

**EXHIBIT “B”**



**WHATCOM COUNTY  
2018-2031 FOURTEEN-YEAR  
FERRY CAPITAL PROGRAM**

## Overview

This program provides a blueprint for the effective, efficient, and continuing operation of the Whatcom County Ferry System within existing financial constraints. Capital improvements are scheduled based on many years of experience operating and maintaining the system, while complying with applicable regulations.

Inevitably, priorities and available funds for the ferry system will change over the fourteen years projected in this program. Therefore, the intention of the program is to be a guide indicating long-range improvements and anticipated revenues and expenditures. Strict adherence is not required.

Enacted in 1975, Revised Code of Washington (**RCW**) **36.54.015** states “The legislative authority of every county operating ferries shall prepare, with the advice and assistance of the county engineer, a fourteen year long range capital improvement plan embracing all major elements of the ferry system. Such plan shall include a listing of each major element of the system showing its estimated current value, its estimated replacement cost, and its amortization period.”

**Table 1: Ferry System Current and Replacement Values** – meets applicable requirements, showing the current value, replacement cost, and amortization periods for the vessels and facilities. The current value of the M/V Whatcom Chief is the insured value, the closest approximation of true worth. The facilities’ current value is book value; original cost less depreciation plus depreciated improvements.

**RCW 36.81.121** (1) states “...the legislative authority of each county, after one or more public hearings thereon, shall prepare and adopt a comprehensive transportation program for the ensuing six calendar years....and for those counties operating ferries shall also include a separate section showing proposed capital expenditures for ferries, docks, and related facilities. Copies of the program shall be filed with the county road administration board and the secretary of transportation not more than thirty days after its adoption by the legislative authority...” Subsection (2) requires expanded information on how a county will spend all its money on the various facets of the transportation program. This RCW Section was enacted in 1961. The capital expenditure portion of Subsection (1) is satisfied by:

**Table 2: Projected Revenues** defines the known and/or anticipated sources of operating and capital project funding for the 14-Year Plan.

**Table 3: Projected Expenditures** includes all other expenditures on the system that meet Subsection (2) requirements. Operational expenditures are delineated

between vessel and non-vessel costs. U.S. Coast Guard regulations currently require the ferries to be dry-docked every two years, however to extend the life, improve reliability and protect our capital investment Whatcom County schedules dry-docking every year for its vessel. The landings are inspected regularly as required by the National Bridge Inspection Standards administered through the Washington State Department of Transportation. The inspection report helps identify and schedule major maintenance and replacement of these facilities.

This RCW section also provides the reporting requirement and timing of program submission, as well as establishing the annual update requirement.

Additionally, the Federal Highway Administration requires all agencies within a Metropolitan Planning Organization to develop and annually update the long range Transportation Improvement Plans and their Biennial Element. Whatcom County updates this 14-Year plan each year and incorporates the results into the Six-Year Transportation Improvement Program.

## **Major Project Analysis**

A level of service and alternatives analysis for the vessel and Gooseberry Point terminal relocation will be completed in 2018.

In 2019, preliminary plans will be developed for the replacement of the approach span and transfer span deck on Lummi Island.

## **Major Maintenance/Reconstruction**

### Electrical Upgrades

The Gooseberry Point terminal electrical system was overhauled and updated in 2017 with minor improvements to the newer Lummi Island electrical system.

### Structural Repair and Painting

Structural steel repair and painting of both the Gooseberry Point and Lummi Island terminals is anticipated for construction in 2018.

### Dolphin & Breakwater Replacement

Engineering and design to replace the remaining timber dolphins and breakwater at the Lummi Island terminal with steel structures will continue in 2018. Construction will be scheduled as funding and operational periods allow.

### Vessel Dry-Docking

US Coast Guard regulations require periodic inspections of all ferry vessels. In addition to yearly certifications, each vessel is required to be dry-docked every two years, with an underwater hull survey required as part of the annual certification between dry dockings. Whatcom County schedules dry-docking every year. The engine overhaul, vessel painting, hull repairs, and other major

and minor repairs occur during dry-docking. Propulsion engine overhauls occur every third year. Generator engines are overhauled on a six-year cycle. Engines are replaced every ten to twelve years. Every three to five years, a vessel survey is conducted to assess the vessel's overall condition (last valuation was in 2014), establish the fair market value, estimate replacement cost, and provide a detailed hull strength assessment. This survey is used in part to determine the requirements for hull plating and framing replacement, and is also a requirement of the current insurance carrier.

## **Minor Maintenance**

General minor maintenance is continual on the ferry, landings, aprons, approaches, and waiting facilities. The costs and extent of the work is unpredictable, and frequently problems must be repaired immediately upon detection. Routine maintenance such as building painting and roof cleaning is more predictable and scheduled in advance.

## **History of the Ferry System**

The ferry system is the only public transportation link for the majority of Lummi Island residents and vehicles to the mainland at Gooseberry Point. In the event of an emergency ferry outage or mechanical failure, the County has contracted pedestrian only ferry services while the vessel is being repaired.

Following is a brief chronology outlining the history of the Whatcom County Ferry System.

### **YEAR EVENT**

- 1926 Lummi Shore Road from Bellingham was completed and a ferry, the Central, owned by Whatcom County and large enough to hold six small Model-T Fords started making scheduled runs between Lummi Island and Gooseberry Point.
- 1929 The slightly larger Chief Kwina replaces the Central.
- 1950 Gooseberry Point terminal built.
- 1962 The M/V Whatcom Chief begins service.
- 1978 Lummi Island terminal is relocated.
- 1982 New lift mechanism installed on transfer span at Lummi Island.  
Gooseberry Point pier refurbished
- 1987 Gooseberry Point Transfer span, wing walls and dolphins replaced
- 1997 Major refurbishment of Gooseberry point landing accomplished
- 2002 20-Year Plan Phase 1 Process and report completed.
- 2005 Major Status Report on Ferry System
- 2006 Lummi Island Dock preservation project (Bearing Seats Rebuild).  
Major corrosion repair to vessel hull.

- Completed design package for a 35-car replacement vessel.  
Completed design package for urgent electrical/structural terminal repairs.  
First Rate Increase in 5 years.
- 2008 Rate Increase
  - 2009 Rate adjustment
  - 2009 Emergency wing wall replacement on Lummi Island
  - 2010 Emergency wing wall replacement on Lummi Island
  - 2011 Rate increase and long term lease with the Lummi Nation
  - 2012 Planning and design for the remote control installation at Lummi Island and the wing wall replacement at Gooseberry Point.
  - 2013 Gooseberry Point terminal wooden wingwalls replaced with modern steel-pile supported wingwalls.
  - 2013 Lummi Island terminal transfer span and apron remote control system installed.
  - 2014 Gooseberry Point terminal wooden dolphins replaced with modern steel-pile supported dolphins.
  - 2015 Rate adjustment
  - 2015 Dolphin Emergency Repair – Lummi Island Terminal
  - 2017 Gooseberry Point Electrical Upgrade

## FERRY SYSTEM CURRENT AND REPLACEMENT VALUES - 2017

### VESSELS

	<i>M/V Whatcom Chief</i>	
Current Statistics		
LENGTH (ft)	94	
BEAM (ft)	44	
DISPLACEMENT (tons)	78	
YEAR BUILT	1962	
CAPACITY -- Passengers	100	
CAPACITY -- Cars	20	
CURRENT INSURED VALUE - 2017	\$910,000	
<b>TOTAL CURRENT VALUE - 2017<sup>(1)</sup></b>		<b>\$910,000</b>
Replacement Statistics		
YEAR	2015	
CAPACITY -- Passengers	100	
CAPACITY -- Cars	20	
REPLACEMENT VALUE - 2017 <sup>(2)</sup>	\$5,997,834	
<b>TOTAL - REPLACEMENT VALUE - 2015</b>		<b>\$5,997,834</b>

### FACILITIES

LOCATION	YEAR BUILT	AMORTIZATION SCHEDULED REPLACEMENT YEAR	BOOK VALUE <sup>(4)</sup>	IDP ADJUSTED REPLACEMENT VALUE 2016
<b>Lummi Island Landing</b>				
Transfer Span and Dock	1982	2022	\$195,000	\$990,000
Dolphins/Wingwall <sup>(3)</sup>	1978	2018	\$938,069	\$3,561,000
Parking Lots	2005	2045	\$50,000	\$94,350
Passenger Waiting/Office	1978	2018	\$10,000	\$27,750
<b>Subtotal - Lummi Island Landing</b>			<b>\$1,193,069</b>	<b>\$4,673,100</b>
<b>Gooseberry Point Landing</b>				
Transfer Span and Dock	1987	2027	\$326,000	\$361,860
Dolphins/Wingwall <sup>(3)</sup>	2013, 2014	2053, 2054	\$2,778,235	\$5,039,400
<b>Subtotal - Gooseberry Point Landing</b>			<b>\$3,104,235</b>	<b>\$5,401,260</b>
<b>TOTAL FACILITIES VALUE</b>			<b>\$4,297,304</b>	<b>\$10,074,360</b>
<b>TOTAL VESSEL &amp; FACILITIES VALUE</b>			<b>\$5,207,304</b>	<b>\$16,072,194</b>

NOTES:

- (1) Current Insured Value
- (2) Appreciated Columbia Sentinel Engineers (2014) Replacement Value + IDP Adjustment
- (3) Replace with Steel Pilings, estimation of replacement value due to recent replacement timeframe
- (4) Estimated using a 40-year life and straight-line depreciation (including depreciated improvements)

<b>Lummi Island Ferry 14-Year Capital Program</b>							
<b>All \$ in 000's Revenues 2018-2024</b>							
Category	2017	2018	2019	2020	2021	2022	2023
Punch Card Fares (3)	\$1,172	\$1,203	\$1,235	\$1,267	\$1,300	\$1,334	\$1,369
Cash Fares (4)	293	301	309	317	325	334	342
(Memo 55% of Operating Cost) (1)	1,465	1,504	1,544	1,584	1,626	1,668	1,712
MVFT Deficit Subsidy	275	275	275	275	275	275	275
County Road Fund Subsidy	1,281	1,311	1,342	1,374	1,407	1,441	1,475
	1,385	-	10	-	-	-	-
Total Revenues	4,406	3,090	3,171	3,233	3,308	3,384	3,462
Total Expenditures (2)	4,231	2,914	2,993	3,054	3,127	3,201	3,278
Net Unfunded	(175)	(177)	(178)	(179)	(181)	(182)	(184)

<b>Lummi Island Ferry 14-Year Capital Program</b>							
<b>All \$ in 000's Revenues 2025-2031</b>							
Category	2025	2026	2027	2028	2029	2030	2031
Punch Card Fares (3)	\$1,405	\$1,441	\$1,480	\$1,518	\$1,558	\$1,600	\$1,641
Cash Fares (4)	351	360	370	379	390	400	410
(Memo 55% of Operating Cost) (1)	1,756	1,802	1,850	1,897	1,948	2,001	2,051
MVFT Deficit Subsidy	275	275	275	275	275	275	275
County Road Fund Subsidy	1,510	1,546	1,584	1,622	1,662	1,703	1,743
	-	-	-	-	-	-	-
Total Revenues	3,542	3,623	3,709	3,794	3,885	3,979	4,069
Total Expenditures (2)	3,357	3,436	3,521	3,603	3,692	3,785	3,873
Net Unfunded	(185)	(187)	(189)	(190)	(192)	(194)	(196)

Note 1: After Subtracting the MVFT Deficit Subsidy. Budgeted for 57% fare recovery based on historical

Note 2: As Shown On Table 2, including capital expenditures

Note 3: Equal to 80% of Fares

Note 4: Equal to 20% of Fares

**Lummi Island Ferry 14-Year Capital Program**

**All in 000's Table 2 Expenditures 2018-2024 Page 1**

Category	2018	2019	2020	2021	2022	2023	2024
<b>Operating Expenses</b>							
Vessel Operations							
Personnel	1,332	1,359	1,386	1,414	1,442	1,471	1,500
Fuel & Operating Supplies	708	729	751	774	797	821	845
Insurance	60	62	64	66	68	70	72
Other Operating Expenses	132	137	143	148	154	161	167
<b>Total Vessel Operations</b>	<b>2,232</b>	<b>2,287</b>	<b>2,343</b>	<b>2,401</b>	<b>2,461</b>	<b>2,522</b>	<b>2,584</b>
Other Operations							
Administration	208	212	216	221	225	230	234
Parking Lots/Staging							
Lummi Island	37	38	38	39	40	41	42
Gooseberry Pt.	14	14	15	15	15	15	16
Docks							
Lummi Island	49	50	51	52	53	54	55
Gooseberry Pt.	306	312	318	325	331	338	345
<b>Total Operating Expenses</b>	<b>2,846</b>	<b>2,913</b>	<b>2,982</b>	<b>3,053</b>	<b>3,125</b>	<b>3,199</b>	<b>3,276</b>
<b>Capital Expenditures</b>							
Major Vessel Upgrades	5	-	10	-	-	-	-
Gooseberry Point							
Docks	630	-	-	-	-	-	-
Staging	-	-	-	-	-	-	--
Parking	-	-	-	-	-	-	-
Lummi Island							
Docks	750	-	-	-	-	-	-
Staging	-	-	-	-	-	-	-
Parking	-	-	-	-	-	-	-
<b>Total Capital Program Costs</b>	<b>1,385</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Costs</b>	<b>4,231</b>	<b>2,913</b>	<b>2,992</b>	<b>3,053</b>	<b>3,125</b>	<b>3,199</b>	<b>3,276</b>



**Lummi Island Ferry 14-Year Capital Program**

**All in 000's Table 2 Expenditures 2024-2030 Page 2**

Category	2025	2026	2027	2028	2029	2030	2031
<b>Operating Expenses</b>							
Vessel Operations							
Personnel	1,530	1,561	1,592	1,624	1,656	1,689	1,723
Fuel & Operating Supplies	871	897	924	951	980	1,009	1,040
Insurance	74	76	78	81	83	86	88
Other Operating Expenses	174	181	188	195	203	209	216
<b>Total Vessel Operations</b>	<b>2,648</b>	<b>2,714</b>	<b>2,782</b>	<b>2,851</b>	<b>2,922</b>	<b>2,994</b>	<b>3,067</b>
Other Operations							
Administration	239	244	249	254	259	264	269
Parking Lots/Staging							
Lummi Island	43	43	44	45	46	48	49
Gooseberry Pt.	16	17	17	18	18	19	19
Docks							
Lummi Island	56	57	59	60	61	62	63
Gooseberry Pt.	351	359	366	373	380	388	396
<b>Total Operating Expenses</b>	<b>3,354</b>	<b>3,433</b>	<b>3,517</b>	<b>3,599</b>	<b>3,688</b>	<b>3,775</b>	<b>3,863</b>
<b>Capital Expenditures</b>							
Major Vessel Upgrades	-	-	-	-	-	-	-
Gooseberry Point							
Docks	-	-	-	-	-	-	-
Staging	-	-	-	-	-	-	-
Parking	-	-	-	-	-	-	-
Lummi Island							
Docks	-	-	-	-	-	-	-
Staging	-	-	-	-	-	-	-
Parking	-	-	-	-	-	-	-
<b>Total Capital Program Costs</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Costs</b>	<b>3,354</b>	<b>3,433</b>	<b>3,517</b>	<b>3,599</b>	<b>3,688</b>	<b>3,775</b>	<b>3,863</b>