

EXHIBIT “B”



**WHATCOM COUNTY
2021-2034 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 program intends 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 include all other expenditures on the system that meet Subsection (2) requirements. Operational expenditures are delineated between the 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.

Level-of-Service

On July 24, 2018, the Whatcom County Council passed resolution #2018-026. This resolution established a level of service for the Lummi Island Ferry System. Also, the resolution enacts an action plan to achieve the recommended improvements including:

1. Vessel

- A. Balancing capacity against operating costs (fuel, personnel, etc.) to ensure affordable fares over the long run, including needs-based fares, while optimizing vehicle demand, deck space, and trip frequency to minimize wait times, the design of a 34 car vessel is in the 2021-2026 Six-Year Transportation Improvement Program. The timing of the design and construction shall coincide with the next cycle of funding by the County Road Administration Board.
- B. The design of the vessel shall accommodate all walk-on passengers during typical peak times, accommodate legal loads of vehicles per Washington State Commercial Vehicle Guide and comply with U.S. Coast Guard safety standards and the Americans with Disabilities Act.
- C. To approach the goal of a carbon-neutral vessel and provide flexibility for future electric conversion and reliability, the design of the vessel shall be a hybrid diesel-electric.

2. Terminals

- A. The design of the marine structure modifications to the Gooseberry Point terminal and Lummi Island terminal to accommodate the new vessel are included in the 2021-2026 Six-Year Transportation Improvement Program and take into consideration the plan, listed 2E-2H below, to move the Gooseberry terminal at a future date. The timing of the design and construction shall coincide with the next cycle of funding by the County Road Administration Board and the construction of the new vessel.
- B. In addition to the modifications to accommodate a new vessel, improvements to the Lummi Island terminal shall include: reconfigure the queuing lanes, install ADA restrooms, and improve bicycle and pedestrian loading by locating the queuing area as close to the vessel as possible to reduce the time required to load onto the ferry.

- C. Implement remote ferry queue monitoring.
- D. Implement self-service ticketing.
- E. Whatcom County will initiate an intergovernmental agreement with the Lummi Nation to confirm the location of the Gooseberry Point Terminal as shown on the 2015 Lummi Nation TIGER grant application. Upon the finalization of the agreement, Whatcom County Public Works shall initiate the environmental review and permitting process for the Gooseberry Point terminal relocation.
- F. Construction of the new Gooseberry Point terminal relocation is to be accomplished before the end of the Uplands Lease Agreement with the Lummi Nation (October 2046). The design shall include dual lane loading and improve bicycle and pedestrian loading by locating the queuing area as close to the vessel as possible to reduce the time required to load onto the ferry.
- G. Whatcom County shall coordinate the Gooseberry Point terminal relocation with the Lummi Nation's permitting, funding, and construction of the future Fisherman's Cove Improvements.
- H. As property becomes available, Whatcom County shall purchase lands adjacent and near the new location of the Gooseberry Point terminal. The property will be utilized for off-street queuing, parking, and passenger amenities.
- I. All infrastructures shall be designed to accommodate the 100-year sea-level rise prediction by NOAA.

3. Operations

- A. A Whatcom County ferry district may be created to increase grant opportunities. This district shall be funded by a seasonal surcharge on single cash fares for the capitalization of future vessels.
- B. The long-term improvements shall be phased over time to allow for a complete funding portfolio to leverage a variety of funding sources and mechanisms.

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.

GP denotes work occurred at the Gooseberry Point Terminal

LI denotes work occurred at the Lummi Island Terminal

- 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 (**GP**)
- 1962 The M/V Whatcom Chief begins service
- 1977 Lummi Island terminal is relocated (**LI**)
- 1981 New transfer span and tower superstructure installed (**LI**)
- 1982 Approach span trestle refurbished (**GP**)
- 1986 Transfer span, tower structures, and marine structures replaced (**GP**)
- 1993 South inner and mid-ship timber dolphins replaced/installed (**LI**)
- 1999 Emergency South outer dolphin and breakwater repair (**LI**)
- 1999 Electrical feeder replacement (**GP**)
- 2001 Major maintenance on both terminals including painting, new aprons, electrical work, new hydraulics, tower bolt replacement (**LI** and **GP**)
- 2002 20-Year Plan Phase 1 Process and report completed
- 2005 South outer timber dolphin replaced with steel structure (**LI**)
Major Status Report on the Ferry System
- 2006 Emergency bearing seat pedestal replacement (**LI**)
Parking lot improvements (**LI**)
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
- 2007 Bridge bearings replaced (**LI**)
Electrical repairs (**LI** and **GP**)
- 2008 Two North timber dolphins replaced with steel doughnut dolphins designed for larger 35-car ferry boat design (**LI**)
Counterweight sheaves replaced (**GP** and **LI**)
Rate increase
- 2009 Emergency North wingwall replacement (**LI**)

- Traffic Gates Installed (**LI** and **GP**)
Rate adjustment
- 2010 Emergency South wingwall replacement (**LI**)
- 2011 New live load hangers and pins installed (**GP**)
- 2013 Steel apron flaps replaced with rubber-coated flaps (**LI**)
Timber wingwalls replaced with steel structures (**GP**)
Terminal remote control system installed, electrical and hydraulic equipment updates (**LI**)
- 2014 Terminal remote control system installed (**GP**)
All four timber dolphins replaced with steel structures (**GP**)
- 2015 Steel apron flaps replaced with rubber-coated flaps (**GP**)
Emergency temporary repair to outer timber dolphin (**LI**)
Rate adjustment
- 2017 Electrical system overhaul (**GP**)
- 2018 Structural steel repair work including new lifting beam, new live load hangars, and replacement of corroded high-strength bolts and diagonal bracing (**GP**)
Structural steel repair work including replacement of corroded high-strength bolts and diagonal bracing (**LI**)
- 2019 Commenced public outreach and preliminary vessel and terminal designs
- 2020 COVID 19 significantly impacted operations resulting in lost revenue, reduced ridership, and conversion to cashless fares to mitigate risk
Completed propulsion study for new vessel
Applied for federal Build Grant and state Consolidated Grant Program
Whatcom County obtained approval from USCG to modify the annual dry-docking schedule with a dockside maintenance substitution. This will be continued for future dry dockings when eligible.
Terminal structural improvements and full paint job (**LI**)

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Table 1

FERRY SYSTEM CURRENT AND REPLACEMENT VALUES - 2020						
VESSELS						
Current Statistics		<i>M/V Whatcom Chief</i>				
LENGTH (ft)	94					
BEAM (ft)	44					
DISPLACEMENT (tons)	78					
YEAR BUILT	1962					
CAPACITY -- Passengers	100					
CAPACITY -- Cars	20					
CURRENT INSURED VALUE - 2020	\$890,000					
TOTAL CURRENT VALUE - 2020		<u>\$890,000</u>				
Replacement Statistics						
YEAR	2024					
LENGTH (ft)	184					
BEAM (ft)	54					
DISPLACEMENT (tons)	100					
CAPACITY -- Passengers	150					
CAPACITY -- Cars	34					
REPLACEMENT VALUE ⁽¹⁾	\$19,500,000					
TOTAL - REPLACEMENT VALUE		<u>\$19,500,000</u>				
FACILITIES						
LOCATION	YEAR BUILT OR REBUILT	AMORTIZATION PERIOD END	SCHEDULED REPLACEMENT /MODIFICATION YEAR	CURRENT BOOK VALUE ⁽⁴⁾	ESTIMATED REPLACEMENT COST 2020 \$'s ⁽²⁾	
Lummi Island Landing						
Transfer Span and Dock	1982	2022	2040	\$472,802	\$10,609,000	
Dolphins/Wingwall/Breakwater	1978	2018	2024	\$1,247,481	\$7,426,300	
Upland Facilities	1978	2018	2024	\$60,000	\$4,243,600	
Subtotal - Lummi Island Landing				\$1,780,283	\$22,278,900	
Gooseberry Point Landing						
Transfer Span and Dock	1987	2027	2024-2046	\$569,042	\$24,931,150	
Dolphins/Wingwall ⁽³⁾	2013, 2014	2053, 2054	2024-2046	\$2,945,405	\$3,182,700	
Upland Facilities				\$0	\$10,078,550	
Subtotal - Gooseberry Point Landing				\$3,514,447	\$38,192,400	
TOTAL FACILITIES VALUE				\$5,294,730	\$60,471,300	
TOTAL VESSEL & FACILITIES VALUE				\$6,184,730	\$79,971,300	
NOTES:						
(1) Cost based on 2020 estimate with 3% per year escalation through 2024						
(2) Per 2018 LOS Alternatives Analysis by KPFF Consulting (Costs have been escalated 3% per year and represent a 2020 replacement cost.)						
(3) Replacement requires relocation. A phased approach to relocation will include modifications to existing facilities prior to completion of the new facility.						
(4) Estimated using a 40-year life and straight-line depreciation (including depreciated improvements)						

Table 2

Lummi Island Ferry 14-Year Capital Program							
All \$ in 000's Revenues 2021-2027							
Category	2021	2022	2023	2024	2025	2026⁶	2027
Multi-Ride Fares (3)	\$1,448	\$1,443	\$1,475	\$1,508	\$ 1,542	\$1,944	\$1,987
Single-Ride Fares (4)	362	361	369	377	385	486	497
(Memo 55% of Operating Cost) (1)	1,811	1,804	1,844	1,885	1,927	2,430	2,484
MVFT Deficit Subsidy	250	255	260	265	271	276	282
County Road Fund Operating Subsidy	1,594	1,591	1,626	1,662	1,698	1,736	1,775
County Road Fund Capital Subsidy	3,200	350	550	-	-	-	-
CRAB Capital Ferry Funding					500	500	500
Total Revenues	6,855	3,999	4,279	3,812	4,396	4,942	5,040
Total Expenditures (2)	6,742	3,884	4,162	17,092	20,574	3,858	3,944
Net Unfunded (Funded) (5)	(113)	(115)	(117)	13,281	16,178	(1,084)	(1,097)

Lummi Island Ferry 14-Year Capital Program							
All \$ in 000's Revenues 2028-2034							
Category	2028	2029	2030	2031	2032	2033	2034
Multi-Ride Fares (3)	\$2,032	\$2,078	\$2,124	\$2,172	\$ 2,222	\$2,276	\$2,327
Single-Ride Fares (4)	508	519	531	543	555	569	582
(Memo 55% of Operating Cost) (1)	2,540	2,597	2,656	2,716	2,777	2,845	2,909
MVFT Deficit Subsidy	287	293	299	305	311	317	323
County Road Fund Operating Subsidy	1,814	1,855	1,896	1,939	1,982	2,030	2,076
County Road Fund Capital Subsidy	-	-	-	-	-	-	-
CRAB Capital Ferry Funding	500	500	500	500	500	500	500
Total Revenues	5,141	5,245	5,350	5,459	5,570	5,691	5,808
Total Expenditures (2)	4,031	4,121	4,214	4,308	4,405	4,511	4,612
Net Unfunded (Funded) (5)	(1,110)	(1,123)	(1,137)	(1,151)	(1,165)	(1,181)	(1,196)

Note 1: After Subtracting the MVFT Deficit Subsidy. Budgeted for 55% fare recovery based on historical results until the new ferry is operational. At that point a 25% increase is factored based on new size and expected changes in ridership patterns.

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

Note 3: Equal to 80% of Fares

Note 4: Equal to 20% of Fares

Note 5: Unfunded ferry capital is generally covered using road fund revenue. In the case of years 2024 and 2025 grant funds are being actively sought as the road fund does not have the capacity to cover these deficits

Note 6: Assumed ridership change with operation of new boat.

Table 3

Lummi Island Ferry 14-Year Capital Program							
All in 000's Table 2 Expenditures 2021-2027 Page 1							
Category	2021	2022	2023	2024	2025	2026	2027
Operating Expenses							
Vessel Operations							
Personnel	1,400	1,417	1,445	1,474	1,504	1,534	1,564
Fuel & Operating Supplies	1,039	1,031	1,062	1,094	1,126	1,149	1,183
Insurance	68	70	72	74	77	90	93
Other Operating Expenses	100	104	108	112	117	122	127
Total Vessel Operations	2,607	2,622	2,688	2,755	2,824	2,894	2,967
Other Operations							
Administration	410	412	414	416	418	420	422
Parking Lots							
Lummi Island	10	10	10	11	11	11	11
Gooseberry Pt.	9	9	9	10	10	10	10
Staging Areas							
Lummi Island	28	29	30	31	32	32	33
Gooseberry Pt.	8	8	8	9	9	9	10
Docks							
Lummi Island	69	69	70	72	73	75	76
Gooseberry Pt.	401	375	383	390	398	406	414
Total Operating Expenses	3,542	3,534	3,612	3,692	3,774	3,858	3,944
Capital Expenditures							
Replacement of Whatcom Chief	300	300	500	8,400	10,000	-	-
Terminal Modifications				5,000	6,800		
Gooseberry Pt Terminal Preservation	800	-	-	-	-	-	-
Lummi Island Breakwater Replacement	2,050						
Relocation of Gooseberry Terminal	50	50	50				
Total Capital Program Costs	3,200	350	550	13,400	16,800	-	-
Total Costs	6,742	3,884	4,162	17,092	20,574	3,858	3,944

Table 3 (continued)

Lummi Island Ferry 14-Year Capital Program							
All in 000's Table 2 Expenditures 2028-2034 Page 2							
Category	2028	2029	2030	2031	2032	2033	2034
Operating Expenses							
Vessel Operations							
Personnel	1,596	1,628	1,660	1,693	1,727	1,762	1,797
Fuel & Operating Supplies	1,218	1,254	1,291	1,329	1,368	1,409	1,452
Insurance	95	98	101	104	107	111	114
Other Operating Expenses	132	137	142	148	154	159	163
Total Vessel Operations	3,041	3,117	3,195	3,275	3,356	3,440	3,526
Other Operations							
Administration	425	427	429	431	433	435	437
Parking Lots							
Lummi Island	11	12	12	12	13	13	13
Gooseberry Pt.	10	11	11	11	12	12	12
Staging Areas							
Lummi Island	34	35	37	38	39	40	41
Gooseberry Pt.	10	10	10	11	11	18	19
Docks							
Lummi Island	78	79	81	82	84	86	88
Gooseberry Pt.	422	431	439	448	457	466	476
Total Operating Expenses	4,031	4,121	4,214	4,308	4,405	4,511	4,612
Capital Expenditures							
Replacement of Whatcom Chief	-	-	-	-	-	-	-
Terminal Modifications							
Gooseberry Pt Terminal Preservation	-	-	-	-	-	-	-
Lummi Island Breakwater Replacement	-	-	-	-	-	-	-
Relocation of Gooseberry Terminal	-	-	-	-	-	-	-
Total Capital Program Costs	-	-	-	-	-	-	-
Total Costs	4,031	4,121	4,214	4,308	4,405	4,511	4,612