

**Transportation Revenue  
Forecast Council  
'September 2022  
Transportation Economic and  
Revenue Forecasts  
Volume III: Alternate Forecast Tables**

# Transportation Revenue Forecast Council

## Alternative Forecasts

### September 2022

- Alternative Ferry Forecast.....III-3
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# **REVENUE AND RIDERSHIP PROJECTIONS**

## **SEPTEMBER 2022 FORECAST**

### **FISCAL YEARS 2023-2033**

Prepared for  
**Washington State Ferries**  
for Presentation to the  
**Transportation Revenue  
Forecast Council**

Prepared by  
WSP USA

September 23, 2022

Note: The COVID-19 pandemic materially disrupted normal ferry ridership patterns and has led to ongoing staffing shortages which result in service disruptions on certain routes. The duration and magnitude of these combined effects and how they will continue to impact ferry ridership, while becoming more apparent, remain uncertain. As such, the September 2022 Forecast projections, as well as the assumptions upon which they are based at the time of preparation, remain subject to an above normal level of risk and uncertainty, which may cause actual results to vary considerably from projections.

# Washington State Ferries

## September 2022 Revenue and Ridership Forecasts — Fiscal Years 2022-2033

### SEPTEMBER 2022 FORECAST NOTES

The fare revenue and ridership projections for Washington State Ferries (WSF) are prepared using a combination of systemwide econometric, time series, and spreadsheet models to forecast monthly ridership and revenue across 10 routes and seven fare categories through fiscal year (FY) 2033.

The seven fare categories include: (1) passenger full fares, (2) passenger commuter discount fares, (3) passenger other discount fares, (4) auto/driver full fares, (5) auto commuter discount fares, (6) other discount vehicles, and (7) oversize vehicle fares.

Beginning in early March 2020, the COVID-19 pandemic negatively impacted ferry travel, with April 2020 ridership 73% lower than 2019. Ridership has been somewhat erratically rebounding since then, with COVID-19 virus cycles combined with reduced service levels due to ongoing staffing challenges, extending the recovery.

Since 2000, passenger and vehicle/driver commuter discounted fare ridership has been declining in absolute volumes and in shares of total passengers and vehicles. Contributing factors include an aging population in ferry-served communities, telecommuting, changes in the frequent-user multi-ride fare media, and most recently, the pandemic. Enduring telecommuting trends suggest that passenger commuter ridership shows the least potential for ridership rebound and future growth among the seven fare categories. As the forecast models continue to adapt to new trends, the September Forecast applies a 30% long-term downward adjustment to the passenger commuter forecast, and a 5% adjustment to vehicle commuter ridership.

The September 2022 Forecast assumes the gradual recovery of pandemic staffing-related service reductions through FY 2023. Full restoration of pre-pandemic service levels, including resumption of the Anacortes-Sidney, B.C. route, is currently slated for July 1, 2023 (FY 2024), with ridership demand expected to have fully recovered to projected “new normal” levels one year later by July 1, 2024 (FY 2025).

The September 2022 Forecast incorporates the latest fares adopted by the Washington State Transportation Commission (WSTC), including the pending elimination of youth passenger fares effective October 1, 2022, with the following forecast assumptions.

- **Baseline Forecast** – Includes the two adopted 2.5% fare increases with nickel rounding scheduled for October 1 in 2021 and 2022, and the elimination of youth fares scheduled for October 1, 2022, after which no further changes are assumed.
- **Alternative 1 Forecast** – In addition to the above two increases and elimination of youth fares, includes 2.5% annual increases plus nickel rounding each subsequent year, from October 1, 2023 (FY 2024) through 2030 (FY 2031).

The current projections for FY 2022 include actual ridership and revenue through August 2022.

### Ridership Impacts

- The September 2022 Forecast incorporates the latest demographic and economic variable projections. COVID-19 indicator variables were tailored for all fare category models except oversize vehicles to capture first year pandemic effects not associated with other factors, and only the passenger commuter fare indicator variable remains in effect.
- The forecast period projections for real personal income were revised slightly downward, which dampens ridership demand.
- Slightly higher employment forecasts contribute to higher ferry ridership demand.
- The inflation projections are slightly higher across the forecast horizon, which result in lower real fares that contribute to an uplift in ridership demand.
- Real gasoline prices have been revised materially higher over the forecast horizon, dampening vehicle/driver demand.
- Actual ridership for the most recent three months (June-August 2022) averaged about 10% lower than previously forecasted, due to ongoing staffing-related service disruptions and public concern about the Omicron variant of COVID-19.

### Fare and Surcharge Revenue Impacts

- Actual revenue collections for June through August 2022 averaged about 10% lower than previously forecasted.
- For the Baseline and Alternative 1 Forecasts, revenues for the 2021-23 biennium are projected to be \$347.5 M, or \$7.6 million (2.1%) less than the June Forecast, with \$335.3 M in base fare revenues and \$12.2 M in surcharges.
- The elimination of youth fares on 10/1/2022 is expected to reduce 2021-23 biennium revenue by \$2.4 M, with \$2.1 M in base fares and \$0.3 M in surcharges.
- For the 2023-25 biennium, the Baseline Forecast of revenues is \$408.7 M, which is \$11.0 M (2.6%) lower than in June. The Baseline Forecast comprises nearly \$394.7 M in base fare revenues and nearly \$14.1 M in surcharges.
- For the 2023-25 biennium, the Alternative 1 Forecast of revenues is \$417.9 M, which is \$11.1 M (2.6%) lower than the prior June value and comprises nearly \$404.0 M in base fare revenues and nearly \$14.0 M in surcharges.
- The elimination of youth fares is expected to reduce 2023-25 biennium revenue for the Baseline and Alternative 1 Forecasts by \$8.1 M and \$8.2 M, respectively.
- For the remainder of the forecast horizon, projected revenues for both the Baseline and Alternative 1 Forecasts have been revised downward between 2.3% and 2.6%.

# Washington State Ferries

## REVENUE PROJECTIONS | SEPTEMBER 2022 BASELINE FORECAST

2.5% Adopted Fare Increases on October 1, 2022 & 2022 | No Further Fare Increases<sup>1</sup>

Fiscal Years 2022-2031

Fiscal Year	September 2022 Capacity-Constrained Revenue Forecast	Fiscal Year Annual Rate of Change	September Biennium Total	September vs. June Forecast		June 2022 Baseline	
				% Change by Fiscal Year	\$ Change and % Change by Biennium	Capacity-Constrained Revenue Forecast	Biennium Total
2014	\$167,441,867	3.3%					
2015	\$175,965,750	5.1%	\$343,407,617				
2016	\$181,444,863	3.1%					
2017	\$186,973,746	3.0%	\$368,418,609				
2018	\$192,827,951	3.1%					
2019	\$195,268,522	1.3%	\$388,096,473				
2020	\$166,825,103	(14.6%)					
2022	\$155,668,672	(6.7%)	\$322,493,775				
2022	\$167,212,000	29.6%		(1.3%)		\$169,346,000	
2023 <sup>2</sup>	\$180,310,000	7.8%	\$347,522,000	(2.9%)	(\$7,577,000) (2.1%)	\$185,753,000	\$355,099,000
2024	\$201,725,000	11.9%		(2.8%)		\$207,514,000	
2025	\$206,996,000	2.6%	\$408,721,000	(2.4%)	(\$10,972,000) (2.6%)	\$212,179,000	\$419,693,000
2026	\$210,382,000	1.6%		(2.6%)		\$216,057,000	
2027	\$213,914,000	1.7%	\$424,296,000	(2.4%)	(\$10,927,000) (2.5%)	\$219,166,000	\$435,223,000
2028	\$216,373,000	1.1%		(2.3%)		\$221,576,000	
2029	\$218,508,000	1.0%	\$434,881,000	(2.2%)	(\$10,195,000) (2.3%)	\$223,500,000	\$445,076,000
2030	\$220,416,000	0.9%		(2.3%)		\$225,525,000	
2031	\$222,446,000	0.9%	\$442,862,000	(2.3%)	(\$10,382,000) (2.3%)	\$227,719,000	\$453,244,000
2032	\$224,405,000	0.9%					
2033	\$226,320,000	0.9%	\$450,725,000				

<sup>1</sup> The Baseline Forecast includes a 2.5% fare increase on October 1, 2022 (FY 2022) and another 2.5% fare increase plus the elimination of youth passenger fares on October 1, 2022 (FY 2023). The Baseline Forecast excludes any further changes to the current base fares, resulting in declining real fares beyond FY 2023. The Baseline Forecast also reflects the current programmed level of service, including service reductions associated with the COVID-19 pandemic.

<sup>2</sup> FY 2023 includes actual revenue data through August 2022. Light green shaded values denote historical annual data.

# Washington State Ferries

## REVENUE PROJECTIONS | SEPTEMBER 2022 BASELINE FORECAST

2.5% Adopted Fare Increases on October 1, 2022 & 2022 | No Further Fare Increases<sup>1</sup>

Fiscal Years 2022-2031

Fiscal Year	September 2022		Distribution of Revenue to Operating and Capital Programs					
	Capacity-Constrained Revenue Forecast	September Biennium Total	25¢ Capital Surcharge Revenue	25¢ Vessel Surcharge Revenue	Total Surcharge Revenue	Biennium Totals for Capital	Base Fare Revenue for Operations	Biennium Totals for Operations
2014	\$167,441,867		\$3,662,690		\$3,662,690		\$163,779,177	
2015	\$175,965,750	\$343,407,617	\$3,894,088		\$3,894,088	\$7,556,778	\$172,071,662	\$335,850,839
2016	\$181,444,863		\$4,007,848		\$4,007,848		\$177,437,015	
2017	\$186,973,746	\$368,418,609	\$4,022,681		\$4,022,681	\$8,030,529	\$182,951,065	\$360,388,080
2018	\$192,827,951		\$4,084,581		\$4,084,581		\$188,743,370	
2019	\$195,268,522	\$388,096,473	\$3,987,656		\$3,987,656	\$8,072,237	\$191,280,866	\$380,024,236
2020	\$166,825,103		\$3,304,324	\$378,136	\$3,682,460		\$163,142,643	
2022	\$155,668,672	\$322,493,775	\$2,737,730	\$2,726,447	\$5,464,177	\$9,146,637	\$150,204,495	\$313,347,138
2022	\$167,212,000		\$2,966,726	\$2,952,832	\$5,920,000		\$161,292,000	
2023 <sup>2</sup>	\$180,310,000	\$347,522,000	\$3,151,000	\$3,150,000	\$6,301,000	\$12,221,000	\$174,009,000	\$335,301,000
2024	\$201,725,000		\$3,466,000	\$3,465,000	\$6,931,000		\$194,794,000	
2025	\$206,996,000	\$408,721,000	\$3,569,000	\$3,569,000	\$7,138,000	\$14,069,000	\$199,858,000	\$394,652,000
2026	\$210,382,000		\$3,634,000	\$3,633,000	\$7,267,000		\$203,115,000	
2027	\$213,914,000	\$424,296,000	\$3,695,000	\$3,694,000	\$7,389,000	\$14,656,000	\$206,525,000	\$409,640,000
2028	\$216,373,000		\$3,738,000	\$3,738,000	\$7,476,000		\$208,897,000	
2029	\$218,508,000	\$434,881,000	\$3,777,000	\$3,776,000	\$7,553,000	\$15,029,000	\$210,955,000	\$419,852,000
2030	\$220,416,000		\$3,811,000	\$3,810,000	\$7,621,000		\$212,795,000	
2031	\$222,446,000	\$442,862,000	\$3,848,000	\$3,848,000	\$7,696,000	\$15,317,000	\$214,750,000	\$427,545,000
2032	\$224,405,000		\$3,885,000	\$3,884,000	\$7,769,000		\$216,636,000	
2033	\$226,320,000	\$450,725,000	\$3,921,000	\$3,920,000	\$7,841,000	\$15,610,000	\$218,479,000	\$435,115,000

<sup>1</sup> The Baseline Forecast includes a 2.5% fare increase on October 1, 2022 (FY 2022) and another 2.5% fare increase plus the elimination of youth passenger fares on October 1, 2022 (FY 2023). The Baseline Forecast excludes any further changes to the current base fares, resulting in declining real fares beyond FY 2023. The Baseline Forecast also reflects the current programmed level of service, including service reductions associated with the COVID-19 pandemic.

<sup>2</sup> FY 2023 includes actual revenue data through August 2022. Light green shaded values denote historical annual data.

# Washington State Ferries

## REVENUE PROJECTIONS | SEPTEMBER 2022 ALTERNATIVE 1 FORECAST

2.5% Adopted Fare Increases on October 1, 2022 & 2022 | 2.5% Fare Increases each October thereafter (FYs 2024-31)<sup>1</sup>

Fiscal Years 2022-2031

Fiscal Year	September 2022 Capacity-Constrained Revenue Forecast	Fiscal Year Annual Rate of Change	September Biennium Total	September vs. June Forecast		June 2022 Alternative 1	
				% Change by Fiscal Year	\$ Change and % Change by Biennium	Capacity-Constrained Revenue Forecast	Biennium Total
2014	\$167,441,867	3.3%					
2015	\$175,965,750	5.1%	\$343,407,617				
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2018	\$192,827,951	3.1%					
2019	\$195,268,522	1.3%	\$388,096,473				
2020	\$166,825,103	(14.6%)					
2022	\$155,668,672	(6.7%)	\$322,493,775				
2022	\$167,212,000	31.2%		(1.3%)		\$169,346,000	
2023 <sup>2</sup>	\$180,310,000	7.8%	\$347,522,000	(2.9%)	(\$7,577,000) (2.1%)	\$185,753,000	\$355,099,000
2024	\$204,311,000	13.3%		(2.8%)		\$210,147,000	
2025	\$213,635,000	4.6%	\$417,946,000	(2.4%)	(\$11,113,000) (2.6%)	\$218,912,000	\$429,059,000
2026	\$221,201,000	3.5%		(2.6%)		\$227,071,000	
2027	\$229,172,000	3.6%	\$450,373,000	(2.4%)	(\$11,460,000) (2.5%)	\$234,762,000	\$461,833,000
2028	\$236,249,000	3.1%		(2.4%)		\$242,112,000	
2029	\$243,147,000	2.9%	\$479,396,000	(2.4%)	(\$11,730,000) (2.4%)	\$249,014,000	\$491,126,000
2030	\$250,315,000	2.9%		(2.3%)		\$256,232,000	
2031	\$257,918,000	3.0%	\$508,233,000	(2.3%)	(\$11,912,000) (2.3%)	\$263,913,000	\$520,145,000
2032	\$265,312,000	2.9%					
2033	\$264,480,000	(0.3%)	\$529,792,000				

<sup>1</sup> In addition to a 2.5% fare increase on October 1, 2022 (FY 2022) and another 2.5% fare increase plus the elimination of youth passenger fares on October 1, 2022 (FY 2023), the Alternative 1 Forecast continues annual 2.5% fare increases each October thereafter, from October 1, 2023 (FY 2024) through October 1, 2032 (FY 2033). The Alternative 1 Forecast reflects the current programmed level of service, including service reductions associated with the COVID-19 pandemic.

<sup>2</sup> FY 2023 includes actual revenue data through August 2022. Light green shaded values denote historical annual data.

# Washington State Ferries

## REVENUE PROJECTIONS | SEPTEMBER 2022 ALTERNATIVE 1 FORECAST

2.5% Adopted Fare Increases on October 1, 2022 & 2022 | 2.5% Fare Increases each October thereafter (FYs 2024-31)<sup>1</sup>

Fiscal Years 2022-2031

Fiscal Year	September 2022		Distribution of Revenue to Operating and Capital Programs					
	Capacity-Constrained Revenue Forecast	September Biennium Total	25¢ Capital Surcharge Revenue	25¢ Vessel Surcharge Revenue	Total Surcharge Revenue	Biennium Totals for Capital	Base Fare Revenue for Operations	Biennium Totals for Operations
2014	\$167,441,867		\$3,662,690		\$3,662,690		\$163,779,177	
2015	\$175,965,750	\$343,407,617	\$3,894,088		\$3,894,088	\$7,556,778	\$172,071,662	\$335,850,839
2016	\$181,444,863		\$4,007,848		\$4,007,848		\$177,437,015	
2017	\$186,973,746	\$368,418,609	\$4,022,681		\$4,022,681	\$8,030,529	\$182,951,065	\$360,388,080
2018	\$192,827,951		\$4,084,581		\$4,084,581		\$188,743,370	
2019	\$195,268,522	\$388,096,473	\$3,987,656		\$3,987,656	\$8,072,237	\$191,280,866	\$380,024,236
2020	\$166,825,103		\$3,304,324	\$378,136	\$3,682,460		\$163,142,643	
2022	\$155,668,672	\$322,493,775	\$2,737,730	\$2,726,447	\$5,464,177	\$9,146,637	\$150,204,495	\$313,347,138
2022	\$167,212,000		\$2,966,726	\$2,952,832	\$5,920,000		\$161,292,000	
2023 <sup>2</sup>	\$180,310,000	\$347,522,000	\$3,151,000	\$3,150,000	\$6,301,000	\$12,221,000	\$174,009,000	\$335,301,000
2024	\$204,311,000		\$3,455,000	\$3,455,000	\$6,910,000		\$197,401,000	
2025	\$213,635,000	\$417,946,000	\$3,538,000	\$3,538,000	\$7,076,000	\$13,986,000	\$206,559,000	\$403,960,000
2026	\$221,201,000		\$3,581,000	\$3,580,000	\$7,161,000		\$214,040,000	
2027	\$229,172,000	\$450,373,000	\$3,619,000	\$3,619,000	\$7,238,000	\$14,399,000	\$221,934,000	\$435,974,000
2028	\$236,249,000		\$3,643,000	\$3,642,000	\$7,285,000		\$228,964,000	
2029	\$243,147,000	\$479,396,000	\$3,663,000	\$3,663,000	\$7,326,000	\$14,611,000	\$235,821,000	\$464,785,000
2030	\$250,315,000		\$3,683,000	\$3,683,000	\$7,366,000		\$242,949,000	
2031	\$257,918,000	\$508,233,000	\$3,707,000	\$3,707,000	\$7,414,000	\$14,780,000	\$250,504,000	\$493,453,000
2032	\$265,312,000		\$3,728,000	\$3,728,000	\$7,456,000		\$257,856,000	
2033	\$264,480,000	\$529,792,000	\$3,747,000	\$3,746,000	\$7,493,000	\$14,949,000	\$256,987,000	\$514,843,000

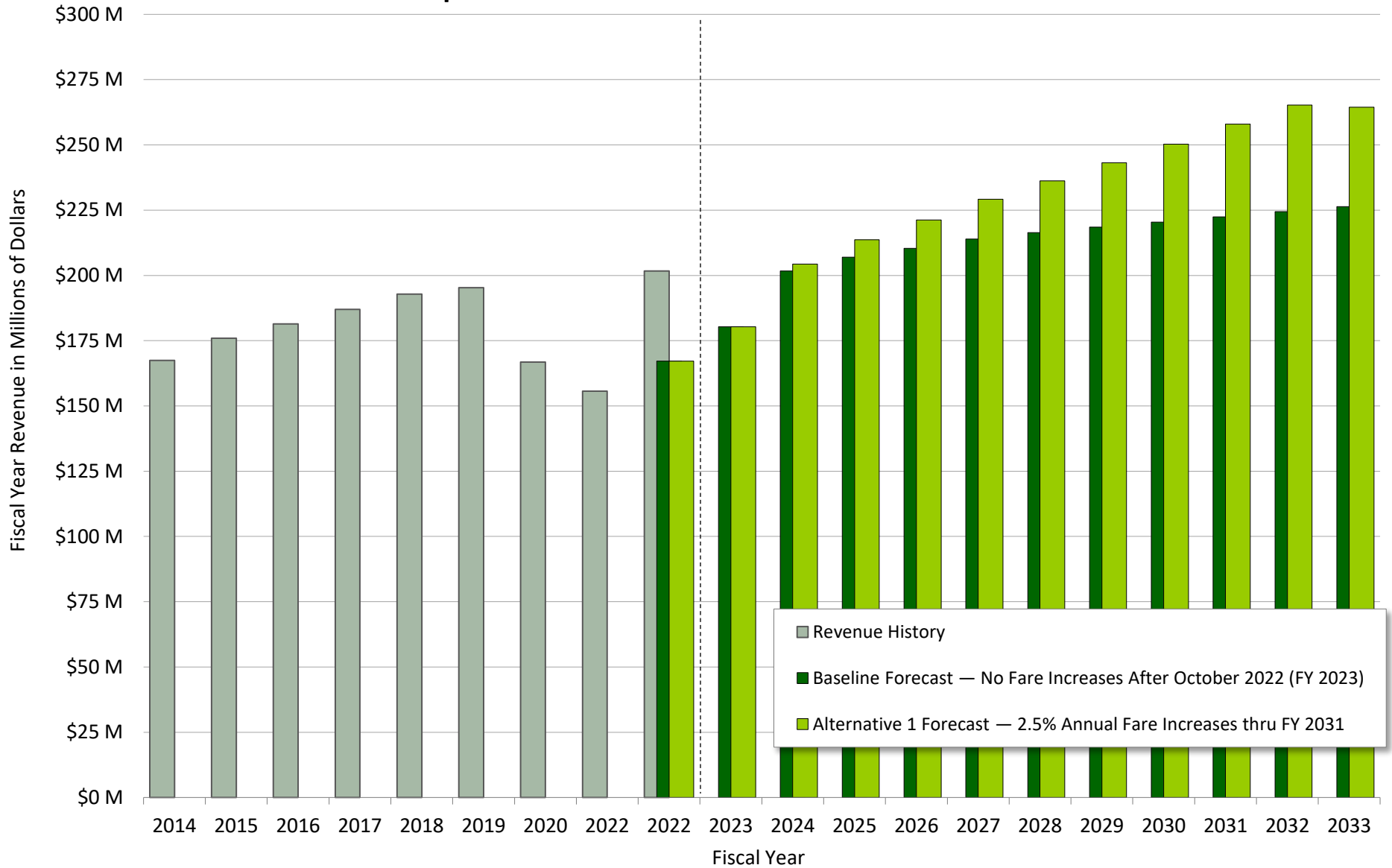
<sup>1</sup> In addition to a 2.5% fare increase on October 1, 2022 (FY 2022) and another 2.5% fare increase plus the elimination of youth passenger fares on October 1, 2022 (FY 2023), the Alternative 1 Forecast continues annual 2.5% fare increases each October thereafter, from October 1, 2023 (FY 2024) through October 1, 2032 (FY 2033). The Alternative 1 Forecast reflects the current programmed level of service, including service reductions associated with the COVID-19 pandemic.

<sup>2</sup> FY 2023 includes actual revenue data through August 2022. Light green shaded values denote historical annual data.



# Washington State Ferries — Revenue History and Forecast Trends

## September 2022 Forecast – Fiscal Years 2014-2033



# Washington State Ferries

## RIDERSHIP PROJECTIONS | SEPTEMBER 2022 BASELINE FORECAST

2.5% Adopted Fare Increases on October 1, 2021 & 2022 | No Further Fare Increases<sup>1</sup>

Fiscal Years 2023-2033

Fiscal Year	September 2022 Unconstrained Demand Forecast*	September 2022 Capacity Constrained Projections				June 2022 Baseline	
		Passenger Ridership	Vehicle/Driver Ridership	Total Ridership	Annual Rate of Change	Total Ridership	September 2022 vs June
2014		12,696,936	10,154,905	22,851,841	2.0%		
2015		13,270,874	10,387,368	23,658,242	3.5%		
2016		13,523,385	10,559,240	24,082,625	1.8%		
2017		13,669,834	10,544,735	24,214,569	0.5%		
2018		13,856,444	10,707,373	24,563,817	1.4%		
2019		13,699,985	10,555,460	24,255,445	(1.3%)		
2020		10,358,348	9,020,899	19,379,247	(20.1%)		
2021		6,903,479	8,397,508	15,300,987	(21.0%)		
2022	17,156,000	8,556,000	8,600,000	17,156,000	12.1%	17,384,000	(1.3%)
2023 <sup>2</sup>	19,390,000	9,918,000	9,059,000	18,977,000	10.6%	19,897,000	(4.6%)
2024	21,579,000	11,411,000	10,168,000	21,579,000	13.7%	22,279,000	(3.1%)
2025	22,349,000	11,999,000	10,339,000	22,338,000	3.5%	22,928,000	(2.6%)
2026	22,871,000	12,427,000	10,419,000	22,846,000	2.3%	23,441,000	(2.5%)
2027	23,298,000	12,719,000	10,540,000	23,259,000	1.8%	23,763,000	(2.1%)
2028	23,619,000	12,890,000	10,665,000	23,555,000	1.3%	24,063,000	(2.1%)
2029	23,926,000	13,065,000	10,765,000	23,830,000	1.2%	24,326,000	(2.0%)
2030	24,241,000	13,246,000	10,848,000	24,094,000	1.1%	24,608,000	(2.1%)
2031	24,591,000	13,448,000	10,938,000	24,386,000	1.2%	24,922,000	(2.2%)
2032	24,699,000	13,652,000	11,022,000	24,674,000	1.2%		
2033	24,959,000	13,855,000	11,104,000	24,959,000	1.2%		

<sup>1</sup> The Baseline Forecast includes a 2.5% fare increase on October 1, 2021 (FY 2022) and another 2.5% fare increase plus the elimination of youth passenger fares on October 1, 2022 (FY 2023). The Baseline Forecast excludes any further changes to the current base fares, resulting in declining real fares beyond FY 2023.

The Baseline Forecast also reflects the current programmed level of service, including service reductions associated with the COVID-19 pandemic.

<sup>2</sup> FY 2023 includes actual ridership data through September 2022. Light green shaded values denote historical annual data.

\* Excludes adjustments for vessel capacity constraints and fiscal year-to-date actual data.

# Washington State Ferries

## RIDERSHIP PROJECTIONS | SEPTEMBER 2022 ALTERNATIVE 1 FORECAST

2.5% Adopted Fare Increases on October 1, 2021 & 2022 | 2.5% Fare Increases each October thereafter (FYs 2024-33)<sup>1</sup>

Fiscal Years 2023-2033

Fiscal Year	September 2022 Unconstrained Demand Forecast*	September 2022 Capacity Constrained Projections				June 2022 Alternative 1	
		Passenger Ridership	Vehicle/Driver Ridership	Total Ridership	Annual Rate of Change	Total Ridership	September 2022 vs June
2014		12,696,936	10,154,905	22,851,841	2.0%		
2015		13,270,874	10,387,368	23,658,242	3.5%		
2016		13,523,385	10,559,240	24,082,625	1.8%		
2017		13,669,834	10,544,735	24,214,569	0.5%		
2018		13,856,444	10,707,373	24,563,817	1.4%		
2019		13,699,985	10,555,460	24,255,445	(1.3%)		
2020		10,358,000	9,021,000	19,379,000	(20.1%)		
2021		6,903,479	8,397,508	15,300,987	(21.0%)		
2022	17,156,000	8,556,000	8,600,000	17,156,000	12.1%	17,384,000	(1.3%)
2023 <sup>2</sup>	19,390,000	9,918,000	9,059,000	18,977,000	10.6%	19,897,000	(4.6%)
2024	21,516,000	11,380,000	10,136,000	21,516,000	13.4%	22,208,000	(3.1%)
2025	22,149,000	11,894,000	10,247,000	22,141,000	2.9%	22,710,000	(2.5%)
2026	22,518,000	12,234,000	10,265,000	22,499,000	1.6%	23,063,000	(2.4%)
2027	22,792,000	12,440,000	10,326,000	22,766,000	1.2%	23,234,000	(2.0%)
2028	22,962,000	12,530,000	10,395,000	22,925,000	0.7%	23,401,000	(2.0%)
2029	23,121,000	12,624,000	10,448,000	23,072,000	0.6%	23,536,000	(2.0%)
2030	23,285,000	12,725,000	10,498,000	23,223,000	0.7%	23,685,000	(2.0%)
2031	23,476,000	12,845,000	10,559,000	23,404,000	0.8%	23,865,000	(1.9%)
2032	23,570,000	12,961,000	10,609,000	23,570,000	0.7%		
2033	23,723,000	13,070,000	10,653,000	23,723,000	0.6%		

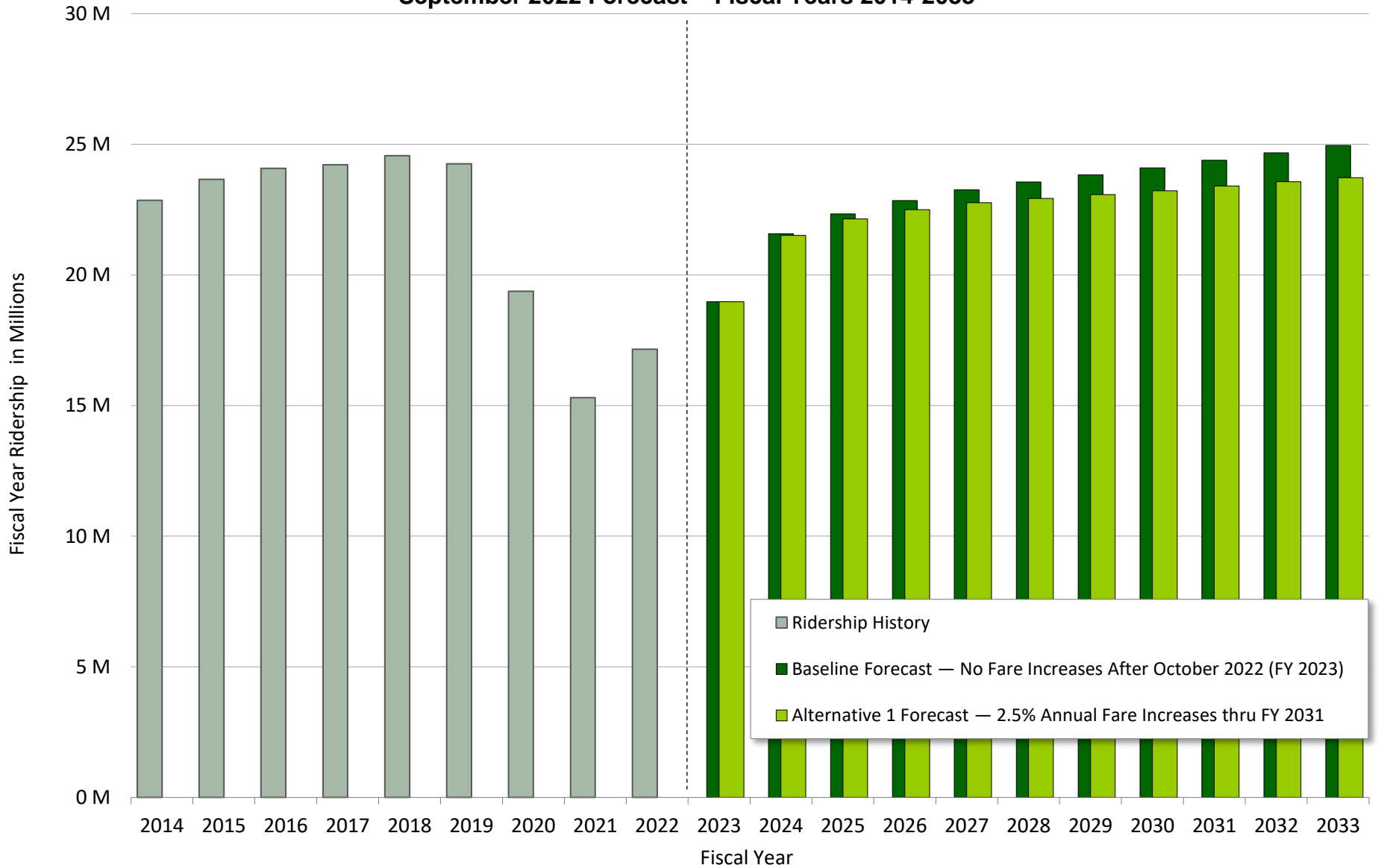
<sup>1</sup> In addition to a 2.5% fare increase on October 1, 2021 (FY 2022) and another 2.5% fare increase plus the elimination of youth passenger fares on October 1, 2022 (FY 2023), the Alternative 1 Forecast continues annual 2.5% fare increases each October thereafter, from October 1, 2023 (FY 2024) through October 1, 2032 (FY 2033). The Alternative 1 Forecast reflects the current programmed level of service, including service reductions associated with the COVID-19 pandemic.

<sup>2</sup> FY 2023 includes actual ridership data through September 2022. Light green shaded values denote historical annual data.

\* Excludes adjustments for vessel capacity constraints and fiscal year-to-date actual data.

# Washington State Ferries — Ridership History and Forecast Trends

September 2022 Forecast – Fiscal Years 2014-2033



# Washington State Ferries

## 2021-23 BIENNIUM REVENUE PROJECTION COMPARISONS

### SEPTEMBER / JUNE / MARCH 2021 ALTERNATIVE 1 FORECASTS

	September 2021 Baseline and Alternative 1 Forecasts*			June 2021 Alternative 1 Forecast			March 2021 Alternative 1 Forecast		
	Base Fare Revenue	Surcharge Revenues	Total Fare & Surcharge Revenue	Base Fare Revenue	Surcharge Revenues	Total Fare & Surcharge Revenue	Base Fare Revenue	Surcharge Revenues	Total Fare & Surcharge Revenue
FY 2022	\$183.0 M	\$6.9 M	\$189.9 M	\$184.2 M	\$6.9 M	\$191.1 M	\$174.4 M	\$6.6 M	\$181.0 M
FY 2023	\$205.3 M	\$7.8 M	\$213.1 M	\$204.7 M	\$7.8 M	\$212.5 M	\$202.3 M	\$7.7 M	\$210.0 M
<b>2021-23 Biennium</b>	<b>\$388.3 M</b>	<b>\$14.7 M</b>	<b>\$403.0 M</b>	<b>\$388.9 M</b>	<b>\$14.7 M</b>	<b>\$403.6 M</b>	<b>\$376.6 M</b>	<b>\$14.3 M</b>	<b>\$391.0 M</b>
				% Change September vs. June Forecasts			% Change September vs. March Forecasts		
	Base Fare Revenue	Surcharge Revenues	Total Fare & Surcharge Revenue	Base Fare Revenue	Surcharge Revenues	Total Fare & Surcharge Revenue	Base Fare Revenue	Surcharge Revenues	Total Fare & Surcharge Revenue
FY 2022	-0.6%	-0.5%	-0.6%	+5.0%	+3.8%	+4.9%	+5.0%	+3.8%	+4.9%
FY 2023	+0.3%	+0.4%	+0.3%	+1.5%	+1.3%	+1.5%	+1.5%	+1.3%	+1.5%
<b>2021-23 Biennium</b>	<b>-0.1%</b>	<b>-0.0%</b>	<b>-0.1%</b>	<b>+3.1%</b>	<b>+2.4%</b>	<b>+3.1%</b>	<b>+3.1%</b>	<b>+2.4%</b>	<b>+3.1%</b>
				% Change June vs. March Forecasts					
	Base Fare Revenue	Surcharge Revenues	Total Fare & Surcharge Revenue				Base Fare Revenue	Surcharge Revenues	Total Fare & Surcharge Revenue
FY 2022	+5.6%	+4.3%	+5.6%				+5.6%	+4.3%	+5.6%
FY 2023	+1.2%	+0.9%	+1.2%				+1.2%	+0.9%	+1.2%
<b>2021-23 Biennium</b>	<b>+3.3%</b>	<b>+2.4%</b>	<b>+3.2%</b>				<b>+3.3%</b>	<b>+2.4%</b>	<b>+3.2%</b>

\* For the current 2021-23 biennium, the September 2021 Baseline Forecast includes 2.5% fare increases on October 1, 2021 (FY 2022) and October 1, 2022 (FY 2023) that were recently adopted by the Washington State Transportation Commission, making the Baseline and Alternative 1 Forecasts identical for these two fiscal years.

# **WSDOT Alternate Vehicle Miles Traveled Forecast September 2022**

Contact: David Ding, Washington State Department of Transportation, 360-705-7502, [dingdav@wsdot.wa.gov](mailto:dingdav@wsdot.wa.gov)

## WSDOT VEHICLE MILES TRAVELLED (VMT) FORECAST FOR SEPTEMBER 2022

- WSDOT has produced a statewide VMT forecast for more than twenty years.
- All independent variables have been updated from the latest TRFC data and WSDOT Statewide Travel & Collision Data Office (STCDO) provides estimated “actual” Vehicle Miles Travelled data for calendar year 2021. This year the 2021 VMT forecast also incorporates STCDO monthly statewide estimates of the Vehicle Miles Traveled through June 2022.
- “Actual” Vehicle Miles Travelled for FY 2021 was 56.39 billion, 1.45% lower than FY 2020. For FY 2022, VMT estimated actuals were 59.64 billion, 2.12% higher than the last forecast.
- The current forecast is higher than the previous forecast throughout the forecast horizon. This is due primarily to:
  - o Actuals are up in current FY2022
- Even the September 2022 forecast for VMT is higher comparing with previous forecast, but the statewide traffic level does not get back to the FY 2019 VMT traffic until 2026.
- After FY 2022, the VMT projected annual growth rates start the recovery from the pandemic at 1.71% annual growth in FY 2023 and that annual rate of growth gets gradually smaller over time. By the end of the forecast horizon, the annual growth rate in VMT is 0.42%.

### STATEWIDE VMT FORECAST METHODOLOGY

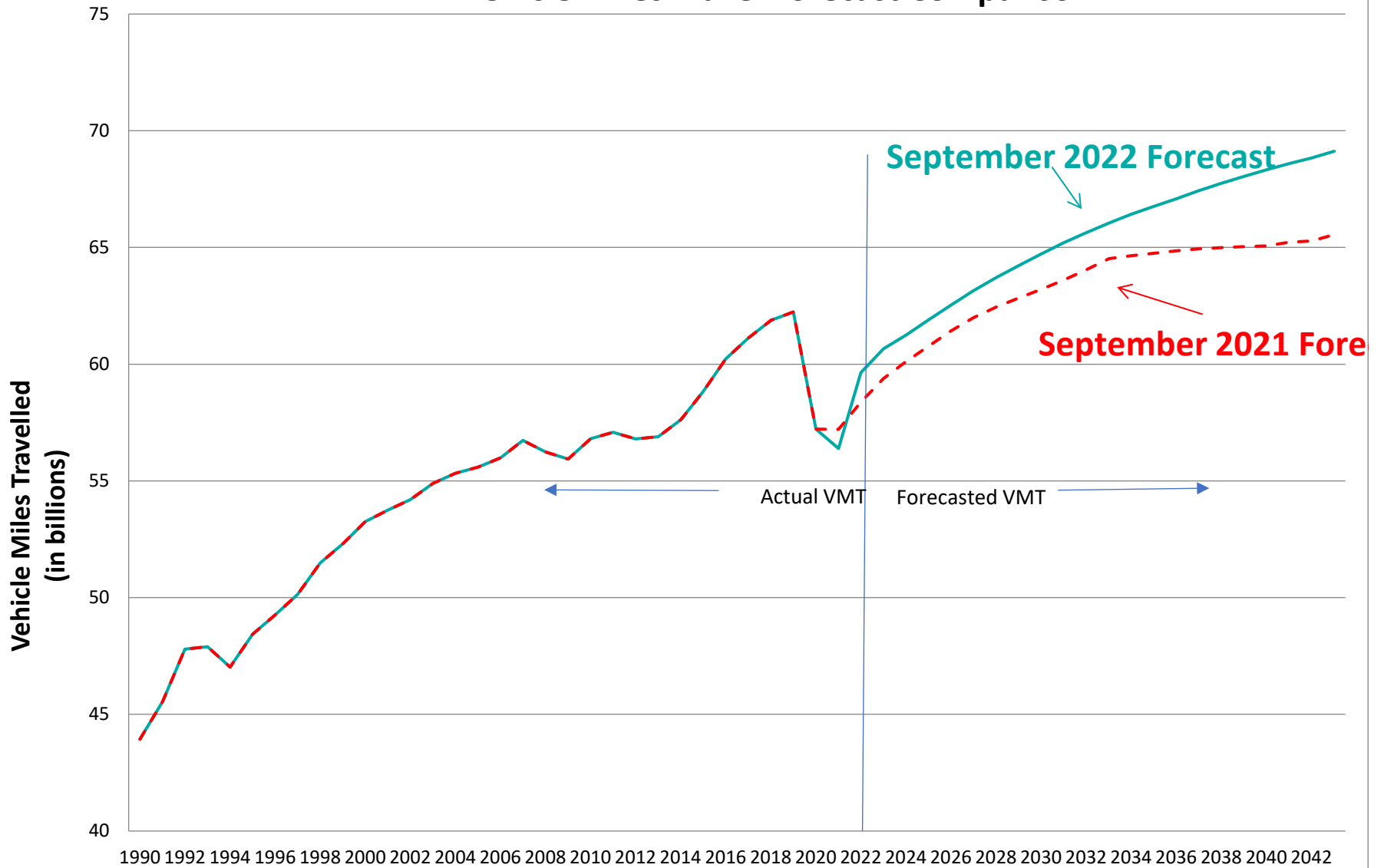
The annual statewide VMT model is first differenced log-log functional form which includes the log of the following independent variables:

- o Washington employment
- o Washington motor vehicle registrations
- o Washington gas prices
  - The annual forecast model considers three separate types of impacts on VMT: economic activity, vehicles registered, and gas prices
  - Due to the pandemic, a new autoregressive moving average (ARIMA) monthly VMT model was developed to estimate some of the short-term declines and recovery period from the continued shut-down impacts within the state economy. The annual VMT model does not accurately capture all the recent traffic reductions due to the COVID-19 shutdowns. The new ARIMA model results helped inform the near-term forecast for VMT by indicating how much reduction we had experienced year over year in traffic and it estimated a gradual recovery.

### SOURCE OF INDEPENDENT FORECASTED VARIABLES

- 2 Washington employment – Economic and Revenue Forecast Council September 2022 forecast in the near-term and from OFM’s long-term non-farm employment projections for Washington.
- Washington motorized vehicle registrations –WSDOT-Economic Analysis section for the Transportation Revenue Council September 2022 forecast
- Washington gasoline prices –WSDOT forecast for the Transportation Revenue Council September 2022 forecast
-

# Vehicle Miles Travel Forecast Comparison





September 2020 Forecast of Vehicle Miles Travelled (History and Forecast), VMT per capita, and Independent Variables.

YEAR	Total VMT (Billion Miles)	Percent Change	VMT Per Capita	Percent Change	VMT Per Driver Pop	Percent Change	Variables					
							VMT change fro	VMT Percent change from the Sept. 2020 fct	Washington Employment <sup>1</sup> (in Thousands)	Vehicles Registered <sup>2</sup> (in Thousands)	Gas Prices <sup>3</sup>	
1965	14.803						-			869	1,525	0.19
1966	15.645	5.69%					-			940	1,619	0.19
1967	17.067	9.09%					-			1,021	1,727	0.20
1968	18.347	7.50%					-			1,075	1,834	0.20
1969	19.211	4.71%					-			1,116	1,971	0.21
1970	20.371	6.04%	5,936		9,048		-			1,109	1,971	0.21
1971	20.844	2.32%	6,073	2.30%	9,143	1.05%	-			1,062	1,998	0.22
1972	21.835	4.75%	6,337	4.35%	9,495	3.85%	-			1,079	2,078	0.22
1973	22.977	5.23%	6,564	3.59%	9,845	3.68%	-			1,127	2,200	0.23
1974	22.317	-2.87%	6,267	-4.53%	9,307	-5.46%	-			1,172	2,288	0.36
1975	23.106	3.54%	6,370	1.64%	9,370	0.67%	-			1,217	2,358	0.40
1976	24.685	6.83%	6,657	4.51%	9,723	3.77%	-			1,249	2,483	0.41
1977	26.485	7.29%	6,929	4.07%	10,109	3.96%	-			1,322	2,649	0.43
1978	28.605	8.00%	7,220	4.20%	10,495	3.82%	-			1,427	2,743	0.44
1979	29.511	3.17%	7,181	-0.54%	10,362	-1.26%	-			1,534	2,969	0.69
1980	28.765	-2.53%	6,826	-4.94%	9,673	-6.65%	-			1,607	3,092	1.25
1981	29.446	2.37%	6,897	1.03%	9,607	-0.68%	-			1,615	3,219	1.40
1982	30.744	4.41%	7,142	3.56%	9,854	2.57%	-			1,590	3,214	1.29
1983	31.965	3.97%	7,350	2.90%	10,126	2.76%	-			1,564	3,256	1.23
1984	33.414	4.53%	7,582	3.16%	10,451	3.22%	-			1,623	3,328	1.21
1985	34.260	2.53%	7,686	1.37%	10,561	1.05%	-			1,685	3,422	1.26
1986	35.152	2.60%	7,776	1.17%	10,700	1.32%	-			1,741	3,569	1.17
1987	37.207	5.85%	8,076	3.86%	11,148	4.18%	-			1,805	3,768	0.91
1988	40.045	7.63%	8,492	5.14%	11,750	5.40%	-			1,897	3,876	0.94
1989	42.434	5.97%	8,749	3.03%	12,147	3.38%	-			1,992	4,007	0.95
1990	43.934	3.53%	8,787	0.44%	12,246	0.81%	-			2,106	4,219	1.01
1991	45.536	3.65%	8,882	1.09%	12,344	0.81%	-			2,165	4,293	1.24
1992	47.793	4.96%	9,106	2.52%	12,668	2.63%	-			2,206	4,448	1.12
1993	47.894	0.21%	8,948	-1.73%	12,425	-1.92%	-			2,244	4,480	1.18
1994	47.025	-1.81%	8,618	-3.68%	11,975	-3.62%	-			2,291	4,512	1.14
1995	48.430	2.99%	8,718	1.15%	12,101	1.05%	-			2,346	4,581	1.22
1996	49.259	1.71%	8,717	-0.01%	12,082	-0.16%	-			2,384	4,587	1.27
1997	50.135	1.78%	8,736	0.22%	12,074	-0.07%	-			2,483	4,701	1.31
1998	51.482	2.69%	8,846	1.26%	12,177	0.85%	-			2,583	4,847	1.20
1999	52.303	1.59%	8,884	0.43%	12,157	-0.16%	-			2,650	4,930	1.12
2000	53.248	1.81%	8,932	0.53%	12,180	0.18%	-			2,717	5,195	1.43
2001	53.752	0.95%	8,889	-0.48%	12,097	-0.68%	-			2,754	5,256	1.57
2002	54.201	0.84%	8,857	-0.35%	11,987	-0.91%	-			2,704	5,422	1.36
2003	54.890	1.27%	8,855	-0.03%	11,953	-0.28%	-			2,697	5,473	1.49
2004	55.330	0.80%	8,797	-0.65%	11,855	-0.83%	-			2,715	5,652	1.78
2005	55.584	0.46%	8,680	-1.34%	11,703	-1.28%	-			2,774	5,720	2.08
2006	55.989	0.73%	8,600	-0.92%	11,547	-1.34%	-			2,856	5,832	2.60
2007	56.739	1.34%	8,601	0.02%	11,482	-0.56%	-			2,931	5,912	2.84
2008	56.236	-0.89%	8,439	-1.88%	11,201	-2.45%	-			2,995	6,161	3.30
2009	55.934	-0.54%	8,327	-1.34%	10,998	-1.81%	-			2,937	6,030	2.78
2010	56.811	1.57%	8,400	0.89%	11,059	0.55%	-			2,832	5,950	2.93
2011	57.082	0.48%	8,379	-0.25%	11,004	-0.49%	-			2,852	6,153	3.38
2012	56.793	-0.51%	8,260	-1.42%	10,840	-1.49%	-			2,893	6,104	3.84
2013	56.897	0.18%	8,177	-1.00%	10,738	-0.94%	-			2,951	6,211	3.73
2014	57.619	1.27%	8,173	-0.05%	10,728	-0.09%	-			3,019	6,336	3.61
2015	58.825	2.09%	8,235	0.75%	10,796	0.63%	-			3,102	6,553	3.08
2016	60.228	2.39%	8,324	1.08%	10,894	0.91%	-			3,193	6,806	2.51
2017	61.124	1.49%	8,346	0.27%	10,903	0.07%	-			3,284	6,997	2.70
2018	61.876	1.23%	8,354	0.09%	10,891	-0.10%	-			3,363	7,158	3.02
2019	62.232	0.58%	8,311	-0.51%	10,818	-0.67%	-			3,433	7,174	3.05
2020	57.217	-8.06%	7,561	-9.02%	9,831	-9.12%	-			3,400	7,056	2.96
2021	56.386	-1.45%	7,374	-2.47%	9,581	-2.55%	(0.819)	-1.43%		3,280	7,663	2.98
2022	59.643	5.78%	7,720	4.69%	10,022	4.60%	1.269	2.17%		3,462	7,467	3.25
2023	60.664	1.71%	7,773	0.68%	10,080	0.58%	1.280	2.16%		3,573	7,361	3.27
2024	61.253	0.97%	7,770	-0.04%	10,065	-0.15%	1.140	1.90%		3,598	7,483	3.30
2025	61.902	1.06%	7,775	0.07%	10,057	-0.08%	1.125	1.85%		3,627	7,632	3.35
2026	62.532	1.02%	7,778	0.04%	10,045	-0.12%	1.106	1.80%		3,657	7,766	3.39
2027	63.153	0.99%	7,781	0.04%	10,035	-0.10%	1.162	1.88%		3,689	7,890	3.46
2028	63.709	0.88%	7,777	-0.06%	10,017	-0.18%	1.263	2.02%		3,721	7,982	3.59
2029	64.225	0.81%	7,768	-0.11%	9,996	-0.21%	1.384	2.20%		3,753	8,072	3.78
2030	64.718	0.77%	7,758	-0.13%	9,972	-0.24%	1.509	2.39%		3,785	8,164	3.91
2031	65.199	0.74%	7,748	-0.13%	9,948	-0.24%	1.595	2.51%		3,817	8,255	3.97
2032	65.636	0.67%	7,733	-0.18%	9,920	-0.28%	1.592	2.49%		3,846	8,344	4.06
2033	66.047	0.63%	7,718	-0.20%	9,891	-0.30%	1.524	2.36%		3,874	8,432	4.15
2034	66.420	0.56%	7,699	-0.25%	9,858	-0.33%	1.777	2.75%		3,900	8,518	4.25
2035	66.765	0.52%	7,678	-0.27%	9,823	-0.36%	2.015	3.11%		3,925	8,602	4.34
2036	67.085	0.48%	7,655	-0.30%	9,785	-0.38%	2.225	3.43%		3,950	8,680	4.44
2037	67.437	0.52%	7,637	-0.24%	9,753	-0.32%	2.495	3.84%		3,981	8,758	4.54
2038	67.748	0.46%	7,615	-0.29%	9,717	-0.37%	2.754	4.24%		4,010	8,832	4.65
2039	68.047	0.44%	7,445	-2.24%	9,681	-0.37%	3.016	4.64%		4,040	8,904	4.75
2040	68.328	0.41%	7,407	-0.50%	9,643	-0.40%	3.258	5.01%		4,070	8,977	4.86
2041	68.592	0.39%	7,369	-0.52%	9,418	-2.33%	3.364	5.16%		4,100	9,052	4.97
2042	68.836	0.36%	7,329	-0.54%	9,359	-0.62%	3.553	5.44%		4,130	9,126	5.08
2043	69.122	0.42%	7,294	-0.48%	9,307	-0.55%	3.573	5.45%		4,159	9,200	5.18

<sup>1</sup>Forecast 2022-2027 from Economic and Revenue Forecast Council's September 2021 Forecast  
Forecast 2027-2041 extended based on OFM forecast growth rate Sept 2021  
Forecast 2041-2043 extended using trend

<sup>2</sup>Forecast 2022-2031 from Transportation Revenue Forecast Council's September 2021 Forecast

<sup>3</sup>Forecast 2022-2031 from Transportation Revenue Forecast Council's September 2021 Forecast

Adopted

# Toll Operations and Revenue Forecast

## September 2022

Contact: Jen Khozikov, Washington State Department of Transportation, (206) 716-1153,  
[KhozikJ@WSDOT.wa.gov](mailto:KhozikJ@WSDOT.wa.gov)

## **Transportation Revenue Forecast Council September 2022 TNB Toll Forecast: Toll Rate Reduction**

### **TNB Current and Forecasted Toll Rates**

The Tacoma Narrows Bridge (TNB) passenger car toll rates are \$5.25 for *Good To Go!* account holders, \$6.25 for tollbooth customers and \$7.25 for post-paid Pay By Mail transactions. Vehicles with multiple axles pay a multiple of the passenger car rate equal to half the 2-axle toll times the number of axles for up to six axles. On August 23, 2022, the Transportation Commission adopted new lower toll rates on TNB effective October 1, 2022. Two-axle vehicles will be reduced to \$4.50 for *Good To Go!* account holders, \$5.50 for tollbooth customers and \$6.50 for post-paid Pay By Mail transactions. Vehicles with multiple axles will continue to be charged a multiple of the passenger car rates using the same multiplier formula.

### **TNB Loan & Subsidy for 2021-2023 Biennium**

In 2018 the Legislature passed SHB 2990 establishing legislative intent to mitigate future toll increases beyond a one-time toll rate increase of 25 cents beginning in FY 2022. To forestall rate increases to cover rising debt service costs the Legislature declared its intent to loan funds from other sources to the TNB Account in amounts needed to mitigate toll rate increases, up to a total loan amount of \$85 million. These loans would be repaid using toll revenue after debt service and deferred sales tax obligations have been met, extending the period of tolling as needed to repay.

The Covid pandemic resulted in significant revenue decreases for all toll facilities, affecting the loan amount requested to forestall rate increases. The Legislature provided \$30.3 million in loans as well as \$15.7 million in federal American Rescue Plan funds to offset projected revenue losses. WSDOT also shifted planned toll system preservation work to the 2023-25 biennium and took other cost reduction measures.

### **Purpose of Proposed Toll Rate Reduction**

This change reflects the effects of SSB 5488, which pledges to transfer \$13 million annually from the General Fund into the TNB Account for ten years. The Transportation Commission is directed to make appropriate adjustments in toll rates, with the intent to lower rates by 75 cents for passenger vehicles.

### **Toll Rate Reduction Results**

\$0.75 rate reduction impacts Toll Traffic and Revenue as the following:

- Annual Toll Transactions are increased by 0.8%, FY 2023 increase (9 months) is 0.5%, FY 2024 increase is 0.7% due to the rounding
- Annual Gross Toll Revenues are decreased by 12.6%, FY 2023 reduction (9 months) is 9.1%
- Annual Adjusted Gross Toll Revenues are decreased by 12.7%, FY 2023 (9 months) reduction is by 9.3%
- Ten-years FY 2023-2032 Adjusted Gross Toll Revenues are decreased by \$109.2 million, or 12.4%.

**Total Toll Transactions - \$0.75 toll reduction**

Fiscal Year	Baseline (Sept'22)	Alternative	Difference vs. Baseline	
			Value	Percent
2022	15,425,951	15,425,951	-	0.0%
2023	15,704,000	15,780,000	76,000	0.5%
2024	15,755,000	15,868,000	113,000	0.7%
2025	15,952,000	16,073,000	121,000	0.8%
2026	16,110,000	16,233,000	123,000	0.8%
2027	16,272,000	16,396,000	124,000	0.8%
2028	16,436,000	16,563,000	127,000	0.8%
2029	16,601,000	16,729,000	128,000	0.8%
2030	16,768,000	16,898,000	130,000	0.8%
2031	16,936,000	17,065,000	129,000	0.8%
2032	17,106,000	17,238,000	132,000	0.8%
2033				

**Total Gross Toll Revenue - \$0.75 toll reduction**

Fiscal Year	Baseline (Sept'22)	Alternative	Difference vs. Baseline	
			Value	Percent
2022	\$89,142,410	\$89,142,410	\$0	0.0%
2023	\$91,725,000	\$83,349,000	-\$8,376,000	-9.1%
2024	\$91,919,000	\$80,333,000	-\$11,586,000	-12.6%
2025	\$93,067,000	\$81,375,000	-\$11,692,000	-12.6%
2026	\$93,989,000	\$82,179,000	-\$11,810,000	-12.6%
2027	\$94,934,000	\$83,007,000	-\$11,927,000	-12.6%
2028	\$95,891,000	\$83,848,000	-\$12,043,000	-12.6%
2029	\$96,853,000	\$84,692,000	-\$12,161,000	-12.6%
2030	\$97,828,000	\$85,544,000	-\$12,284,000	-12.6%
2031	\$98,808,000	\$86,395,000	-\$12,413,000	-12.6%
2032	\$99,800,000	\$87,271,000	-\$12,529,000	-12.6%
2033				

**Adjusted Gross Toll Revenue - \$0.75 toll reduction**

Fiscal Year	Baseline (Sept'22)	Alternative	Difference vs. Baseline	
			Value	Percent
2022	\$83,330,607	\$83,330,607	\$0	0.0%
2023	\$85,073,000	\$77,163,000	-\$7,910,000	-9.3%
2024	\$84,716,000	\$73,932,000	-\$10,784,000	-12.7%
2025	\$85,892,000	\$74,982,000	-\$10,910,000	-12.7%
2026	\$86,815,000	\$75,783,000	-\$11,032,000	-12.7%
2027	\$87,688,000	\$76,545,000	-\$11,143,000	-12.7%
2028	\$88,572,000	\$77,321,000	-\$11,251,000	-12.7%
2029	\$89,459,000	\$78,098,000	-\$11,361,000	-12.7%
2030	\$90,361,000	\$78,885,000	-\$11,476,000	-12.7%
2031	\$91,266,000	\$79,671,000	-\$11,595,000	-12.7%
2032	\$92,182,000	\$80,477,000	-\$11,705,000	-12.7%
2033				

**Calendar Year 2022 Rate Reduction schedule**

Date	Milestone
Aug 23 WSTC Meeting	Propose Permanent Rates (File CR-102)
August 26	Adoption for Permanent Toll Rate Proposal (file CR-103P)
October 1	Proposed new toll rates take effect