



WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
FERRIES DIVISION

FINAL LONG-RANGE PLAN

APPENDIX O
SOURCES AND USES

LONG-RANGE PLAN SOURCES & USES

REVENUE & COST ESTIMATE METHODOLOGY

This appendix describes the methodology and assumptions used to develop the Final Long-Range Plan revenues (sources of funds) and costs (uses of funds).

Summary of Key Operating Revenue Assumptions

Farebox Revenue. Revenue received from fares paid by passengers and vehicles.

- Farebox revenue and ridership is based on the Department of Transportation Revenue Forecast Council's (Forecast Council) June 2009 forecast for ridership and farebox recovery.
- Fare increases are based on the Forecast Council's Scenario #2 ("Baseline Fare Increases") – 2.5% fare increases each October, 2009 – 2031, rounded up to the nearest nickel.

Miscellaneous Revenues. Revenue received from vessel and terminal concessions, freight and vessel use fees, on-board Wi-Fi charges, advertising, and parking.

- Revenues are based on the Forecast Council's June 2009 forecast developed by WSF.

State Taxes, Capron Transfers, Fees, and Other Revenue. Authorized by RCW 47.60.530 (created in 1972), provides tax support for operations and maintenance of Washington State Ferries, which includes:

- Motor fuel tax (2.3283% of net gas tax collections or 0.54 cents of 23 cent dedicated gas tax)
- Motor vehicle registration fee (\$2.02 per new registration, \$0.93 per renewal)
- Combined licensing fees (1.411% of collections)
- Tax revenues are based on the Forecast Council's June 2009 forecast.

Other Taxes.

- The funding analysis assumes that WSF will receive the expected \$46.4 million in support from other transportation funds over the next two biennia (per 2009 Legislative session). Following that period, no additional support is anticipated from the motor vehicle fund, except treasury deposit earnings and a small amount of MVET distributions related to the elimination of the handling loss deduction for the motor vehicle fuel tax set forth by SB 5027.

Summary of Key Capital Revenue Assumptions

The funding that is already committed includes:

- Transfers from the Motor Vehicle and Multimodal Accounts in the 16-Year Plan which are assumed to stop at the end of the 16-year commitment.
- Dedicated funding (gas tax) is based on the June forecast.

- Bond proceeds as per the 2009 Legislative Financial Plan.
- An assumed average of about \$15 million per year in Federal funding.

Summary of Key Operation Expenditures & Escalation Indices

Vessels. Operating expenditures include variable and fixed costs. Deck labor (and supplies) and fuel are the major variable costs that are dependent on the vessel type and hours of service. Fixed costs include engine room staff, repairs, and maintenance.

- Deck Labor: Based on annual increases of 3.6% per year.
- Fuel: Based on the Forecast Council's June 2009 forecast for diesel fuel price per gallon. Fuel prices assume cost savings attributable to slowing vessels down on average 0.5 knot in the summer and 0.75 knot in the spring, fall, and winter.
- Non-Labor, Fixed Vessel, and Management & Support costs: Based on general implicit price deflator (IPD) for personal consumption (2.0% per year average).

Terminals. Operating expenditures include only fixed costs associated with labor and materials.

- Expenditures are escalated using a blended average of labor and non-labor escalation (assumed 3.0% per year average).

Summary of Key Capital Expenditure Escalation Indices

Vessel Preservation. Vessel preservation needs are developed using the Life Cycle Cost Model (LCCM), which identifies when assets are expected to be replaced, based on current condition ratings and an expected useful life.

- Based on Bureau of Labor Statistics (BLS) ship repair non-military index (3.75% per year).

Vessel Improvements & Emergency Repairs. Expenditures include fuel conservation, regulatory-related and other targeted vessel improvements. Fuel conservation investments are designed to support the fuel conservation program in the 2009-11 bienniums. No further fuel conservation investments are assumed. In new vessels, fuel conservation measures will be incorporated into the design.

- Based on Bureau of Labor Statistics (BLS) ship repair non-military index (3.75% per year).

Vessel Procurement. The most significant capital funding need over the next 22 years is new vessel acquisitions to support the upcoming retirements of several aging vessels in the fleet.

- Based on Bureau of Labor Statistics (BLS) ship construction non-military (4.70% per year).

Terminal Preservation & Improvements. Terminal preservation needs are developed using the LCCM, which has been updated for current facility condition ratings and to reflect current costs of asset replacement. Improvements reflect some modest terminal improvements, where projects can be demonstrated to add significant value. The projects include a vehicle reservation system, major terminal projects at Seattle, Anacortes, Mukilteo, and Edmonds, and other small projects.

- Escalation is similar to the general implicit price deflator (IPD) for personal consumption (2.0% per year average).

Long Range Plan: Operating and Capital Funding
Washington State Department of Transportation
Washington State Ferries Sources and Uses of Funds

millions of dollars

Operating Program	2009-11	2011-13	2013-15	2015-17	2017-19	2019-21	2021-23	2023-25	2025-27	2027-29	2029-31	Total 2009-2031	16-Yr Total
Cash Carry-Forward	(4.4)	(19.8)	(39.5)	(94.5)	(153.8)	(213.5)	(270.0)	(314.7)	(362.5)	(406.0)	(448.7)		
Sources of Funds													
Farebox Revenue *	306.7	335.1	357.8	383.9	413.1	444.1	476.7	510.5	545.2	581.8	610.8	4,965.6	3,227.8
Miscellaneous Revenue (Concessions, etc)	7.4	7.9	8.2	8.7	9.3	10.0	10.6	11.3	12.1	12.9	13.7	112.1	73.5
Total Operating Revenues Generated	314.1	343.0	366.0	392.6	422.4	454.1	487.3	521.8	557.3	594.7	624.5	5,077.7	3,301.3
Uses of Funds													
Vessel Costs													
Deck Labor Cost	101.6	104.6	110.6	117.8	125.4	134.6	144.5	155.1	166.4	178.6	200.7	1,540.0	994.2
Fuel Cost **	73.3	86.2	104.1	112.2	119.7	123.3	118.6	127.9	133.4	139.9	147.0	1,285.6	865.2
Other non-labor Cost	4.3	4.5	4.7	4.8	5.0	5.2	5.4	5.7	5.9	6.1	7.1	58.7	39.6
Fixed Vessel Costs	111.0	117.5	128.5	138.7	148.5	158.0	168.1	178.9	185.9	195.9	179.8	1,710.9	1,149.3
Total Vessel Costs	290.2	312.8	347.9	373.5	398.6	421.1	436.7	467.5	491.6	520.5	534.7	4,595.1	3,048.3
Terminal Costs	76.9	78.3	82.9	87.8	92.9	98.4	104.2	110.3	117.0	124.1	133.6	1,106.5	731.7
Management & Support Costs	53.7	56.6	59.0	61.4	63.9	66.5	69.3	72.1	74.9	77.9	81.0	736.2	502.4
Other Misc Costs (State Employee Compensation Adj)	(3.2)	(3.2)	(3.4)	(3.5)	(3.5)	(3.5)	(3.6)	(3.7)	(3.8)	(3.9)	(3.9)	(39.2)	(27.6)
Total Uses of Funds	417.6	444.5	486.4	519.2	551.9	582.5	606.5	646.2	679.8	718.7	745.3	6,398.6	4,254.8
Subsidy Required/Operating Surplus	(107.8)	(121.4)	(159.9)	(221.2)	(283.2)	(342.0)	(389.2)	(439.1)	(485.0)	(530.1)	(569.5)	(1,320.8)	(953.5)
State Taxes (Gas Tax) + Capron Act	45.5	46.8	47.8	49.3	51.0	52.7	54.7	56.3	58.0	59.9	61.7	583.8	404.1
Licenses, Permit and Fees	15.3	15.8	16.4	17.0	17.5	18.0	18.5	19.1	19.7	20.3	21.0	198.5	137.6
Taxes and Fees (Transfers Assumed in 16-Yr Plan)	27.2	19.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	57.3	53.7
Presumed Level of Subsidy Under Current Legal Arrangements for Ferry Operations	88.0	81.8	65.4	67.4	69.7	72.0	74.4	76.6	78.9	81.4	83.9	839.6	595.3
Annual operating surplus/(deficit)	(15.5)	(19.7)	(55.0)	(59.3)	(59.8)	(56.5)	(44.7)	(47.8)	(43.5)	(42.6)	(36.9)	(485.6)	(362.5)
Cumulative operating surplus/(deficit)	(19.8)	(39.5)	(94.5)	(153.8)	(213.5)	(270.0)	(314.7)	(362.5)	(406.0)	(448.7)	(485.6)	(485.6)	(362.5)
Farebox Recovery (farebox revenues/total use of funds)	73%	75%	74%	74%	75%	76%	79%	79%	80%	81%	82%	78%	78%
Fuel Surcharge													
Fuel Surcharge Revenues ***	20.2	19.5	36.0	44.8	50.5	52.1	39.7	40.4	42.9	45.6	44.2	435.8	303.1
Cumulative operating surplus/(deficit) with Fuel Surcharge	0.3	0.1	(18.9)	(33.4)	(42.7)	(47.0)	(52.0)	(59.4)	(60.1)	(57.1)	(49.8)	(49.8)	(59.4)

Capital Program	2009-11	2011-13	2013-15	2015-17	2017-19	2019-21	2021-23	2023-25	2025-27	2027-29	2029-31	Total 2009-31	16-Yr Total
Cash Carry-Forward	1.6	5.6	(0.8)	(337.0)	(611.1)	(787.0)	(885.8)	(912.1)	(954.1)	(1,848.1)	(2,834.8)		
Sources of Funds													
State Distribution of Gas Tax	35.9	36.8	37.5	38.4	39.5	40.6	42.1	43.3	44.3	45.4	46.5	450.2	314.0
State Revenue from 2003 Transportation Account	51.7	50.0	15.0	5.1	13.9	0.0	0.0	0.0	0.0	0.0	0.0	135.6	135.6
State Revenue from 2005 Transportation Partnership Account	67.2	23.2	10.8	0.0	0.0	24.3	0.0	0.0	0.0	0.0	0.0	125.6	125.6
Admin Transfer from Multimodal Account	0.2	45.4	15.7	27.2	20.0	100.0	122.0	120.0	0.0	0.0	0.0	450.5	450.5
Total State Taxes and Fees for Ferry Capital	155.0	155.4	79.0	70.7	73.3	164.9	164.1	163.3	44.3	45.4	46.5	1,161.9	1,025.8
Bond Proceeds (R-49 & Multimodal GO)	118.0	127.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	245.0	245.0
Treasury Deposit Earnings	2.5	2.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	6.4
Local Funds	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	8.5
Federal Funds	38.3	32.5	35.0	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	339.8	252.0
Total Sources of Funds	322.3	317.3	115.5	99.9	102.6	194.2	193.4	192.6	73.6	74.6	75.7	1,761.7	1,537.7
Uses of Funds													
Emergency Repairs	6.3	4.6	4.9	5.2	5.6	6.0	6.4	6.9	7.4	7.9	8.5	69.8	46.0
Terminal Preservation	50.7	69.3	55.9	173.2	95.9	129.2	49.3	49.2	129.7	79.3	103.4	985.1	672.7
Terminal Improvements	23.7	19.7	15.2	34.6	17.6	0.0	0.0	0.0	0.0	0.0	0.0	110.8	110.8
Total New Vessel Construction	117.3	139.4	249.0	0.0	0.0	0.0	0.0	13.6	655.7	718.7	0.0	1,893.6	519.2
Vessel Preservation	50.3	33.4	68.3	101.6	98.9	99.1	112.7	126.8	140.5	219.5	227.2	1,278.2	691.1
Vessel Improvements	12.5	4.7	5.4	6.0	6.6	7.3	7.8	7.5	8.0	8.6	9.2	83.5	57.7
Admin, Support, & Indirect	24.0	21.2	21.7	22.3	23.1	24.0	24.9	25.8	26.8	27.8	28.8	270.4	187.0
Total Capital Projects	284.8	292.3	420.4	342.9	247.8	265.6	201.1	229.8	968.0	1,061.8	377.1	4,691.5	2,284.6
State Employee Compensation Adj	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.5)	(4.5)	(3.2)
Existing Debt Service	33.8	31.8	31.8	31.5	31.1	27.8	19.0	5.2	0.0	0.0	0.0	212.1	212.1
Total Uses of Funds	318.2	323.7	451.8	374.0	278.5	293.0	219.7	234.6	967.6	1,061.3	376.6	4,899.0	2,493.5
Annual capital surplus/(deficit)	4.0	(6.4)	(336.3)	(274.1)	(175.9)	(98.8)	(26.3)	(42.0)	(894.0)	(986.7)	(300.9)	(3,135.7)	(954.1)
Cumulative Capital Fund Balance (Capital Sources Minus Uses)	5.6	(0.8)	(337.0)	(611.1)	(787.0)	(885.8)	(912.1)	(954.1)	(1,848.1)	(2,834.8)	(3,135.7)	(3,135.7)	(954.1)
Net operating surplus/(deficit)	(19.8)	(39.5)	(94.5)	(153.8)	(213.5)	(270.0)	(314.7)	(362.5)	(406.0)	(448.7)	(485.6)	(485.6)	(362.5)
Total Funding Needed for 2030 Ferry Plan	(14.2)	(40.3)	(431.5)	(764.9)	(1,000.5)	(1,155.8)	(1,226.9)	(1,316.7)	(2,254.2)	(3,283.5)	(3,621.3)	(3,621.3)	(1,316.7)

* Based on the June Forecast for Ridership, Revenue, and Fuel Projections

** Based on Global Insights June Baseline Diesel forecast

*** Fuel Surcharge would only be implemented if Legislature approves fuel surcharge plan