigued driving and hours of service violations.

The pilot is a collaboration between WSDOT and the University of Washington, which collected and analyzed parking space occupancy data to develop a self-learning algorithm that predicts truck parking availability up to four hours in advance.

WSDOT purchases new cameras and plate readers

In 2020, WSDOT purchased new enforcement cameras and automatic license plate recognition readers with $684,000 in grant funding. The enforcement cameras and ALPRs identify and screen commercial vehicles traveling on the highways allowing WSP to target high-risk carriers.

The cameras take an overhead picture of the commercial vehicle for identification while the readers capture license plate information and instantly compare plate numbers to a database of registered commercial vehicle operators.

The new readers can identify almost all states and provinces from which the commercial vehicles originate. Reducing the number of safe and legal commercial vehicles using the weigh stations unnecessarily helps WSP more quickly identify out-of-service carriers.

Installation is nearly completed at 10 stations across Washington, with Fort Lewis being the only remaining site to be completed.

Contributors include Sonja Clark, Justin Heryford, Angela Ranger, Joe Irwin and Michele Villnave

85 ADVERTISEMENT RECORD QUARTERLY UPDATE

Connecting Washington Account projects in construction[1] Through March 31, 2022; (County); Dollars in millions	Schedule status	Completion date	Total project cost
SR 167/SR 509 Puget Sound Gateway (multiple counties)			
SR 509/SeaTac Stage 1 Elements (WSDOT Contribution)	Advanced	Nov-2022	$49.2
SR 509/King County Trail (WSDOT Contribution)	Delayed	Mar-2023	$10.0
SR 509/I-5 & SR 516 I/C to 28th/24th Ave. South - SR 509 Completion Stage 1	Delayed	Jun-2025	$432.0
SR 167/I-5 to SR 509 - Stage 1B	Delayed	Oct-2025	$608.5
I-405/Renton to Bellevue - Corridor Widening (King)			
I-405/Renton to Bellevue - Corridor Widening & ETL (Stage 2)	Delayed	Dec-2024	$788.8
I-405/Toll Vendor for Renton to Bellevue - Toll System	On schedule	Sep-2024	$42.5
Land Mobile Radio Upgrade (multiple counties)			
Wireless Communication	Delayed	Sep-2022	$37.0
SR 520 Seattle Corridor Improvements - West End (King)			
SR 520/Montlake to Lake Washington - I/C and Bridge Replacement	Delayed	Apr-2023	$669.6
SR 520/I-5 to Lake Washington - Bridge Replacement - Mitigation	On schedule	Jun-2024	$26.3
SR 520/I-5 Interchange - Improvement	Delayed	Dec-2023	$ 114.1
US 395 North Spokane Corridor (Spokane)			
US 395/NSC Wellesley Ave. Improvements	On schedule	Oct-2022	$38.3
US 395/NSC Spokane River to Columbia	On schedule	Oct-2022	$49.2
US 395/NSC Spokane River to Columbia - Shared Use Path	On schedule	Jun-2022	$13.3
US 395/NSC Sprague Ave. to Spokane River	Delayed	Dec-2022	$112.5
I-90/Eastgate to SR 900 - Corridor Improvements (King)			
I-90/Eastgate to SR 900 - Corridor Improvements	Delayed	Oct-2021	$73.0
US 12/Walla Walla Corridor Improvements (Walla Walla)			
US 12/Nine Mile Hill to Frenchtown Vicinity - Build New Highway	Delayed	Jul-2023	$161.4
I-90 Snoqualmie Pass - Widen to Easton (Kittitas)			
I-90/Easton Hill to W. Easton I/C Westbound - Replace Bridge/Build Detour	Delayed	May-2022	$14.6
I-90/Cabin Creek I/C to W Easton I/C Phase 3 - Add Lanes/Wildlife Bridges	Delayed	Oct-2027	$338.4
I-90/Barker to Harvard - Improve Interchanges & Local Roads (Spokane)			
I-90/Barker to Harvard Phase 2 - Improve Interchanges and Local Roads	On schedule	Jul-2022	$12.6
SR 305 Construction - Safety Mobility Improvements (Kitsap)			
SR 305/Johnson Rd. - Roundabout	Delayed	Aug-2022	$5.9
I-405/NE 132nd Interchange - Totem Lake (King)			
I-405/NE 132nd Street I/C Improvements	On schedule	Dec-2023	$83.4
I-5/Northbound Marine View Dr. to SR 529 - Corridor & Interchange Improvements (Snohomish)			
I-5/NB Marine View Dr. to SR 529 - Corridor & I/C Improvements	Delayed	Sep-2024	$123.0
I-90/Medical Lake & Geiger Interchanges (Spokane)			
I-90/Medical Lake I/C to Geiger Field I/C - Reconstruction - Phase 2	Delayed	Sep-2022	$6.4

Data source: WSDOT Capital Program Development and Management.

Note: **1** Connecting Washington advertisements show projects currently in construction, and do not represent a comprehensive list of completed Connecting Washington projects. I/C = Interchange. ETL = Electronic Toll Lanes.

Connecting Washington Account projects in construction Through March 31, 2022; (County); Dollars in millions (continued)	Schedule status	Completion date	Total project cost
SR 501/I-5 to Port of Vancouver (Clark)			
SR 501/I-5 to Port of Vancouver - I/C and Profile Improvements	Delayed	Jun-2022	$6.4
SR 520/148th Ave NE Interchange - Overlake Access Ramp (King)			
SR 520/148th Ave NE I/C - Overlake Access Ramp	Delayed	Oct-2022	$68.3
US 395/Ridgeline Intersection (Benton)			
US 395/Ridgeline Drive - Construct Interchange	Delayed	Oct-2022	$17.6
I-90/SR 18 Interchange Improvements (Kittitas)			
I-90/SR 18 I/C to Deep Creek - I/C Improvements & Widening	Delayed	Oct-2024	$188.5
I-90/SR 18 Interchange Improvements (Snohomish)			
SR 9/SR 204 Intersection - Improvements	Delayed	Oct-2023	$69.2
SR 9/SR 204 Interchange (Whitman)			
SR 26/Dusty to Colfax - Add Climbing Lanes	Delayed	Oct-2022	$10.1

Nickel & TPA projects in construction Through March 31, 2022; (County); Dollars in millions	Fund type	Advertised on time	Ad date	Operationally complete date	Award amount
SR 99 Alaskan Way Viaduct Replacement (King)					
SR 99/South King Street Vicinity to Roy Street – Viaduct Replacement	Nickel/ TPA	√	May-2010	Oct-2022	$1,089.7
The SR 99 Tunnel opened to traffic in February 2019. The award amount is for the SR 99 Tunnel contract. The Viaduct Demolition, Battery Street Tunnel Decommissioning and Surface Street Improvements are in process.					
SR 99/Alaskan Way and Elliot Ave Surface Street Restoration	Nickel/ TPA	√	Nov-2018	Jan-2023	$153.0
The City of Seattle is the lead on this project.					
I-5/Tacoma HOV Improvements (Pierce)					
I-5/Portland Ave to Port of Tacoma Rd. - Southbound HOV	TPA	Late	Jan-2018	Oct-2023	$159.8
SR 290/Spokane River E. Trent Bridge - Replace Bridge (Spokane)	**TPA**				
SR 290/Spokane River E Trent Bridge - Replace Bridge	TPA	Late	Dec-2019	Oct-2022	$20.1

Data source: WSDOT Capital Program Development and Management.

WSDOT tracks four change orders of $500,000 or more

WSDOT had four change orders of $500,000 or more recorded during the quarter ending March 31, 2022 (several occurred earlier but WSDOT was unable to put them online until web updates were completed). **1)** An $11.3 million change order increased I-405, Renton to Bellevue Widening and Express Toll project costs due to account for revisions to prevailing wage rates. **2)** An $882,000 change order decreased US 395, North Spokane Corridor Sprague Ave to Spokane River Phase 1 project costs to account for the removal of items related to shaft obstructions. **3)** A $517,400 change order increased I-5, Northbound Seneca St. Vicinity to SR 520 Mobility Improvements project costs to account for leasing a transport vehicle and providing quick change movable barrier parts. **4)** A $908,900 change order increased SR 9, SR 204 Intersection Improvements (Stage 2) project costs to account for additional work associated with modifications to two noise walls.

When changes must occur to build projects, WSDOT issues a change order to modify the original contract. The order directs contractors how to handle the change, and also modifies the contract cost, plans and specifications as necessary. Oftentimes, these costs are included in the project's risk reserves. Each month, WSDOT posts all change orders estimated at $500,000 or more online at Change orders over $500,000 | WSDOT (wa.gov).

85 PRE-EXISTING FUNDS QUARTERLY UPDATE

WSDOT advertises 58 Pre-existing Funds projects in the third quarter of the biennium

WSDOT advertised 58 of 143 Pre-existing Funds projects in the third quarter of the 2021-2023 biennium (January through March 2022). Of the 58 total projects advertised, two were advanced, 24 were on time, three were emergent, 12 were emergency projects and 17 were late. Of the remaining 85 projects originally scheduled to be advertised during the quarter, WSDOT completed four in an earlier biennium, delayed 74 within the 2021-2023 biennium, deferred three out of the biennium and deleted four.

As of March 31, 2022, WSDOT's current cost to complete the 117 PEF projects advertised through the third quarter of the 2021-2023 biennium was about $573.2 million, approximately $126.1 million (22.0%) more than the original value of $447.1 million (refer to chart at right).

Cash flows currently lower than original projections

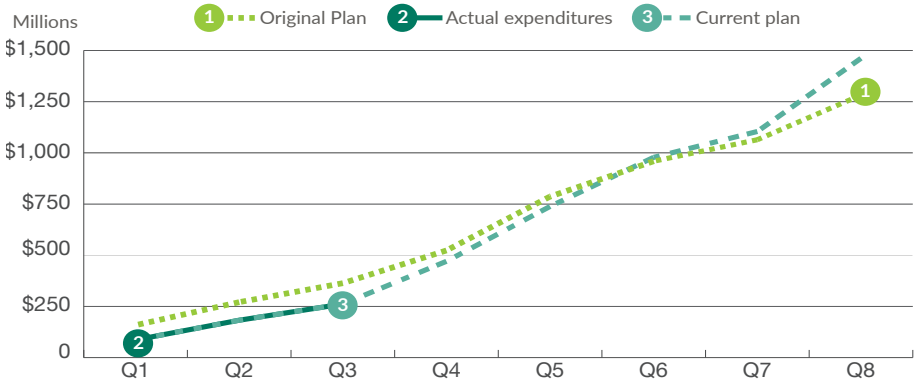
WSDOT originally planned to have approximately $363.5 million in cumulative combined PEF improvement and preservation cash flows at the end of the third quarter of the 2021-2023 biennium, but had $261.7 million, approximately $101.8 million (28.0%) less in actual expenditures due to adjustments in the delivery plan.

Current cash flows can vary from originally planned cash flows for a number of reasons. For example, emergent projects may add cash flow to the current reporting quarter, whereas project deletions can remove cash flow.

As the biennium continues, WSDOT uses the original plan as a goal while working to meet the projections in the current plan. The current plan is more fluid and reflects quarterly changes due to projects being emergent, emergency, delayed, deferred, advanced or deleted.

Cumulative Pre-existing Funds improvement and preservation combined cash flows during the 2021-2023 biennium lower than planned

2021-2023 biennium; Quarter ending March 31, 2022; Planned vs. actual expenditures and current plan; Dollars in millions



Data source: WSDOT Capital Program Development and Management.

Note: Q3 refers to the third quarter (January through March 2022) of the 2021-2023 biennium, which runs from July 2021 through June 2023.

Current cost to complete PEF advertisements $400,000 more than original value

2021-2023 biennium (July 2021 through June 2023); Third quarter (ending March 31, 2022); Dollars in millions

	Number of projects	Original value	Current cost to complete
Planned PEF advertisements for the 2021-2023 biennium	426	$2,896.2	$3,217.9
Actual PEF advertisements through the third quarter	117	$447.1	$573.2

Data source: WSDOT Capital Program Development and Management.

WSDOT advertises 117 PEF projects during the 2021-2023 biennium

Advertisement status	Quarter[1]	Cumulative[2]
Advanced[3]	2	11
On time	24	65
Emergent[4]	3	10
Emergency	12	25
Late	17	26
Total projects advertised	**58**	**117**
Early[5]	4	7
Delayed within the biennium	74	134
Deferred out of the biennium	3	3
Deleted	4	4

Data source: WSDOT Capital Program Development and Management.

Notes: **1** Quarter refers to January through March 2022. **2** Cumulative refers to July 2021 through June 2023. **3** Advanced projects were moved up from future quarters. **4** Emergent projects include unanticipated projects. **5** Early projects are planned for the quarter but advertised in a previous quarter.

WSDOT advertises 58 Pre-existing Funds projects during the third quarter of the 2021-2023 biennium

January through March 2022

Advanced (2)	
SR 20/Olson Creek and Unnamed Tributary to Skagit River - Fish Passage	US 101/Delphi Rd. to I-5 - Paving
On time (24)	
I-5/Jackson St. & S Forest St. Vicinity - Fiber Repair	SR 26/LaCrosse - Airport Rd. to Dusty - Chip Seal
I-5/Northgate Way & Maple Rd. Bridges - Seismic Retrofit	SR 27/Garfield to Rockford - Chip Seal
SR 20/Skagit River - Fish Passage	SR 27/Freeman to 32nd Ave. - Chip Seal
I-405/NE 85th St. Interchange - Toll Infrastructure	I-90/Bridge Deck Preventative Preservation - Patching
SR 410/288th Ave. SE Vicinity to Crystal Mountain Blvd. Vicinity - BST	SR 127/Big Alkali Rd. to Dusty - Chip Seal
US 2/East of Leavenworth - Slope Stabilization	US 195/Colton to Jct. SR 27 - Chip Seal
I-90/Moses Lake to Adams County Line - Bridge Repair	US 195/Cashup Flats Portable Weigh Station - Preservation
OR Strategic Bridge Preservation 2021-2023 - Bridge Deck Patching	US 195/Old BNRR Bridge to Jct. SR 271 - PCCP Rehabilitation
SR 7/SR 507 to S of S 38th St. - Paving	SR 261/Snake River to SR 260 - Chip Seal
SR 142/Lyle to Goldendale - Chip Seal	ER Breakaway Cable Terminal Replacement - Freeways
I-82/Coffin Rd. Vicinity - Paving	US 395/Immel Rd. to Arden - Paving
ER/Bridge Deck Preventative Preservation - Patching	US 395/Colville to Columbia River - Paving
Emergent (3)	
Sign Removal at Weigh Stations	NCR Region Wide Crack Seal - 2022
SR 542/Shuksan Maintenance Facility - Emergency Radio Communications	
Emergency (12)	
SR 536/Skagit River Movable Bridge - Emergency Contract	SR 4/West of Mill Creek Rd. - Emergency Rockslide
I-5/Pierce County NB - Emergency Repair	I-5/0.1 Miles N of 13th St. to Harrison Ave. - Bridge ER Pavement Repairs
US 12/Schrader Ln. - Emergency Repair	US 101/1.5 Miles N of Weyerhaeuser Rd. - Emergency Slope Failure
SR 112/Clallam Bay - Emergency Repair	SR 105/1 Mile S of Smith Creek Bridge - Emergency Slope Repair
SR 112/Jim Creek West - Emergency Repairs	SR 506/1.5 Miles N of Frontage Rd. to I-5 - Emergency Bridge Repair
SR 113/S of Old Sappho-Pysht Hwy. - Emergency Repairs	SR 26/Laurel Rd. to Washtucna - Emergency Pavement Repair
Late (17)	
SR 18/EB Jenkins Creek to SE 231st St. Vicinity - Paving	SR 17/ Lind Coulee Bridge to Vicinity I-90 - Seal
SR 20/Rocky Creek to Granite Creek - BST	SR 17/Leahy West - Seal
SR 99/Tukwila International Blvd. to S Cloverdale St. - Bridge Deck Rehab	SR 17/Grape Dr. - Intersection Safety Improvement
SR 99/Tukwila International Blvd. to S Cloverdale St. - Paving	SR 28/Quincy East - Seal and Pave
SR 516/Military Rd. Vicinity to SR 181 - Paving	SR 170/West of Warden - Seal
SR 516/Reith Rd. - ADA Compliance	2021 OR Regionwide Safety Features - Signing

Data source: WSDOT Capital Program Development and Management.

Notes: SRA = Safety Rest Area. Vic. = Vicinity. WSDOT Regions: ER = Eastern Region, NCR - North Central Region, NWR = Northwest Region, OR = Olympic Region, SCR = South Central Region and SWR = Southwest Region. PCCP = Portland Cement Concrete Pavement.

WSDOT advertises 58 Pre-existing Funds projects during the third quarter of the 2021-2023 biennium

January through March 2022

Late (continued from previous page)	
I-5/US 101 Interchange - Install Concrete Barrier	SR 305/Murden Creek - Remove Fish Barrier
I-5/S 56th St. Interchange - ADA Compliance	2021-2023 SCR Region Wide Safety Features - Signing
US 101/Hoquiam River-Riverside Ave. Bridge - Machine Rooms Rehab	
Early (4)	
I-90/Lewis and Sunset Creeks - Fish Passage	SR 92/Lake Drive - ADA Compliance
SR 92/Lake Dr. to 147th Ave. NE Vicinity - Paving with Exceptions	SR 161/Unnamed Tributaries to Hylebos Creek - Fish Passage
Delayed (74)	
I-5/Silver Lake SB SRA - Roof and Skylight Replacement - NWR	SR 305/Sam Snyder Creek - Remove Fish Barrier
SR 24/Vernita SRA - RV Rehabilitation - SCR	US 101/Sol Duc River Bridges - Expansion Joint Repairs
I-90/Schrag EB SRA - Water System Rehabilitation - ER	US 101/Elwha River Bridge - Bridge Replacement
Strategic Pavement Preservation 2201-2023 - Contract	US 101/N of Kalaloch Campground to Hoh River Bridge - Chip Seal
NWR HMA Crack Seal and Pavement Repair	US 101/Leland Creek and Unnamed Tributaries - Remove Fish Barriers
NWR HMA Ramps Crack Seal and Pavement Repair	SR 106/Twanoh Creek - Remove Fish Barrier
I-90/West Village Park and Schneider Creeks - Fish Passage	SR 109/N of Moclips Highway - Stabilize Slope
SR 99/Duwamish River to S Spokane St. Vicinity - Paving	SR 115/Ocean Shores to SR 109 - Chip Seal
SR 99/S Lucile St. to S Idaho St. - ADA Compliance	SR 161/Unnamed Tributary to South Creek - Remove Fish Barrier
SR 167/S 208th St. Vicinity to S 200th St. Vicinity - Drainage Replacement	US 101/E of Wisen Creek Rd. to E of Sol Duc Hot Springs Rd. - Chip Seal
SR 167/SR 516 to S 277th St. - Southbound Auxiliary Lane	SWR Breakaway Cable Terminal Replacement - Freeways 2021-2023
SR 167/Southbound Union Pacific Railroad Bridge - Deck Overlay	21-23 SWR Regionwide Bridges Concrete Deck - Patching
SR 202/Evans Creek - Fish Passage	I-5/Interstate Bridge - Electrical Control System Upgrade
SR 203/Deer Creek Bridge Vicinity - Stormwater Pipe Replacement	I-5/BNRR Overcrossing Bridge - Painting
SR 509/Miller Creek - Fish Passage	I-5/Dike Access Rd. and BNRR Overcrossing Bridge - Painting
SR 526/Airport Rd. to E Casino Rd. - Seismic Retrofit	I-5/N of 63rd St. Bridge Vicinity - Drainage Improvements
SR 529/NB Snohomish River - Bridge Rehabilitation	I-5/SB I-205 to 179th St. - Replace Deteriorated Concrete Panels
SR 900/68th Ave. S Vicinity - Pedestrian Safety - Phase 2	US 97/0.1 Mile N of SR 142 - Goldendale Weigh Station Rehabilitation
SR 539/Duffner Ditch - Fish Passage	I-205/Burton Rd. Bridge to Salmon Creek Bridge - Joint Rehab
SR 529/NB and SB Steamboat Slough Bridges - Mechanical Rehabilitation	I-205/Glen Jackson Bridge to I-5 - Replace Deteriorated Concrete Panels
US 2/Stevens Pass East - Paving	SR 433/Lewis and Clark Bridge - Expansion Joint Replacement
SR 20/SR 153 Intersection - Drainage Improvement	SR 500/NE 162nd Ave. to Leadbetter Rd. - Paving
I-90/Vantage - Upgrade ITS Components	SR 500/NE 182nd Ave. - Intersection Improvements
SR 7/Unnamed Tributary to S Creek 1 and S Creek 2 - Remove Fish Barriers	SR 500/NE Robinson Rd. and NE 3rd St. - Intersection Safety Improvements
SR 7/Spanaway Weigh Station - Weigh Station Improvement	SR 10 Et Al/Kittitas and Yakima County - Centerline Rumble Strips
US 12/ Wishkah River Bridge - Mechanical Rehabilitation	SR 128 Et Al/SE Washington - Centerline Rumble Strips

Notes: SRA = Safety Rest Area. Vic. = Vicinity. WSDOT Regions: ER = Eastern Region, NCR - North Central Region, NWR = Northwest Region, OR = Olympic Region, SCR = South Central Region and SWR = Southwest Region. ADA = Americans with Disabilities Act. PCCP = Portland Cement Concrete Pavement. BST = Chip seal. HMA = Hot mix asphalt. ITS = Information Technology Systems.

WSDOT advertises 58 Pre-existing Funds projects during the third quarter of the 2021-2023 biennium

January through March 2022

Delayed (continued from previous page)	
I-90, US 97 & SR 970 Ellensburg Vicinity - CED Planning and Mitigation	SR 241/Sheller Rd. Vicinity to Roza Canal Bridge - Paving
SR 17/US 395 to Rd. 170 - Paving	SR 970/East of Cle Elum to US 97 - Chip Seal
I-82/County Line Rd. Interchange - Paving	SR 21/I-90 to Canniwai Creek - Chip Seal
I-82/Gap Rd. Interchange - Paving	SR 25/Fruitland to US 395 - Chip Seal
I-82/Selah Creek to Yakima Vicinity - Paving	SR 28/Grant County Line to Lamona - Chip Seal
I-90/North Bend to Cabin Creek Rd. Vicinity - Major Drainage	SR 31/Metaline Falls to Canada - Chip Seal
I-90/Homestead Valley Rd. to Hyak - Bridge Deck Repair	SR 231/Reardan to Fisher Rd. - Chip Seal
US 97/Pumphouse Rd. Vicinity to SR 22 - Chip Seal	SR 292/Springdale to Loon Lake - Chip Seal
US 97/Desmond Rd. to Lower Green Canyon Rd. - Chip Seal	US 395/Loon Lake - Roundabout
SR 125/Oregon State Line to Military Rd. - Paving	US 395/Loon Lake to Hafer Rd. - Paving
SR 125/Oregon State Line to Military Rd. - ADA Compliance	US 395/Columbia River to Boyds - Chip Seal
Deferred (3)	
SR 8/Elma SRA - Building 1 Replacement - OR	SR 20/Spruce Canyon Rd. to S Fork Mill Creek Rd. - Chip Seal
I-5/NB Interstate Bridge - Bearing Rehabilitation Piers 10 and 12	
Deleted (4)	
SR 26/Hatton Coulee SRA - Water Line Replacement - ER	I-90/Winchester WB SRA - Water Rehabilitation - NCR
I-90/Winchester WB SRA - Water Rehabilitation - NCR	SR 548/Unnamed Tributary to Terrell Creek - Fish Passage

Notes: SRA = Safety Rest Area. Vic. = Vicinity. WSDOT Regions: ER = Eastern Region, NCR - North Central Region, NWR = Northwest Region, OR = Olympic Region, SCR = South Central Region and SWR = Southwest Region. ADA = Americans with Disabilities Act. PCCP = Portland Cement Concrete Pavement. BST = Chip seal. HMA = Hot mix asphalt. CED = Community and Economic Development.

WSDOT's Watch List projects available online:

To streamline work and ensure accuracy and consistency, the Watch List is no longer featured in the Gray Notebook. This change helps the GNB better align with WSDOT's Capital Program Development and Management Office and its monthly online Watch List of projects that have or may have significant changes in scope, schedule or budget.

GNB no longer tracking Current LEAP data

As progress on the vast majority of Nickel/Transportation Partnership Account projects winds down, the Gray Notebook will no longer be tracking their Current Legislative Evaluation and Accountability Program details. The GNB has also phased out reporting on these fuel taxes (which concluded at the end of 2021). The few, remaining Nickel/TPA projects will continue to be tracked in the Completed Projects and Contracts and Ad Record sections.

85 STATEWIDE TRANSPORTATION POLICY GOALS & GRAY NOTEBOOK INFORMATION GUIDE

Statewide transportation policy goals

Laws enacted in 2007 established policy goals for transportation agencies in Washington (RCW 47.04.280). Throughout its editions, WSDOT's Gray Notebook reports on progress toward the six statewide transportation policy goals that include:

- **Safety:** To provide for and improve the safety and security of transportation customers and the transportation system;
- **Preservation:** To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services;
- **Mobility:** To improve the predictable movement of goods and people throughout Washington, including congestion relief and improved freight mobility;
- **Environment:** To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment;
- **Economic Vitality:** To promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy; and
- **Stewardship:** To continuously improve the quality, effectiveness, and efficiency of the transportation system.

Past Gray Notebook editions are available

Readers can use the GNB archives to access the last five years of editions. Earlier editions are available upon request by contacting the WSDOT Performance Management Office.

GNB reporting periods

WSDOT programs report their performance data during different periods to best fit the work they do. For example, a program that receives substantial federal funds may report performance based on the federal fiscal year (refer to charts below).

Calendar, state fiscal and federal fiscal quarters

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	GNB 85			GNB 86			GNB 87			GNB 88		
Calendar	**Q1 2022**			Q2 2022			Q3 2022			Q4 2022		
State Fiscal	**Q3 FY2022**			Q4 FY2022			Q1 FY2023			Q2 FY2023		
Fed. Fiscal	**Q2 FFY2022**			Q3 FFY2022			Q4 FFY2022			Q1 FFY2023		

2021-2023 biennial quarters (used by Legislature)

Period	Quarter	Period	Quarter
Jul – Sep 2021	Q1	Jul – Sep 2022	Q5
Oct – Dec 2021	Q2	Oct – Dec 2022	Q6
Jan – Mar 2022	**Q3**	Jan – Mar 2023	Q7
Apr – Jun 2022	Q4	Apr – Jun 2023	Q8

GNB credits

The GNB is developed and produced by members of the WSDOT Transportation Safety & Systems Analysis Division's Performance Management and Strategic Management offices, and articles feature bylines indicating key contributors from dozens of WSDOT programs. This edition of the GNB was completed entirely by staff members who were teleworking to help reduce the spread of COVID-19 in Washington. WSDOT's Headquarters Graphics Division (Marci Mill, Erica Mulherin and Steve Riddle) provides creative assistance, and WSDOT program staff and communicators provide the photographs in each edition.

The Gray Notebook is prepared by:
Transportation Safety
& Systems Analysis Division
Washington State Department of Transportation
310 Maple Park Ave SE, Olympia, WA 98504

Americans with Disabilities Act Information: Accommodation requests for people with disabilities can be made by contacting the WSDOT Diversity/ADA Affairs team at wsdotada@wsdot.wa.gov or by calling toll-free, 855-362-4ADA (4232). Persons who are deaf or hard of hearing may make a request by calling the Washington State Relay at 711.

Title VI Notice to Public: It is the Washington State Department of Transportation's (WSDOT) policy to assure that no person shall, on the grounds of race, color, national origin or sex, as provided by Title VI of the Civil Rights Act of 1964, be excluded from participation in, be denied the benefits of, or be otherwise discriminated against under any of its programs and activities. Any person who believes his/her Title VI protection has been violated, may file a complaint with WSDOT's Office of Equal Opportunity (OEO). For additional information regarding Title VI complaint procedures and/or information regarding our non-discrimination obligations, please contact OEO's Title VI Coordinator at (360) 705-7090.