Transportation Revenue Forecast Council February 2022 Transportation Economic and Revenue Forecasts

Volume III: Alternate Forecast Tables

Transportation Revenue Forecast Council Alternative Forecasts February 2022

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REVENUE AND RIDERSHIP PROJECTIONS FEBRUARY 2022 FORECAST FISCAL YEARS 2022-2031

Prepared for Washington State Ferries

for Presentation to the

Transportation Revenue Forecast Council

Prepared by WSP USA

February 15, 2022

Note: The COVID-19 pandemic has materially disrupted normal ferry ridership patterns, and the duration and magnitude of the pandemic's temporary near-term effects or its more permanent impacts on the economy and ferry ridership, while becoming more apparent, remain uncertain. As such, the February 2022 Forecast projections, as well as the assumptions upon which they are based at the time of preparation, remain subject to a relatively high level of risk and uncertainty, which may cause actual results to vary considerably from projections.





February 2022 Revenue and Ridership Forecasts — Fiscal Years 2022-2031

FEBRUARY 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) 2031.

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 slowly rebounding since then, though recent trends and continued reduced service levels due to staffing challenges are currently extending the recovery transition to a "new normal" until mid-2023 (FY 2024).

Since 2000, passenger and vehicle/driver frequent user discounted fare ridership has been declining in both absolute volumes and in their shares of total passengers and vehicles, respectively. Contributing factors include an aging population in ferry-served communities, telecommuting, and changes in the frequent user multi-ride fare media. Passenger commuter ridership has shown the least recovery across fare categories and has greater potential to remain lower longer term as recent telecommuting trends endure. As such, the February Forecast maintains the previous 20% post-pandemic forecast reduction to account for this. A smaller long-term adjustment of 5% is also applied to the vehicle commuter ridership projection, as that fare category is poised to recover more closely to pre-pandemic levels.

The February 2022 Forecast extends 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 now slated for July 1, 2023 (FY 2024).

The February 2022 Forecast incorporates the latest fares adopted by the Washington State Transportation Commission (WSTC) in August 2021 with the following assumptions reflected in the Baseline and Alternative 1 Forecasts.

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

The February Forecast projections for FY 2022 include actual revenue and ridership through January 2022.

Ridership Impacts

- The February 2022 Forecast incorporates the latest demographic and economic variable projections plus tailored COVID-19 pandemic indicator variables, which were activated through Q1 of 2021 for all fare categories except oversize vehicles and remain activated in the near-term on the passenger commuter fares.
- The forecast period projections for real personal income were revised downward, which dampens ridership demand.
- The various employment forecast measures have all been revised downward, contributing to lower ferry ridership demand.
- The inflation projections are increasingly higher across the forecast horizon, which results in lower real fares that contribute to an uplift in ridership demand.
- Nominal gasoline prices have been revised higher through FY 2025 and slightly lower thereafter. Higher inflation reduces the real gas price increases, though they are still sufficient to dampen vehicle/driver demand through FY 2025. Thereafter, the upward revisions to projected inflation combined with lower forecasted nominal prices result in lower real gas prices, somewhat lifting vehicle/driver ferry ridership demand relative to November's forecast.
- Actual ridership for the most recent three months (November 2021-January 2022) averaged 17% lower than previously forecasted, due to the public concern and response over the rapid rise of the Omicron variant of COVID-19, extraordinary inclement weather in late December and early January, and ongoing staffing-related service disruptions.
- The working- and retirement-age population index variables for the ferry-served communities will be updated and factored in to the June 2022 Forecast.

Fare and Surcharge Revenue Impacts

- Actual revenue for November 2021-January 2022 averaged about 13% lower than previously forecasted.
- For the Baseline and Alternative 1 Forecasts, revenues for the 2021-23 biennium are projected to be \$370.0 M, or \$22.0 million (5.6%) less than the November Forecast, with \$356.5 M in base fare revenues and \$13.5 M in surcharges.
- For the 2023-25 biennium, the Baseline Forecast of revenues is \$435.7 M, which is \$5.3 M (1.2%) lower than in November. The Baseline Forecast comprises more than \$419.8 M in base fare revenues and a bit over \$15.8 M in surcharges.
- For the 2023-25 biennium, the Alternative 1 Forecast of revenues is \$445.5 M, which is \$5.7 M (1.3%) lower than the November Alternative 1 Forecast and comprises nearly \$429.8 M in base fare revenues and about \$15.7 M in surcharges.
- For the remainder of the forecast horizon, projected revenues for the Baseline and Alternative 1 Forecasts have been revised downward from 0.6 to 0.8%.

REVENUE PROJECTIONS | FEBRUARY 2022 BASELINE FORECAST

2.5% Adopted Fare Increases on October 1, 2021 & 2022 | No Further Fare Increases¹ Fiscal Years 2021-2031

	February 2022	Fiscal Year	Fiscal Year Annual February Rate of Biennium Change Total		vs. November For	recast	November 2021 Baseline	
Fiscal Year	Capacity- Constrained Revenue Forecast	Rate of			\$ Change and % Change by Biennium		Capacity- Constrained Revenue Forecast	Biennium Total
2012	\$155,085,373	8.0%						
2013	\$162,047,033	4.5%	\$317,132,406					
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%)						
2021	\$155,668,672	(6.7%)	\$322,493,775					
2022 ²	\$171,866,000	10.4%		(5.9%)			\$182,640,000	
2023	\$198,109,000	15.3%	\$369,975,000	(5.4%)	(\$22,036,000)	(5.6%)	\$209,371,000	\$392,011,000
2024	\$215,887,000	9.0%		(1.3%)			\$218,738,000	
2025	\$219,799,000	1.8%	\$435,686,000	(1.1%)	(\$5,335,000)	(1.2%)	\$222,283,000	\$441,021,000
2026	\$223,303,000	1.6%		(0.9%)			\$225,369,000	
2027	\$226,304,000	1.3%	\$449,607,000	(0.6%)	(\$3,407,000)	(0.8%)	\$227,645,000	\$453,014,000
2028	\$228,484,000	1.0%		(0.6%)			\$229,910,000	
2029	\$230,599,000	0.9%	\$459,083,000	(0.6%)	(\$2,732,000)	(0.6%)	\$231,905,000	\$461,815,000
2030	\$232,616,000	0.9%		(0.6%)			\$233,948,000	
2031	\$234,625,000	0.9%	\$467,241,000	(0.6%)	(\$2,641,000)	(0.6%)	\$235,934,000	\$469,882,000

¹ The Baseline Forecast includes a 2.5% fare increase on October 1, 2021 (FY 2022) and another 2.5% fare increase 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.

² FY 2022 includes actual revenue data through January 2022. Light green shaded values denote historical annual data.



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

REVENUE PROJECTIONS | FEBRUARY 2022 BASELINE FORECAST

2.5% Adopted Fare Increases on October 1, 2021 & 2022 | No Further Fare Increases¹ Fiscal Years 2021-2031

	February 2022			Distribut	ion of Revenue t	o Operating and C	Capital Programs	
Fiscal Year	Capacity- Constrained Revenue Forecast	February 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
2012	\$155,085,373		\$2,544,970		\$2,544,970		\$152,540,403	
2013	\$162,047,033	\$317,132,406	\$3,626,191		\$3,626,191	\$6,171,161	\$158,420,842	\$310,961,245
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	
2021	\$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 ²	\$171,866,000		\$3,110,000	\$3,109,000	\$6,219,000		\$165,647,000	
2023	\$198,109,000	\$369,975,000	\$3,635,000	\$3,635,000	\$7,270,000	\$13,489,000	\$190,839,000	\$356,486,000
2024	\$215,887,000		\$3,926,000	\$3,926,000	\$7,852,000		\$208,035,000	
2025	\$219,799,000	\$435,686,000	\$3,996,000	\$3,995,000	\$7,991,000	\$15,843,000	\$211,808,000	\$419,843,000
2026	\$223,303,000		\$4,055,000	\$4,054,000	\$8,109,000		\$215,194,000	
2027	\$226,304,000	\$449,607,000	\$4,104,000	\$4,104,000	\$8,208,000	\$16,317,000	\$218,096,000	\$433,290,000
2028	\$228,484,000		\$4,147,000	\$4,146,000	\$8,293,000		\$220,191,000	
2029	\$230,599,000	\$459,083,000	\$4,189,000	\$4,189,000	\$8,378,000	\$16,671,000	\$222,221,000	\$442,412,000
2030	\$232,616,000		\$4,230,000	\$4,230,000	\$8,460,000		\$224,156,000	
2031	\$234,625,000	\$467,241,000	\$4,274,000	\$4,273,000	\$8,547,000	\$17,007,000	\$226,078,000	\$450,234,000

¹ The Baseline Forecast includes a 2.5% fare increase on October 1, 2021 (FY 2022) and another 2.5% fare increase 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.

² FY 2022 includes actual revenue data through January 2022. Light green shaded values denote historical annual data.



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

REVENUE PROJECTIONS | FEBRUARY 2022 ALTERNATIVE 1 FORECAST

2.5% Adopted Fare Increases on October 1, 2021 & 2022 | 2.5% Fare Increases each October thereafter (FYs 2024-31)¹
Fiscal Years 2021-2031

	February 2022	Fiscal Year		February	vs. November Fo	recast	November 2021 Alternative 1		
Fiscal Year	Capacity- Constrained Revenue Forecast	Annual Rate of Change	February Biennium Total	% Change by Fiscal Year	\$ Change and % Change by Biennium		Capacity- Constrained Revenue Forecast	Biennium Total	
2012	\$155,085,373	8.0%							
2013	\$162,047,033	4.5%	\$317,132,406						
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%)							
2021	\$155,668,672	(6.7%)	\$322,493,775						
2022 ²	\$171,866,000	10.4%		(5.9%)			\$182,640,000		
2023	\$198,109,000	15.3%	\$369,975,000	(5.4%)	(\$22,036,000)	(5.6%)	\$209,371,000	\$392,011,000	
2024	\$218,638,000	10.4%		(1.3%)			\$221,584,000		
2025	\$226,864,000	3.8%	\$445,502,000	(1.2%)	(\$5,707,000)	(1.3%)	\$229,625,000	\$451,209,000	
2026	\$235,012,000	3.6%		(1.0%)			\$237,341,000		
2027	\$242,840,000	3.3%	\$477,852,000	(0.7%)	(\$4,026,000)	(0.8%)	\$244,537,000	\$481,878,000	
2028	\$250,088,000	3.0%		(0.7%)			\$251,828,000		
2029	\$257,289,000	2.9%	\$507,377,000	(0.6%)	(\$3,314,000)	(0.6%)	\$258,863,000	\$510,691,000	
2030	\$264,741,000	2.9%		(0.6%)			\$266,232,000		
2031	\$272,557,000	3.0%	\$537,298,000	(0.6%)	(\$3,023,000)	(0.6%)	\$274,089,000	\$540,321,000	

¹ In addition to a 2.5% fare increase on October 1, 2021 (FY 2022) and another 2.5% fare increase 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, 2030 (FY 2031). This yields slightly increasing real fares over the forecast horizon, given that current inflation projections are about 2.2% annually. The Alternative 1 Forecast reflects the current programmed level of service, including service reductions associated with the COVID-19 pandemic.

² FY 2022 includes actual revenue data through January 2022. Light green shaded values denote historical annual data.



REVENUE PROJECTIONS | FEBRUARY 2022 ALTERNATIVE 1 FORECAST

2.5% Adopted Fare Increases on October 1, 2021 & 2022 | 2.5% Fare Increases each October thereafter (FYs 2024-31)¹
Fiscal Years 2021-2031

	February 2022			Distribut	ion of Revenue t	o Operating and (Capital Programs	
Fiscal Year	Capacity- Constrained Revenue Forecast	February 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
2012	\$155,085,373		\$2,544,970		\$2,544,970		\$152,540,403	
2013	\$162,047,033	\$317,132,406	\$3,626,191		\$3,626,191	\$6,171,161	\$158,420,842	\$310,961,245
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	
2021	\$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 ²	\$171,866,000		\$3,110,000	\$3,109,000	\$6,219,000		\$165,647,000	
2023	\$198,109,000	\$369,975,000	\$3,635,000	\$3,635,000	\$7,270,000	\$13,489,000	\$190,839,000	\$356,486,000
2024	\$218,638,000		\$3,914,000	\$3,914,000	\$7,828,000		\$210,810,000	
2025	\$226,864,000	\$445,502,000	\$3,961,000	\$3,961,000	\$7,922,000	\$15,750,000	\$218,942,000	\$429,752,000
2026	\$235,012,000		\$3,998,000	\$3,998,000	\$7,996,000		\$227,016,000	
2027	\$242,840,000	\$477,852,000	\$4,025,000	\$4,025,000	\$8,050,000	\$16,046,000	\$234,790,000	\$461,806,000
2028	\$250,088,000		\$4,049,000	\$4,049,000	\$8,098,000		\$241,990,000	
2029	\$257,289,000	\$507,377,000	\$4,073,000	\$4,072,000	\$8,145,000	\$16,243,000	\$249,144,000	\$491,134,000
2030	\$264,741,000		\$4,095,000	\$4,095,000	\$8,190,000		\$256,551,000	
2031	\$272,557,000	\$537,298,000	\$4,120,000	\$4,120,000	\$8,240,000	\$16,430,000	\$264,317,000	\$520,868,000

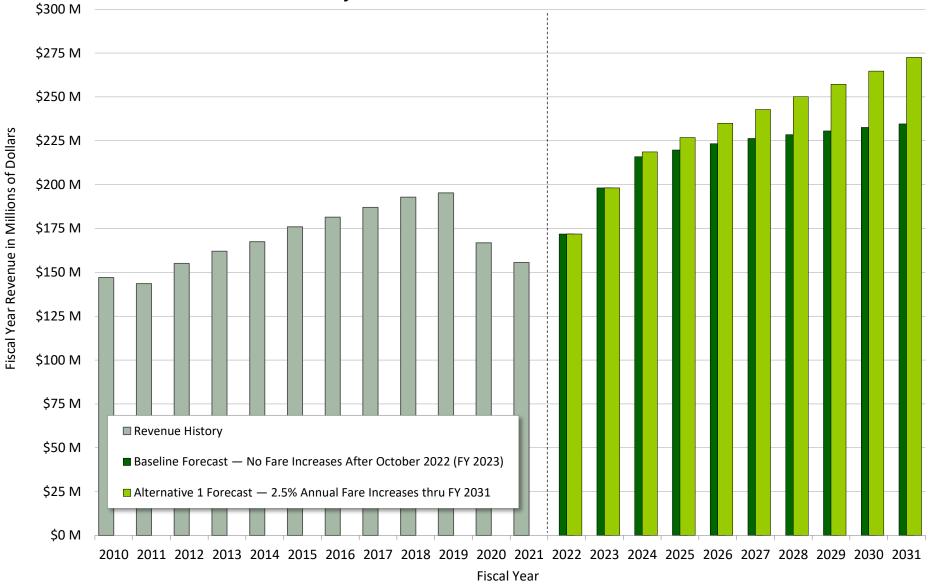
¹ In addition to a 2.5% fare increase on October 1, 2021 (FY 2022) and another 2.5% fare increase on October 1, 2022 (FY 2023), the Alternative 1 Forecast continues annual 2.5% fare increases each October thereafter, from October 1, 2023 (FY 2024) through October 1, 2030 (FY 2031). This yields slightly increasing real fares over the forecast horizon, given that current inflation projections are about 2.2% annually. The Alternative 1 Forecast reflects the current programmed level of service, including service reductions associated with the COVID-19 pandemic.

² FY 2022 includes actual revenue data through January 2022. Light green shaded values denote historical annual data.



Washington State Ferries — Revenue History and Forecast Trends

February 2022 Forecast – Fiscal Years 2010-2031





RIDERSHIP PROJECTIONS | FEBRUARY 2022 BASELINE FORECAST

2.5% Adopted Fare Increases on October 1, 2021 & 2022 | No Further Fare Increases¹ Fiscal Years 2022-2031

	February 2022	Febru	uary 2022 Capacity Co	ons	November 2021 Baseline		
Fiscal Year	Unconstrained Demand Forecast*	Passenger Ridership	Vehicle/Driver Ridership	Total Ridership	Annual Rate of Change	Total Ridership	February 2022 vs November
2012		12,236,081	9,983,059	22,219,140	0.0%		
2013		12,350,126	10,045,043	22,395,169	0.8%		
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 ²	18,922,000	9,409,000	8,775,000	18,184,000	18.8%	19,198,000	(5.3%)
2023	22,007,000	11,590,000	9,859,000	21,449,000	18.0%	22,373,000	(4.1%)
2024	23,168,000	12,560,000	10,562,000	23,122,000	7.8%	23,421,000	(1.3%)
2025	23,619,000	12,835,000	10,708,000	23,543,000	1.8%	23,797,000	(1.1%)
2026	24,029,000	13,084,000	10,827,000	23,911,000	1.6%	24,154,000	(1.0%)
2027	24,392,000	13,284,000	10,934,000	24,218,000	1.3%	24,453,000	(1.0%)
2028	24,754,000	13,481,000	11,024,000	24,505,000	1.2%	24,752,000	(1.0%)
2029	25,117,000	13,692,000	11,105,000	24,797,000	1.2%	25,022,000	(0.9%)
2030	25,489,000	13,907,000	11,181,000	25,088,000	1.2%	25,306,000	(0.9%)
2031	25,894,000	14,146,000	11,257,000	25,403,000	1.3%	25,621,000	(0.9%)

¹ The Baseline Forecast includes a 2.5% fare increase on October 1, 2021 (FY 2022) and another 2.5% fare increase 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.

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



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

2 FY 2022 includes actual ridership data through January 2022. Light green shaded values denote historical annual data.

RIDERSHIP PROJECTIONS | FEBRUARY 2022 ALTERNATIVE 1 FORECAST

2.5% Adopted Fare Increases on October 1, 2021 & 2022 | 2.5% Fare Increases each October thereafter (FYs 2024-31)¹ Fiscal Years 2022-2031

	February 2022	Febru	uary 2022 Capacity Co	ons	November 202	21 Alternative 1	
Fiscal Year	Unconstrained Demand Forecast*	Passenger Ridership	Vehicle/Driver Ridership	Total Ridership	Annual Rate of Change	Total Ridership	February 2022 vs November
2012		12,236,081	9,983,059	22,219,140	0.0%		
2013		12,350,126	10,045,043	22,395,169	0.8%		
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 ²	18,922,000	9,409,000	8,775,000	18,184,000	18.8%	19,198,000	(5.3%)
2023	22,007,000	11,590,000	9,859,000	21,449,000	18.0%	22,373,000	(4.1%)
2024	23,096,000	12,521,000	10,529,000	23,050,000	7.5%	23,353,000	(1.3%)
2025	23,391,000	12,708,000	10,620,000	23,328,000	1.2%	23,592,000	(1.1%)
2026	23,629,000	12,858,000	10,690,000	23,548,000	0.9%	23,798,000	(1.1%)
2027	23,820,000	12,960,000	10,747,000	23,707,000	0.7%	23,959,000	(1.1%)
2028	24,011,000	13,061,000	10,801,000	23,862,000	0.7%	24,118,000	(1.1%)
2029	24,205,000	13,176,000	10,845,000	24,021,000	0.7%	24,248,000	(0.9%)
2030	24,404,000	13,295,000	10,885,000	24,180,000	0.7%	24,393,000	(0.9%)
2031	24,628,000	13,435,000	10,928,000	24,363,000	0.8%	24,579,000	(0.9%)

¹ In addition to a 2.5% fare increase on October 1, 2021 (FY 2022) and another 2.5% fare increase 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, 2030 (FY 2031). This yields slightly increasing real fares over the forecast horizon, given that current inflation projections are about 2.2% anually. The Alternative 1 Forecast reflects the current programmed level of service, including service reductions associated with the COVID-19 pandemic

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



² FY 2022 includes actual ridership data through January 2022. Light green shaded values denote historical annual data.

Washington State Ferries — Ridership History and Forecast Trends

