

**Transportation Revenue
Forecast Council
February 2018
Transportation Economic and
Revenue Forecasts
Volume III: Alternate Forecast Tables**

Transportation Revenue Forecast Council

Alternative Forecasts

February 2018

- **Alternate Ferry Forecast.....IV-3**

REVENUE AND RIDERSHIP PROJECTIONS

FEBRUARY 2018 FORECAST

FISCAL YEARS 2018-2029

Prepared for
Washington State Ferries

for Presentation to the
**Transportation Revenue
Forecast Council**

February 15, 2018 Meeting

Prepared by
WSP USA

February 14, 2018

Washington State Ferries

February 2018 Revenue and Ridership Forecasts — Fiscal Years 2018-2029

FEBRUARY 2018 FORECAST NOTES

The fare revenue and ridership forecasts for Washington State Ferries (WSF) are completed in four stages. First, monthly ridership projections by seven fare categories are prepared for each route using time series analysis methods, with a forecast horizon from the present through fiscal year (FY) 2029.

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

Stage two of the process generates system-wide ridership projections. Econometric models combine ferry fare scenarios with demographic and economic projections to produce system-wide unconstrained ridership forecasts by seven fare categories through FY 2029. Within each fare category, the individual route forecasts are then calibrated to match the system-wide forecast totals from the econometric models.

The third stage of the process consists of adjusting the calibrated passenger and vehicle ridership by route to reflect seasonal vehicle capacity constraints, changes in service hours, and/or the net impacts from adding or eliminating service.

Last, the appropriate fares and average fare realizations are applied to the calibrated, capacity-constrained ridership forecasts for each route by fare category. This yields monthly and annual revenue forecasts by route for seven fare categories.

In August 2017, the Washington State Transportation Commission adopted annual fare increases that took effect on October 1, 2017 (FY 2018) and 2018 (FY 2019), effectively changing the fare assumptions for the Baseline and Alternative 1 Forecasts, starting with the September 2017 Forecast.

- **Baseline Forecast** – Includes nickel-rounded fare increases in FY 2018 of 2.1% for passengers, 2.9% for non-oversize vehicles, and an average of 1.6% on oversize vehicles, effective October 1, 2017. FY 2019 increases of 2.1%, 2.5% and 0.0%, respectively, are set to follow on October 1, 2018. With no further fare increases, real fares will decline from FY 2020 forward.
- **Alternative 1 Forecast** – Builds on the Baseline Forecast by adding consecutive 2.5% increases each October, from 2019 through 2028 (FY 2020-29), resulting in slightly increasing real fares under current inflation projections.

The FY 2018 projections have been updated to include actual ridership through January 2018 and actual revenue through December 2017.

Adopted

Ridership Impacts

- The February 2018 Forecast for ridership incorporates the latest updated demographic and economic variable projections provided by the State.
- Revisions to the real personal income projections are mixed but generally insignificant over the forecast horizon in terms of ridership impacts.
- The population indices for ferry-served communities have been revised, with working age population values higher and retired age population values lower than the last forecast. This puts upward pressure on commuter ridership while other discounted (senior citizen) vehicle/driver ridership is pulled downward.
- The three measures of employment forecasts exhibit very minor upward impacts on ridership through FY 2021 and slightly downward impacts thereafter.
- Small upward revisions to projected inflation yield slightly lower real fares over time, which tends to put upward pressure on the ridership forecasts.
- Real gasoline price projections have been revised upward in FY 2018 dampening near term ridership. However, real prices are down by 3% or more over the forecast horizon, thereby increasing vehicle/driver ridership demand.
- Ridership for November, December and January combined came in 0.8% lower than projected in November, driven largely by an 8.8% drop in the other discounted fare vehicle/driver ridership. Fiscal year-to-date, ridership is 0.1% above the March 2017 Forecast and 1.8% above the same period in FY 2017.
- Overall, the ridership forecasts for FY 2018 and FY 2019 are 0.2% and 0.5% higher, respectively, than the November Baseline and Alternative 1 Forecasts.

Revenue Impacts

- Fiscal year-to-date revenues are 1.4% higher than the March 2017 Forecast used for budgeting, with fare revenues up 1.5% and capital surcharges 1.0% higher.
- The 2017/19 biennium forecast of \$393.6 M is 1.9 M (0.5%) higher than the November Baseline and Alternative 1 Forecasts. This amount is distributed as \$385.3 M in base fares to the operating account and \$8.3 M in fare surcharge revenue to the capital account.
- For the 2019/21 biennium, forecasted revenues of \$409.6 M under the Baseline Forecast are \$2.8 M (0.7%) higher than projected in November. For the Alternative 1 Forecast, revenues of \$419.0 M are \$3.0 M (0.7%) higher.
- Thereafter, the biennial revenue for the Baseline Forecast ranges from 0.5% to 0.7% higher, and the Alternative 1 Forecast ranges from 0.5% to 0.6% higher than projected in November.

Washington State Ferries

REVENUE PROJECTIONS ~ BASELINE FORECAST

Adopted Fares through October 1, 2018 | No Changes in Fares after FY 2019¹

February 2018 Forecast – Fiscal Years 2018-2029

Fiscal Year	February 2018 Capacity-Constrained Revenue Forecast	Fiscal Year Annual Growth Rate	February Biennium Total	February vs. November Forecast			November 2017 Baseline	
				% Change by Fiscal Year	\$ Change and % Change by Biennium		Capacity-Constrained Revenue Forecast	Biennium Total
2010	\$147,009,545	1.7%						
2011	\$147,447,850	0.3%	\$294,457,395					
2012	\$155,085,373	5.2%						
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 ²	\$193,293,000	3.4%		0.2%			\$192,845,000	
2019	\$200,333,000	3.6%	\$393,626,000	0.8%	\$1,943,000	0.5%	\$198,838,000	\$391,683,000
2020	\$203,814,000	1.7%		0.7%			\$202,353,000	
2021	\$205,801,000	1.0%	\$409,615,000	0.6%	\$2,762,000	0.7%	\$204,500,000	\$406,853,000
2022	\$208,078,000	1.1%		0.6%			\$206,799,000	
2023	\$210,427,000	1.1%	\$418,505,000	0.6%	\$2,463,000	0.6%	\$209,243,000	\$416,042,000
2024	\$212,779,000	1.1%		0.6%			\$211,500,000	
2025	\$215,191,000	1.1%	\$427,970,000	0.6%	\$2,610,000	0.6%	\$213,860,000	\$425,360,000
2026	\$217,510,000	1.1%		0.6%			\$216,116,000	
2027	\$219,651,000	1.0%	\$437,161,000	0.7%	\$2,850,000	0.7%	\$218,195,000	\$434,311,000
2028	\$221,457,000	0.8%		0.6%			\$220,212,000	
2029	\$223,254,000	0.8%	\$444,711,000	0.5%	\$2,367,000	0.5%	\$222,132,000	\$442,344,000

¹ The Baseline Forecast includes 2.1% passenger and 2.9% vehicle fare increases on October 1, 2017, followed by 2.1% and 2.5% increases, respectively, on October 1, 2018 (FY 2019), plus the 25¢ surcharge per fare sold for funding capital expenditures. The Baseline Forecast excludes any further changes to the nominal fares after October 2018, resulting in declining real fares thereafter. The Baseline Forecast also reflects the current programmed level of service subject to capacity constraints.

² FY 2018 includes actual revenue data through January 2018.

Washington State Ferries

REVENUE PROJECTIONS ~ BASELINE FORECAST

Adopted Fares through October 1, 2018 | No Changes in Fares after FY 2019¹

February 2018 Forecast – Fiscal Years 2018-2029

Fiscal Year	February 2018 Capacity-Constrained Revenue Forecast	Fiscal Year Annual Growth Rate	February Biennium Total	Distribution of Revenue to Operating and Capital Programs			
				25¢ Surcharge Revenue for Capital Program	Capital Biennium Total	Base Fare Revenue for Operating Program	Operating Biennium Total
2010	\$147,009,545	1.7%				\$147,009,545	
2011	\$147,447,850	0.3%	\$294,457,395			\$147,447,850	\$294,457,395
2012	\$155,085,373	5.2%		\$2,544,970		\$152,540,403	
2013	\$162,047,033	4.5%	\$317,132,406	\$3,626,191	\$6,171,161	\$158,420,842	\$310,961,245
2014	\$167,441,867	3.3%		\$3,662,690		\$163,779,177	
2015	\$175,965,750	5.1%	\$343,407,617	\$3,894,088	\$7,556,778	\$172,071,662	\$335,850,839
2016	\$181,444,863	3.1%		\$4,007,848		\$177,437,015	
2017	\$186,973,746	3.0%	\$368,418,609	\$4,022,681	\$8,030,529	\$182,951,065	\$360,388,080
2018 ²	\$193,293,000	3.4%		\$4,122,000		\$189,171,000	
2019	\$200,333,000	3.6%	\$393,626,000	\$4,158,000	\$8,280,000	\$196,175,000	\$385,346,000
2020	\$203,814,000	1.7%		\$4,206,000		\$199,608,000	
2021	\$205,801,000	1.0%	\$409,615,000	\$4,258,000	\$8,464,000	\$201,543,000	\$401,151,000
2022	\$208,078,000	1.1%		\$4,314,000		\$203,764,000	
2023	\$210,427,000	1.1%	\$418,505,000	\$4,371,000	\$8,685,000	\$206,056,000	\$409,820,000
2024	\$212,779,000	1.1%		\$4,429,000		\$208,350,000	
2025	\$215,191,000	1.1%	\$427,970,000	\$4,486,000	\$8,915,000	\$210,705,000	\$419,055,000
2026	\$217,510,000	1.1%		\$4,541,000		\$212,969,000	
2027	\$219,651,000	1.0%	\$437,161,000	\$4,594,000	\$9,135,000	\$215,057,000	\$428,026,000
2028	\$221,457,000	0.8%		\$4,643,000		\$216,814,000	
2029	\$223,254,000	0.8%	\$444,711,000	\$4,691,000	\$9,334,000	\$218,563,000	\$435,377,000

¹ The Baseline Forecast includes 2.1% passenger and 2.9% vehicle fare increases on October 1, 2017, followed by 2.1% and 2.5% increases, respectively, on October 1, 2018 (FY 2019), plus the 25¢ surcharge per fare sold for funding capital expenditures. The Baseline Forecast excludes any further changes to the nominal fares after October 2018, resulting in declining real fares thereafter. The Baseline Forecast also reflects the current programmed level of service subject to capacity constraints.

² FY 2018 includes actual revenue data through January 2018.

Washington State Ferries

REVENUE PROJECTIONS ~ ALTERNATIVE 1 FORECAST

Adopted Fares through October 1, 2018 | 2.5% Annual Fare Increases FY 2020-29¹

February 2018 Forecast – Fiscal Years 2018-2029

Fiscal Year	February 2018 Capacity-Constrained Revenue Forecast	Fiscal Year Annual Growth Rate	February Biennium Total	February vs. November Forecast			November 2017 Alternative 1	
				% Change by Fiscal Year	\$ Change and % Change by Biennium		Capacity-Constrained Revenue Forecast	Biennium Total
2010	\$147,009,545	1.7%						
2011	\$147,447,850	0.3%	\$294,457,395					
2012	\$155,085,373	5.2%						
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 ²	\$193,293,000	3.4%		0.2%			\$192,845,000	
2019	\$200,333,000	3.6%	\$393,626,000	0.8%	\$1,943,000	0.5%	\$198,838,000	\$391,683,000
2020	\$206,636,000	3.1%		0.8%			\$205,044,000	
2021	\$212,375,000	2.8%	\$419,011,000	0.7%	\$3,001,000	0.7%	\$210,966,000	\$416,010,000
2022	\$218,349,000	2.8%		0.5%			\$217,170,000	
2023	\$224,820,000	3.0%	\$443,169,000	0.5%	\$2,227,000	0.5%	\$223,772,000	\$440,942,000
2024	\$231,477,000	3.0%		0.5%			\$230,295,000	
2025	\$238,560,000	3.1%	\$470,037,000	0.5%	\$2,315,000	0.5%	\$237,427,000	\$467,722,000
2026	\$245,976,000	3.1%		0.5%			\$244,754,000	
2027	\$253,582,000	3.1%	\$499,558,000	0.6%	\$2,679,000	0.5%	\$252,125,000	\$496,879,000
2028	\$260,996,000	2.9%		0.6%			\$259,459,000	
2029	\$268,413,000	2.8%	\$529,409,000	0.6%	\$3,076,000	0.6%	\$266,874,000	\$526,333,000

¹ The Alternative 1 Forecast includes 2.1% passenger and 2.9% vehicle fare increases on October 1, 2017, 2.1% and 2.5% increases, respectively, on October 1, 2018 (FY 2019), followed by 2.5% annual fare increases each October thereafter, and include the 25¢ surcharge per fare sold for funding capital expenditures. Projected annual inflation is less than the 2.5%, leading to slightly increasing real fares over the forecast horizon. The Alternative 1 Forecast also reflects the current programmed level of service subject to capacity constraints.

² FY 2018 includes actual revenue data through January 2018.

Washington State Ferries

REVENUE PROJECTIONS ~ ALTERNATIVE 1 FORECAST

Adopted Fares through October 1, 2018 | 2.5% Annual Fare Increases FY 2020-29¹

February 2018 Forecast – Fiscal Years 2018-2029

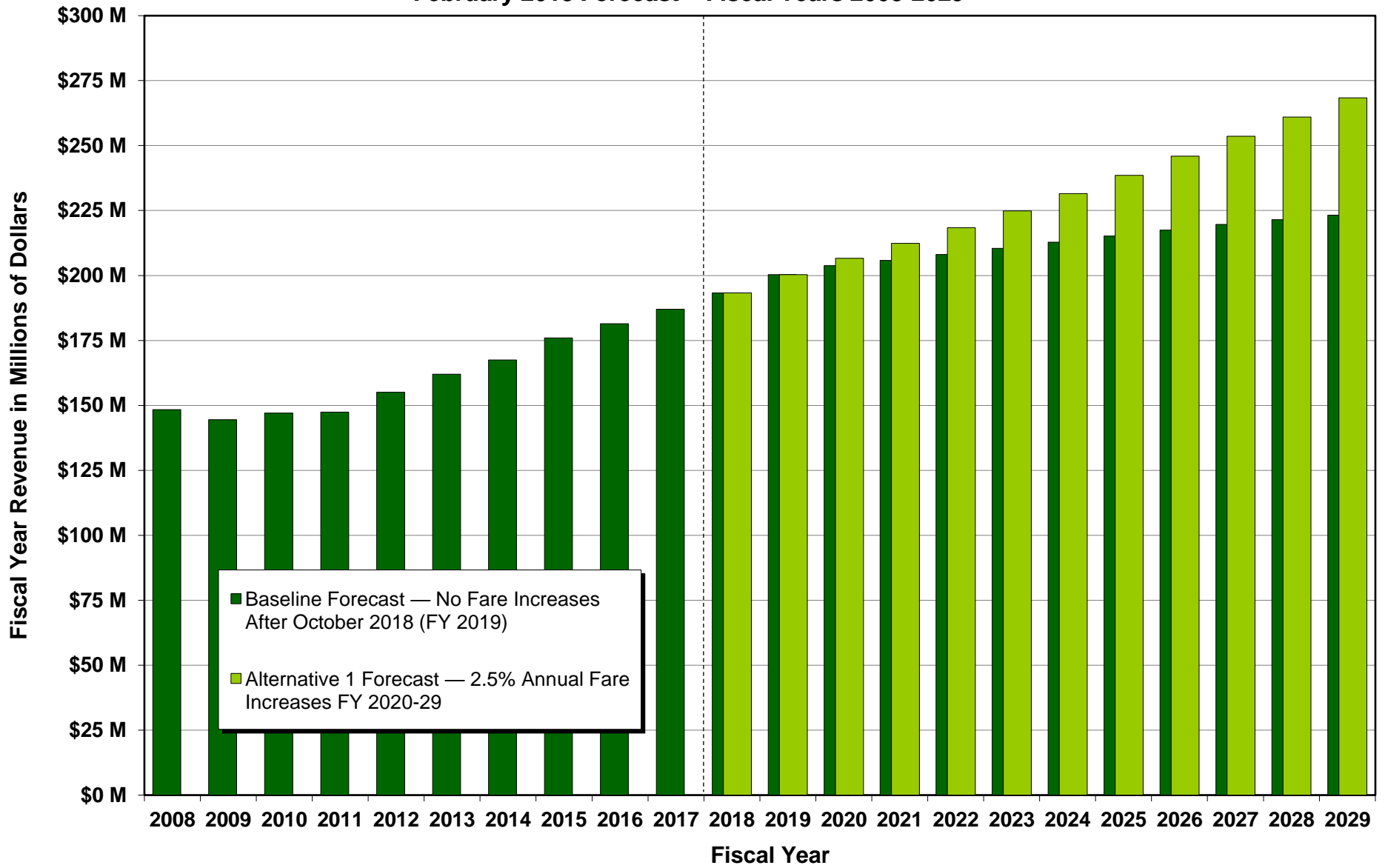
Fiscal Year	February 2018 Capacity-Constrained Revenue Forecast	Fiscal Year Annual Growth Rate	February Biennium Total	Distribution of Revenue to Operating and Capital Programs			
				25¢ Surcharge Revenue for Capital Program	Capital Biennium Total	Base Fare Revenue for Operating Program	Operating Biennium Total
2010	\$147,009,545	1.7%				\$147,009,545	
2011	\$147,447,850	0.3%	\$294,457,395			\$147,447,850	\$294,457,395
2012	\$155,085,373	5.2%		\$2,544,970		\$152,540,403	
2013	\$162,047,033	4.5%	\$317,132,406	\$3,626,191	\$6,171,161	\$158,420,842	\$310,961,245
2014	\$167,441,867	3.3%		\$3,662,690		\$163,779,177	
2015	\$175,965,750	5.1%	\$343,407,617	\$3,894,088	\$7,556,778	\$172,071,662	\$335,850,839
2016	\$181,444,863	3.1%		\$4,007,848		\$177,437,015	
2017	\$186,973,746	3.0%	\$368,418,609	\$4,022,681	\$8,030,529	\$182,951,065	\$360,388,080
2018 ²	\$193,293,000	3.4%		\$4,122,000		\$189,171,000	
2019	\$200,333,000	3.6%	\$393,626,000	\$4,158,000	\$8,280,000	\$196,175,000	\$385,346,000
2020	\$206,636,000	3.1%		\$4,191,000		\$202,445,000	
2021	\$212,375,000	2.8%	\$419,011,000	\$4,213,000	\$8,404,000	\$208,162,000	\$410,607,000
2022	\$218,349,000	2.8%		\$4,236,000		\$214,113,000	
2023	\$224,820,000	3.0%	\$443,169,000	\$4,266,000	\$8,502,000	\$220,554,000	\$434,667,000
2024	\$231,477,000	3.0%		\$4,294,000		\$227,183,000	
2025	\$238,560,000	3.1%	\$470,037,000	\$4,322,000	\$8,616,000	\$234,238,000	\$461,421,000
2026	\$245,976,000	3.1%		\$4,352,000		\$241,624,000	
2027	\$253,582,000	3.1%	\$499,558,000	\$4,383,000	\$8,735,000	\$249,199,000	\$490,823,000
2028	\$260,996,000	2.9%		\$4,411,000		\$256,585,000	
2029	\$268,413,000	2.8%	\$529,409,000	\$4,438,000	\$8,849,000	\$263,975,000	\$520,560,000

¹ The Alternative 1 Forecast includes 2.1% passenger and 2.9% vehicle fare increases on October 1, 2017, 2.1% and 2.5% increases, respectively, on October 1, 2018 (FY 2019), followed by 2.5% annual fare increases each October thereafter, and include the 25¢ surcharge per fare sold for funding capital expenditures. Projected annual inflation is less than the 2.5%, leading to slightly increasing real fares over the forecast horizon. The Alternative 1 Forecast also reflects the current programmed level of service subject to capacity constraints.

² FY 2018 includes actual revenue data through January 2018.

Washington State Ferries — Revenue History and Forecast Trends

February 2018 Forecast – Fiscal Years 2008-2029



Washington State Ferries

RIDERSHIP PROJECTIONS ~ BASELINE FORECAST

Adopted Fares through October 1, 2018 | No Changes in Fares after FY 2019¹

February 2018 Forecast – Fiscal Years 2018-2029

Fiscal Year	February 2018 Unconstrained Demand Forecast*	February 2018 Capacity Constrained Projections				November 2017 Projections	
		Passenger Ridership	Vehicle/Driver Ridership	Total Ridership	Annual Rate of Growth	Total Ridership	Feb. % Chg from Nov.
2010		12,463,027	10,169,074	22,632,101	(0.3%)		
2011		12,242,320	9,968,973	22,211,293	(1.9%)		
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%		
2018²	24,726,000	13,892,000	10,763,000	24,655,000	1.8%	24,615,000	0.2%
2019	24,946,000	14,033,000	10,913,000	24,946,000	1.2%	24,821,000	0.5%
2020	25,226,000	14,166,000	11,057,000	25,223,000	1.1%	25,082,000	0.6%
2021	25,580,000	14,401,000	11,165,000	25,566,000	1.4%	25,442,000	0.5%
2022	25,966,000	14,648,000	11,279,000	25,927,000	1.4%	25,813,000	0.4%
2023	26,375,000	14,899,000	11,401,000	26,300,000	1.4%	26,211,000	0.3%
2024	26,794,000	15,157,000	11,519,000	26,676,000	1.4%	26,575,000	0.4%
2025	27,217,000	15,411,000	11,637,000	27,048,000	1.4%	26,959,000	0.3%
2026	27,662,000	15,679,000	11,744,000	27,423,000	1.4%	27,349,000	0.3%
2027	28,122,000	15,958,000	11,842,000	27,800,000	1.4%	27,727,000	0.3%
2028	28,585,000	16,240,000	11,914,000	28,154,000	1.3%	28,102,000	0.2%
2029	29,060,000	16,530,000	11,980,000	28,510,000	1.3%	28,472,000	0.1%

¹ The Baseline Forecast includes 2.1% passenger and 2.9% vehicle fare increases on October 1, 2017, followed by 2.1% and 2.5% increases, respectively, on October 1, 2018 (FY 2019), plus the 25¢ surcharge per fare sold for funding capital expenditures. The Baseline Forecast excludes any further changes to the nominal fares after October 2018, resulting in declining real fares thereafter. The Baseline Forecast also reflects the current programmed level of service subject to capacity constraints.

² FY 2018 includes actual ridership data through January 2018.

* Excludes adjustments for vessel capacity constraints, 25¢ per fare capital surcharge impacts, and fiscal year-to-date actual data.

Washington State Ferries

RIDERSHIP PROJECTIONS ~ ALTERNATIVE 1 FORECAST

Adopted Fares through October 1, 2018 | 2.5% Annual Fare Increases FY 2020-29¹

February 2018 Forecast – Fiscal Years 2018-2029

Fiscal Year	February 2018 Unconstrained Demand Forecast*	February 2018 Capacity Constrained Projections				November 2017 Projections	
		Passenger Ridership	Vehicle/Driver Ridership	Total Ridership	Annual Rate of Growth	Total Ridership	Feb. % Chg from Nov.
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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%		
2018²	24,726,000	13,892,000	10,763,000	24,655,000	1.8%	24,615,000	0.2%
2019	24,946,000	14,033,000	10,913,000	24,946,000	1.2%	24,821,000	0.5%
2020	25,133,000	14,109,000	11,020,000	25,129,000	0.7%	24,980,000	0.6%
2021	25,293,000	14,242,000	11,042,000	25,284,000	0.6%	25,155,000	0.5%
2022	25,464,000	14,386,000	11,059,000	25,445,000	0.6%	25,351,000	0.4%
2023	25,678,000	14,530,000	11,108,000	25,638,000	0.8%	25,574,000	0.3%
2024	25,886,000	14,668,000	11,153,000	25,821,000	0.7%	25,745,000	0.3%
2025	26,087,000	14,792,000	11,206,000	25,998,000	0.7%	25,938,000	0.2%
2026	26,307,000	14,929,000	11,263,000	26,192,000	0.7%	26,144,000	0.2%
2027	26,536,000	15,075,000	11,321,000	26,396,000	0.8%	26,344,000	0.2%
2028	26,767,000	15,224,000	11,363,000	26,587,000	0.7%	26,541,000	0.2%
2029	27,015,000	15,385,000	11,399,000	26,784,000	0.7%	26,749,000	0.1%

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² FY 2018 includes actual ridership data through January 2018.

* Excludes adjustments for vessel capacity constraints, 25¢ per fare capital surcharge impacts, and fiscal year-to-date actual data.

Washington State Ferries — Ridership History and Forecast Trends

February 2018 Forecast – Fiscal Years 2008-2029

