

**Transportation Revenue  
Forecast Council  
February 2016  
Transportation Economic and  
Revenue Forecasts  
Volume III: Alternate Forecast Tables**

# Transportation Revenue Forecast Council

## Alternative Forecasts

February 2016

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

**REVENUE AND RIDERSHIP PROJECTIONS**  
**FEBRUARY 2016 FORECAST**  
**FISCAL YEARS 2016-2027**

Prepared for  
**Washington State Ferries**

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

February 18, 2016 Meeting

Prepared by  
WSP | Parsons Brinckerhoff

February 12, 2016

# Washington State Ferries

## February 2016 Revenue and Ridership Forecasts — Fiscal Years 2016-2027

### FEBRUARY 2016 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) 2027.

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) oversized 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 2027. 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 2015, the Washington State Transportation Commission adopted two separate fare increases to take place in FY 2016, effectively revising the Baseline and Alternative 1 Forecast Scenarios. The February Forecast scenarios are as follows:

- **Baseline Forecast** – Includes two nickel-rounded fare increases in FY 2016 of 1.0% for passengers and 2.5% for vehicles on October 1, 2015 and May 1, 2016, plus removal of the overweight fare surcharge on vehicles up to 22 feet in length. With no further fare increases, real fares will decline from FY 2017 forward.
- **Alternative 1 Forecast** – Builds on the Baseline Forecast by adding consecutive 2.5% increases each October, from 2017 through 2026 (FY 2018-27), resulting in slightly increasing real fares under current inflation projections.

The FY 2016 projections have been updated to include actual revenue and ridership through January 2016.

### Ridership Impacts

- The February 2016 ridership forecasts reflect the latest updated demographic and economic variable forecasts provided by the State and commercial sources.
- The forecasts for trade/transportation/utilities, retail, and overall non-agricultural employment display a mix of small upward and downward revisions over the forecast horizon, collectively having no material impacts on projected ridership.
- The working age population indices for key ferry service areas have been revised downward based upon the new population forecasts released in November 2015. This tends to decrease ridership forecasts for the two commuter fare categories.
- The forecast for real personal income is slightly lower through FY 2019, then slightly higher thereafter, with parallel impacts to the ridership forecast trends.
- An increasingly downward revision to inflation contributes to slightly higher real fares over the forecast horizon, which tend to dampen the ridership forecasts.
- Projections for real gasoline prices reflect a steep decline for the rest of FY 2016 and continued declines of 2-6% through FY 2023 compared with the previous forecast. Thereafter, the difference tapers off, transitioning to a slight increase by FY 2025 due to a concurrently lower forecast for general inflation. Changes in real gas prices tend to have an inverse effect on the vehicle ridership forecasts.
- Overall, the February Baseline Forecast for ridership in FY 2016 is 0.5% higher than projected in November, showing 1.1% annual growth over FY 2015.
- Actual ridership in November 2015 came in 0.3% lower, though it increased by 0.9% in December 2015 and 0.1% in January 2016. However, vehicle ridership was lower in all three months, which contributed to lower FY 2016 revenue.
- Ridership is projected to be 0.6% higher in FY 2017 than previously forecasted, then ranging from 0.1% higher to 0.3% lower thereafter.

### Revenue Impacts

- For the 2015/17 biennium, forecasted revenues of \$367.0 M are \$0.6 M (0.2%) higher than in November for both the Baseline and Alternative 1 Forecasts.
- The 2015/17 biennium forecast is distributed as \$359.0 M in base fares to the operating account and \$8.0 M in fare surcharge revenue to the capital account.
- For the 2017/19 biennium, forecasted revenues of \$377.5 M under the Baseline Forecast are 0.2% higher than projected in November. For the Alternative 1 Forecast, the 2017/19 biennium projection is \$386.1 M or 0.1% higher.
- Thereafter, projected revenues under both the Baseline and Alternative 1 Forecasts range from unchanged to 0.5% lower than their November values.

# Washington State Ferries

## REVENUE PROJECTIONS ~ ALTERNATIVE 1 FORECAST

Adopted Fares through May 1, 2016 | 2.5% Annual Fare Increases FY 2018-27<sup>1</sup>

February 2016 Forecast – Fiscal Years 2016-2027

| Fiscal Year       | February 2016 Capacity-Constrained Revenue Forecast | Fiscal Year Annual Growth Rate | February Biennium Total | February vs. November Forecast |                                    |        | November 2015 Alternative 1           |                |
|-------------------|---|--------------------------------|-------------------------|--------------------------------|------------------------------------|--------|---------------------------------------|----------------|
|                   |   |                                |                         | % Change by Fiscal Year        | \$ Change and % Change by Biennium |        | Capacity-Constrained Revenue Forecast | Biennium Total |
| 2008              | \$148,379,626                                       | 1.1%                           |                         |                                |                                    |        |                                       |                |
| 2009              | \$144,540,455                                       | (2.6%)                         | \$292,920,081           |                                |                                    |        |                                       |                |
| 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 <sup>2</sup> | \$180,824,000                                       | 2.8%                           |                         | (0.2%)                         |                                    |        | \$181,159,000                         |                |
| 2017              | \$186,167,000                                       | 3.0%                           | \$366,991,000           | 0.5%                           | \$628,000                          | 0.2%   | \$185,204,000                         | \$366,363,000  |
| 2018              | \$190,467,000                                       | 2.3%                           |                         | 0.2%                           |                                    |        | \$190,175,000                         |                |
| 2019              | \$195,643,000                                       | 2.7%                           | \$386,110,000           | 0.1%                           | \$569,000                          | 0.1%   | \$195,366,000                         | \$385,541,000  |
| 2020              | \$201,074,000                                       | 2.8%                           |                         | 0.0%                           |                                    |        | \$201,057,000                         |                |
| 2021              | \$206,081,000                                       | 2.5%                           | \$407,155,000           | (0.1%)                         | (\$144,000)                        | (0.0%) | \$206,242,000                         | \$407,299,000  |
| 2022              | \$211,562,000                                       | 2.7%                           |                         | (0.2%)                         |                                    |        | \$211,990,000                         |                |
| 2023              | \$216,909,000                                       | 2.5%                           | \$428,471,000           | (0.3%)                         | (\$1,159,000)                      | (0.3%) | \$217,640,000                         | \$429,630,000  |
| 2024              | \$222,576,000                                       | 2.6%                           |                         | (0.4%)                         |                                    |        | \$223,499,000                         |                |
| 2025              | \$229,076,000                                       | 2.9%                           | \$451,652,000           | (0.5%)                         | (\$2,048,000)                      | (0.5%) | \$230,201,000                         | \$453,700,000  |
| 2026              | \$235,873,000                                       | 3.0%                           |                         | (0.5%)                         |                                    |        | \$237,133,000                         |                |
| 2027              | \$242,857,000                                       | 3.0%                           | \$478,730,000           | (0.5%)                         | (\$2,568,000)                      | (0.5%) | \$244,165,000                         | \$481,298,000  |

<sup>1</sup> The Alternative 1 Forecast includes includes 1.0% passenger and 2.5% vehicle fare increases on October 1, 2015 and May 1, 2016, followed by annual 2.5% fare increases starting October 2017 (FY 2018), plus 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.

<sup>2</sup> FY 2016 includes actual revenue data through January 2016.

# Washington State Ferries

## REVENUE PROJECTIONS ~ ALTERNATIVE 1 FORECAST

Adopted Fares through May 1, 2016 | 2.5% Annual Fare Increases FY 2018-27<sup>1</sup>

February 2016 Forecast – Fiscal Years 2016-2027

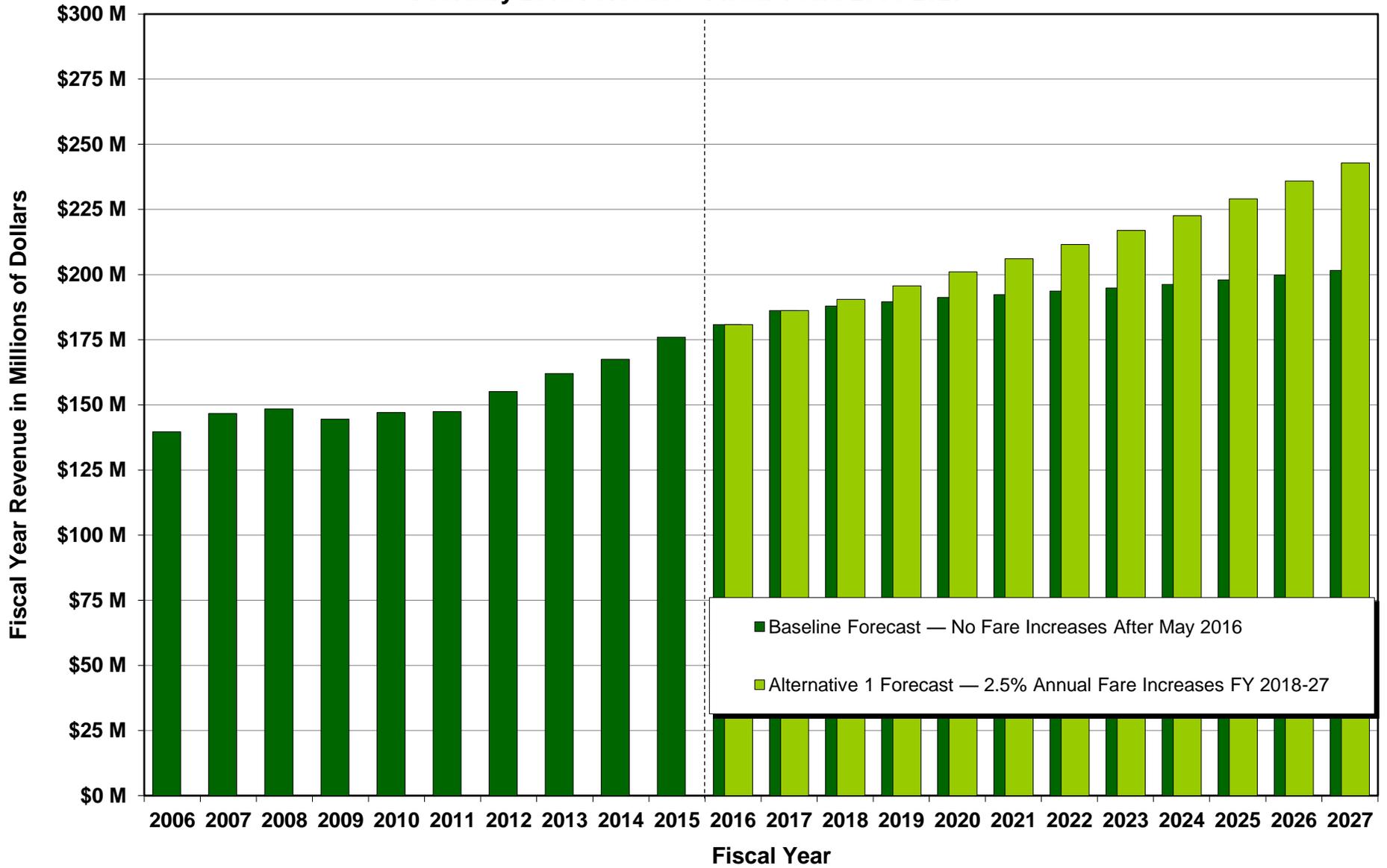
| Fiscal Year       | February 2016 Capacity-Constrained Revenue Forecast | Fiscal Year Annual Growth Rate | February Biennium Total | Distribution of Revenue to Operating and Capital Programs |                        |   |                          |
|-------------------|---|--------------------------------|-------------------------|---|------------------------|---|--------------------------|
|                   |   |                                |                         | 25¢ Surcharge Revenue for Capital Program                 | Capital Biennium Total | Base Fare Revenue for Operating Program | Operating Biennium Total |
| 2008              | \$148,379,626                                       | 1.1%                           |                         |   |                        | \$148,379,626                           |                          |
| 2009              | \$144,540,455                                       | (2.6%)                         | \$292,920,081           |   |                        | \$144,540,455                           | \$292,920,081            |
| 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 <sup>2</sup> | \$180,824,000                                       | 2.8%                           |                         | \$3,997,000   |                        | \$176,827,000                           |                          |
| 2017              | \$186,167,000                                       | 3.0%                           | \$366,991,000           | \$4,011,000   | \$8,008,000            | \$182,156,000                           | \$358,983,000            |
| 2018              | \$190,467,000                                       | 2.3%                           |                         | \$4,036,000   |                        | \$186,431,000                           |                          |
| 2019              | \$195,643,000                                       | 2.7%                           | \$386,110,000           | \$4,049,000   | \$8,085,000            | \$191,594,000                           | \$378,025,000            |
| 2020              | \$201,074,000                                       | 2.8%                           |                         | \$4,067,000   |                        | \$197,007,000                           |                          |
| 2021              | \$206,081,000                                       | 2.5%                           | \$407,155,000           | \$4,074,000   | \$8,141,000            | \$202,007,000                           | \$399,014,000            |
| 2022              | \$211,562,000                                       | 2.7%                           |                         | \$4,088,000   |                        | \$207,474,000                           |                          |
| 2023              | \$216,909,000                                       | 2.5%                           | \$428,471,000           | \$4,103,000   | \$8,191,000            | \$212,806,000                           | \$420,280,000            |
| 2024              | \$222,576,000                                       | 2.6%                           |                         | \$4,119,000   |                        | \$218,457,000                           |                          |
| 2025              | \$229,076,000                                       | 2.9%                           | \$451,652,000           | \$4,142,000   | \$8,261,000            | \$224,934,000                           | \$443,391,000            |
| 2026              | \$235,873,000                                       | 3.0%                           |                         | \$4,166,000   |                        | \$231,707,000                           |                          |
| 2027              | \$242,857,000                                       | 3.0%                           | \$478,730,000           | \$4,194,000   | \$8,360,000            | \$238,663,000                           | \$470,370,000            |

<sup>1</sup> The Alternative 1 Forecast includes includes 1.0% passenger and 2.5% vehicle fare increases on October 1, 2015 and May 1, 2016, followed by annual 2.5% fare increases starting October 2017 (FY 2018), plus 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.

<sup>2</sup> FY 2016 includes actual revenue data through January 2016.

# Washington State Ferries — Revenue History and Forecast Trends

February 2016 Forecast – Fiscal Years 2006-2027



# Washington State Ferries

## RIDERSHIP PROJECTIONS ~ ALTERNATIVE 1 FORECAST

Adopted Fares through May 1, 2016 | 2.5% Annual Fare Increases FY 2018-27<sup>1</sup>

February 2016 Forecast – Fiscal Years 2016-2027

| Fiscal Year             | February 2016 Unconstrained Demand Forecast* | February 2016 Capacity Constrained Projections |                          |                 | November 2015 Projections |                 |                      |
|-------------------------|--|--|--------------------------|-----------------|---------------------------|-----------------|----------------------|
|                         |  | Passenger Ridership                            | Vehicle/Driver Ridership | Total Ridership | Annual Rate of Growth     | Total Ridership | Feb. % Chg from Nov. |
| <b>2008</b>             |  | 12,926,006                                     | 10,441,798               | 23,367,804      | (2.8%)                    |                 |                      |
| <b>2009</b>             |  | 12,580,511                                     | 9,917,249                | 22,497,760      | (3.7%)                    |                 |                      |
| <b>2010</b>             |  | 12,453,226                                     | 10,134,311               | 22,587,537      | 0.4%                      |                 |                      |
| <b>2011</b>             |  | 12,242,320                                     | 9,968,973                | 22,211,293      | (1.7%)                    |                 |                      |
| <b>2012</b>             |  | 12,236,081                                     | 9,983,059                | 22,219,140      | 0.0%                      |                 |                      |
| <b>2013</b>             |  | 12,350,126                                     | 10,045,043               | 22,395,169      | 0.8%                      |                 |                      |
| <b>2014</b>             |  | 12,696,936                                     | 10,154,905               | 22,851,841      | 2.0%                      |                 |                      |
| <b>2015</b>             |  | 13,270,874                                     | 10,387,368               | 23,658,242      | 3.5%                      |                 |                      |
| <b>2016<sup>2</sup></b> | 23,922,000                                   | 13,316,000                                     | 10,606,000               | 23,922,000      | 1.1%                      | 23,808,000      | 0.5%                 |
| <b>2017</b>             | 24,004,000                                   | 13,314,000                                     | 10,690,000               | 24,004,000      | 0.3%                      | 23,865,000      | 0.6%                 |
| <b>2018</b>             | 24,146,000                                   | 13,388,000                                     | 10,758,000               | 24,146,000      | 0.6%                      | 24,126,000      | 0.1%                 |
| <b>2019</b>             | 24,248,000                                   | 13,492,000                                     | 10,756,000               | 24,248,000      | 0.4%                      | 24,255,000      | (0.0%)               |
| <b>2020</b>             | 24,381,000                                   | 13,610,000                                     | 10,765,000               | 24,375,000      | 0.5%                      | 24,400,000      | (0.1%)               |
| <b>2021</b>             | 24,472,000                                   | 13,733,000                                     | 10,728,000               | 24,461,000      | 0.4%                      | 24,475,000      | (0.1%)               |
| <b>2022</b>             | 24,594,000                                   | 13,858,000                                     | 10,718,000               | 24,576,000      | 0.5%                      | 24,619,000      | (0.2%)               |
| <b>2023</b>             | 24,724,000                                   | 13,998,000                                     | 10,701,000               | 24,699,000      | 0.5%                      | 24,766,000      | (0.3%)               |
| <b>2024</b>             | 24,873,000                                   | 14,142,000                                     | 10,693,000               | 24,835,000      | 0.6%                      | 24,909,000      | (0.3%)               |
| <b>2025</b>             | 25,048,000                                   | 14,274,000                                     | 10,717,000               | 24,991,000      | 0.6%                      | 25,075,000      | (0.3%)               |
| <b>2026</b>             | 25,236,000                                   | 14,416,000                                     | 10,746,000               | 25,162,000      | 0.7%                      | 25,247,000      | (0.3%)               |
| <b>2027</b>             | 25,449,000                                   | 14,564,000                                     | 10,789,000               | 25,353,000      | 0.8%                      | 25,436,000      | (0.3%)               |

<sup>1</sup> The Alternative 1 Forecast includes includes 1.0% passenger and 2.5% vehicle fare increases on October 1, 2015 and May 1, 2016, followed by annual 2.5% fare increases starting October 2017 (FY 2018), plus 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.

<sup>2</sup> FY 2016 includes actual revenue data through January 2016.

\* Excludes demand adjustments for potential vessel capacity constraints and impacts due to the 25¢ per fare capital surcharge.

# Washington State Ferries — Ridership History and Forecast Trends

February 2016 Forecast – Fiscal Years 2006-2027

