

Lummi Island Ferry Modernization and Improvement Project Financial Plan

Presented by:

Whatcom County Public Works

Prepared by:

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February 22, 2021

DRAFT



Agenda

1. Project Description and Cost
2. Potential Funding Sources
3. Proposed Funding Plan
4. Next steps



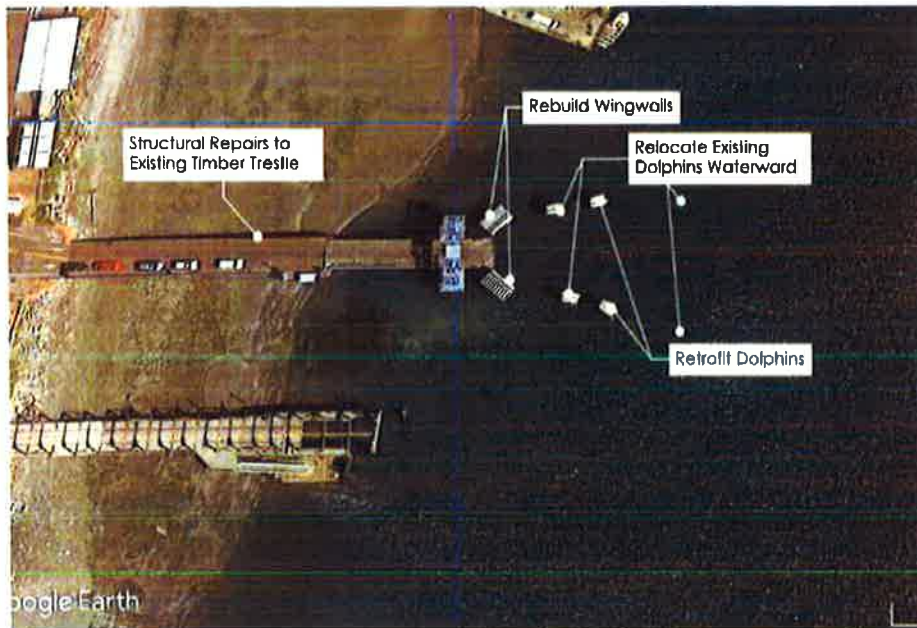
Project Description and Cost

- **Vessel Replacement:** Replace the 60-year-old Whatcom Chief, which is at the end of its useful life and cannot achieve the adopted Level of Service
- **Terminal Improvements:**
 - Adjust marine structures to accommodate the new vessel
 - Replace deteriorated structures
- **Operational and Upland Modifications**
 - Uplands operational improvements at the Lummi Island terminal to improve loading efficiency, monitor vehicle queues, and replace restrooms
 - Ticketing system improvements to expedite fare collection on the larger vessel without impacting crossing times and the service schedule

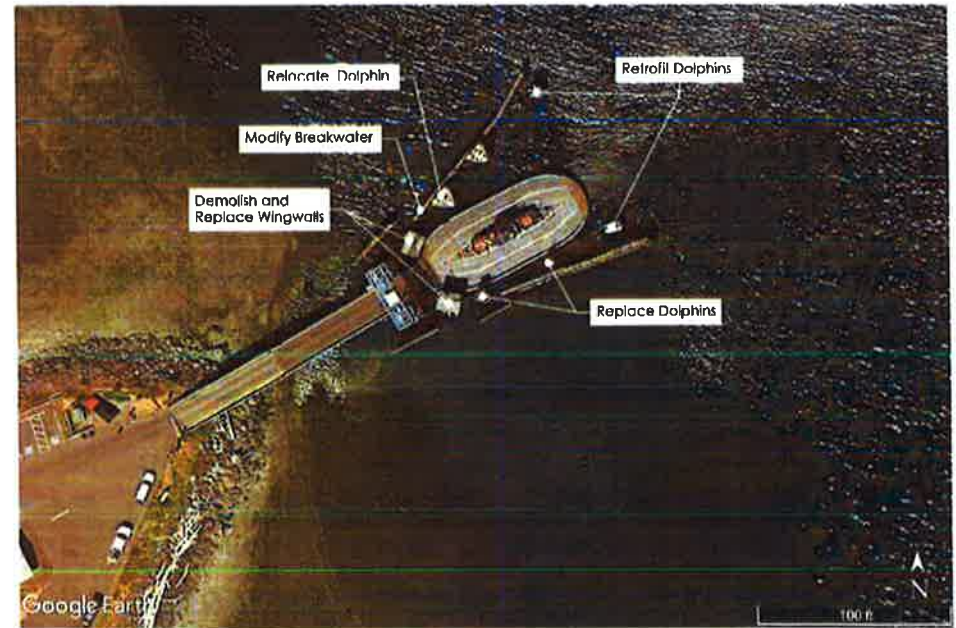


Rendering of the Replacement Vessel

Project Description and Cost



Gooseberry Point Terminal Improvements



Lummi Island Terminal Improvements

Project Description and Cost

Capital Costs (*dollars inflated to year of expenditure*)

\$18.6 M New Vessel Construction
34-car, hybrid diesel-electric ferry

\$12.7 M Terminal Modifications

- Lummi Island: Replace or relocate marine structures to be compatible with the new vessel
- Gooseberry Point: Replace trestle, rebuild or relocate marine structures to be compatible with the new vessel

\$1.6 M Lummi Island Terminal Operational Improvements

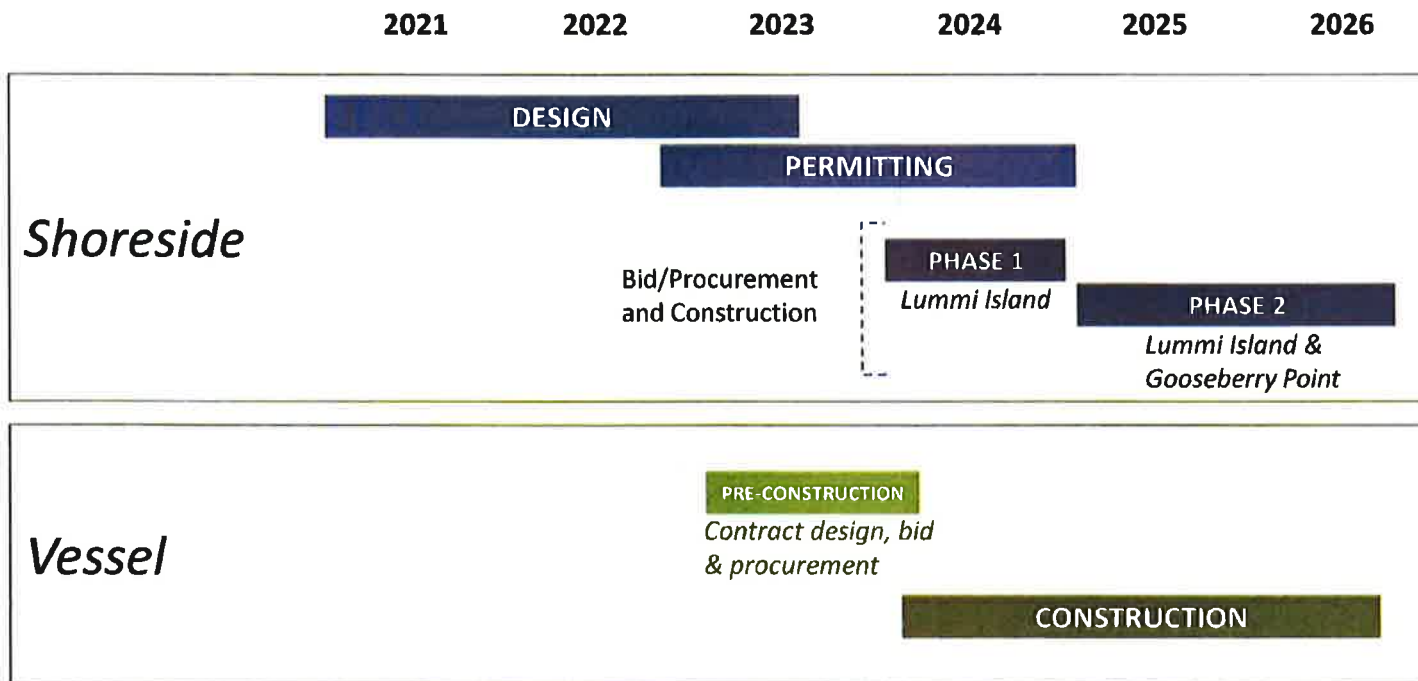
- Improve vehicle and passenger queuing, camera system to monitor LOS
- Replace restrooms

Project Description and Cost

Project Element	2021	2022	2023	2024	2025	2026	Total
Shoreside							
Pre-Construction	102,000	650,000	702,000	113,000	41,000		\$ 1,608,000
Construction				2,130,000	4,607,000	5,995,000	\$12,732,000
<i>Total Shoreside</i>	<i>\$102,000</i>	<i>\$650,000</i>	<i>\$ 702,000</i>	<i>\$2,243,000</i>	<i>\$ 4,648,000</i>	<i>\$5,995,000</i>	<i>\$14,340,000</i>
Vessel							
Pre-Construction			396,000	241,000			\$ 637,000
Construction				7,071,000	9,909,000	965,000	\$17,945,000
<i>Total Vessel</i>			<i>\$ 396,000</i>	<i>\$7,312,000</i>	<i>\$ 9,909,000</i>	<i>\$ 965,000</i>	<i>\$18,582,000</i>
Total Direct Expenditures	\$102,000	\$650,000	\$1,098,000	\$9,555,000	\$14,557,000	\$6,960,000	\$32,922,000

Costs inflated to year of expenditure

Project Schedule



Potential Funding Sources

- Approximately \$33 million dollars is required over the next six years to fund direct expenditures
- Building a funding portfolio for a project of this size will be dependent upon a number of funding sources

Grant Opportunities

Grant	Agency	Details & Status	Due
Ferry Boat Program	FHWA	<ul style="list-style-type: none"> • Receive funds based on formula • Financial plan assumes previous funding levels will be maintained. 	NA
BUILD	US DOT	<ul style="list-style-type: none"> • Submitted proposal in 2020 and were not awarded funds • Received positive feedback and support for resubmitting in 2021 with a financial plan • Maximum \$25M per project 	May 2021
County Ferry Capital Improvement Program	CRAB	<ul style="list-style-type: none"> • Funds are eligible for debt repayment • Counts toward local match for BUILD grant • Maximum \$10M per project distributed in 20 annual installments (Maximum \$0.5M per year) • Insufficient to fund entire project or meet up-front investment requirements 	2022 (four-year cycle)

Capital Surcharge on Fares

Fare Surcharge

- Prescribed in RCW 36.54.200
- Requires County Council action
- Surcharge revenue collected after project completion will fund any debt incurred and future capital projects

Local Funds

County Road Fund

- Funds available to help meet front-end cash flow requirements during construction, either:
 - Unreimbursed, or
 - Reimbursed from CRAB grant funds or capital surcharge revenue

Debt Financing

- Helps with front end cash flows needs by spreading payments out over many years
- Can be repaid through a variety of local revenue sources including CRAB grant and capital surcharge revenue
- Municipal Bond:
 - Assumed at 3% interest with a 10-year repayment period
- Will increase total project cost

Potential Funding Sources Summary

TYPE	SOURCE	PLANNED FUNDING LEVEL	YEAR
Grant	Ferry Boat Program	\$1.25 million	2022-2026
Grant	County Road Administration Board – County Ferry Capital Improvement Program	\$10 million (maximum funding available per project)	2023 - 2042 (Funds distributed in 20 annual payments of \$.5M)
Grant	BUILD (Federal)	\$20 million (less than the \$25 million max. available per project)	2023 - 2026
Local	Capital surcharge on fares (\$1/fare)	\$930,000 (estimated)	2022 - 2026
Local	Road Fund	\$7.3 million (\$1.3M unreimbursed, \$6.0M reimbursed)	2021 - 2026
Debt	Municipal Bond	\$2 million	2026
TOTAL		\$39.5 million	

Proposed Financial Plan

Summary

- The financial plan fully funds anticipated project costs within the construction time with a \$2 million bond issuance repaid through the CRAB grant
- The total cost of debt financing would be \$2.6 million

Funding Source	\$'s
Ferry Boat Program	1,250,000
BUILD Grant	20,000,000
CRAB Grant	10,000,000
Road Fund - Unreimbursed	1,357,000
Road Fund - Reimbursed	5,950,000
Capital Surcharge	930,000
Property Tax	
Municipal Bonds	2,000,000
Total Project Funding	\$ 41,487,000
Less Project Cost (with debt repayment)	\$ 41,487,000
Ending Cash Balance	0
Debt Financing	\$2,000,000 Bonds repaid over 10 years

Timeline / Next Steps

- March/April: County Council adopts financial plan
- May: Whatcom County Council includes adopted financial plan in BUILD grant application

Lummi Island Ferry – Modernization and Improvement Project Financial Plan February 22, 2021 DRAFT

1 Project Description and Cost

The Lummi Island Ferry provides the only publicly available means of transit between the rural Lummi Island and mainland Whatcom County, functioning as a lifeline for the delivery of passengers, vehicles, goods, and emergency services to the island. Built in 1962, the ferry MV *Whatcom Chief* is approaching the end of its useful life. Additionally, with a capacity of 16 standard vehicles the vessel cannot achieve the Level of Service (LOS) recommended by the Lummi Island Ferry Advisory Committee (LIFAC) and adopted by Whatcom County Council. Whatcom County must replace the vessel and invest in terminal, uplands and operational modifications to continue to provide reliable, affordable ferry service and achieve the LOS standards.

1.1 Project Elements

The project is composed of three interrelated and integrated sub-projects: vessel replacement, terminal adjustments and operational and uplands modifications.

1.1.1 Vessel Replacement

In accordance with the LOS Action Plan adopted by Whatcom County Council Resolution No. 2018-026 on July 24, 2018, the MV *Whatcom Chief* will be replaced with a 34-standard vehicle, 150-passenger, double-ended ferry. The vessel will be approximately 184 feet long and 54 feet wide with a maximum loaded draft of 7 feet and 6 inches. To expedite vehicle loading, the vessel is designed with straight lanes and the pilothouse located above the vehicle lanes. The passenger cabin is located to the side of the vessel that will allow for separation of vehicle and passenger loading. The vessel will be powered by a diesel-battery hybrid system and will have the ability to convert to another energy/alternative fuel as power is available or technology advances.

1.1.2 Terminal Adjustments

To accommodate the larger replacement vessel, the marine structures must be adjusted at the Gooseberry Point ferry terminal and the Lummi Island ferry terminal. The project will salvage and reuse the existing structures to the greatest extent feasible. Additionally, the existing timber trestle at the Gooseberry Point ferry terminal requires structural repairs.

1.1.3 Operational and Upland Modifications

Uplands modifications are planned at the Lummi Island Ferry Terminal to reconfigure the vehicle and pedestrian queuing area for more efficient loading, install cameras to implement remote ferry queue monitoring, and replace the restrooms that have reached the end of their useful life with ADA-accessible restrooms.

Additionally, planned improvements include installation of self-service ticket vending machines. The Lummi Island Ferry crew currently collects fares on the vessel while in transit. The short transit time between ferry terminals is typically sufficient for onboard fare collection. However, with a larger vessel, ticketing system improvements are recommended to expedite fare collection and not adversely impact crossing turnaround times.

1.2 Projected Cost

Between 2019 and 2020 approximately \$507,000 has been expended for project development. The estimated design and construction cost to complete all elements of the project are displayed below.

Table 1 – Lummi Island Ferry Replacement Project Cost Estimate¹

Project Element	2021	2022	2023	2024	2025	2026	Total
Shoreside							
Pre-Construction	102,000	650,000	702,000	113,000	41,000		\$ 1,608,000
Construction				2,130,000	4,607,000	5,995,000	\$12,732,000
Total Shoreside	\$102,000	\$50,000	\$ 702,000	\$2,243,000	\$ 4,648,000	\$5,995,000	\$14,340,000
Vessel							
Pre-Construction			396,000	241,000			\$ 637,000
Construction				7,071,000	9,909,000	965,000	\$17,945,000
Total Vessel			\$ 396,000	\$7,312,000	\$ 9,909,000	\$ 965,000	\$18,582,000
Total Direct Expenditures	\$102,000	\$650,000	\$1,098,000	\$9,555,000	\$14,557,000	\$6,960,000	\$32,922,000

1.3 Project Schedule

Design of the new vessel was completed in late 2020. Pre-construction work including preliminary terminal engineering is underway and will continue through 2024, with construction of the new vessel and terminal improvements anticipated to be completed in 2026.

Figure 1 – Lummi Island Ferry Replacement Schedule



¹ Cost inflated to year of expenditure

2 Potential Funding Sources

2.1 County Road Administration Board – County Ferry Capital Improvement Program (CRAB – CFCIP)

The CFCIP was created in 1991 to assist four counties in Washington State operating car ferries that extend the state and local highway system. Whatcom County can apply for a state grant of up to \$10 million; if approved by CRAB, the grant will be subject to additional legislative appropriation. It is anticipated that legislative approval will be secured by July 1, 2023, and funds will be distributed in 20 annual payments of \$500,000.

2.2 BUILD Grant (USDOT)

The Better Utilizing Investments to Leverage Development, or BUILD Transportation Discretionary Grant program, invests in road, rail, transit, ferry and port projects to build, improve and repair freight and passenger transportation networks across the United States. Previously known as Transportation Investment Generating Economic Recovery, or TIGER Discretionary Grants, Congress has dedicated nearly \$8.9 billion for twelve rounds of National Infrastructure Investments to fund projects that have a significant local or regional impact.

Responding to the FY 2020 call for projects, Whatcom County Public Works submitted a BUILD grant application requesting \$20 million for the Lummi Island Ferry System Modernization and Preservation Project. Although a grant was not awarded, the application was favorably evaluated and forwarded for final consideration. The USDOT has announced that they will publish a Notice of Funding Opportunity for FY 2021 BUILD grants by April 26, 2021.

2.3 FHWA Ferry Boat Program

Whatcom County receives an annual distribution of FHWA formula-based ferry boat discretionary funds for capital projects.

2.4 Vessel Replacement Surcharge on Fares

A capital replacement surcharge, as prescribed in RCW 36.54.200, could be levied against all fares to support construction of the new ferry. If a surcharge of \$1.00 on each vehicle and passenger fare is levied, approximately \$186,000 would be collected annually. Surcharge revenue collected after construction is complete will be used to help fund any debt incurred for the project and fund future vessel capital projects. Implementation of the surcharge will require Council action.

2.5 Property Tax Measure

A ferry district, as prescribed in RCW 36.54, may be formed by the Whatcom County Council. Such ferry district will have the authority to levy property taxes on all real and personal property within the boundaries of the district at a levy rate up to \$.75 per \$1,000 of assessed value. The annual yield will vary depending upon the size of the district and the levy rate established and is subject to the approval of a majority of the County Council. The levy rate could be limited in duration.

2.6 Debt Financing

Long-term debt is commonly used to finance large capital assets. While debt financing increases the total cost of a project, it allows state and local governments to acquire or build necessary capital assets sooner by borrowing for up-front costs that cannot be funded from existing reserves or revenues. Spreading out the debt payment over many years, local governments can smooth out their expense and create a more predictable cash flow. General obligation bonds secured by the full faith and credit of the County can be repaid through either existing general revenues and/or a property tax levy.

3 Proposed Funding Plan

As displayed in *Table 1 - Lummi Island Ferry Replacement Project Cost Estimate*, approximately \$33 million dollars is required over the next six years to fund the direct expenditures for the Lummi Island Ferry Modernization and Improvement project. Building a funding portfolio for a project of this size will be dependent upon a number of funding sources. A summary of funding levels by source is displayed in *Table 3*.

3.1 Proposed Funding Sources

3.1.1 BUILD Grant

USDOT has announced that a call for BUILD projects will be issued by April 2021. The project plans to request \$20 million which will likely require a 20 percent local match. Grant funds would be drawn as project expenditures are incurred.

3.1.2 CRAB CFCIP

The County has submitted the project to CRAB and plans to request the maximum grant award in the amount of \$10 million. If CRAB approves the CFCIP application at their spring 2022 meeting it will be forwarded to the legislature for funding in the 2023-2025 biennium. The grant will be distributed in \$500,000 annual payments over 20 years. The first payment is anticipated in calendar year 2023 and will provide part of the required local match to the BUILD grant repay project debt and reimburse the advance from the Road Fund.

3.1.3 FHWA Ferry Boat Discretionary

Formula funding allocations between 2022 and 2026 are estimated to contribute approximately \$1.3 million to project funding.

3.1.4 Ferry Capital Surcharge

The surcharge is expected to generate about \$186,000 annually. If imposed beginning January 2022, over the course of the project construction period it is estimated that the surcharge will collect approximately \$.9 million.

3.1.5 County Road Fund

As noted above, the CRAB grant is distributed over a 20-year period. To meet front-end cash flow requirements during the construction period, the County Road Fund will contribute between 2021 and 2026 a total of \$1.4 million in direct project funding and advance \$6 million from Road Fund reserves that will be reimbursed as over 16 years beginning in 2027.

Table 2 – County Road Funding Contribution by Year

County Road Fund	2021	2022	2023	2024	2025	2026	Total
Unreimbursed	102,000	700,000	555,000				\$ 1,357,000
Reimbursed			147,000	1,225,000	1,184,000	3,394,000	\$ 5,950,000
Total	\$102,000	\$700,000	\$ 702,000	\$1,225,000	\$1,184,000	\$3,394,000	\$ 7,307,000

3.1.6 Municipal Bond Debt Financing

Municipal bonds are assumed at 3% interest with a 10-year repayment period. This rate is similar to one realized recently by another municipality but has not been tested in the current bond market. No allowance has been made for short-term investment of unexpended funds during the construction period.

3.2 Funding Summary

The financial plan fully funds all anticipated project costs on schedule leveraging a \$2 million bond issuance and a \$6 million advance from Road Fund reserves repaid through the CRAB grant. The total cost of bond financing would be \$2.6 million. Although the plan does incorporate a \$1 surcharge on all fares collected, it does not require a new general tax revenue measure. Appendix A displays the cash flow pro forma statement for the proposed financing plan.

Table 3 Funding Summary Table ²

Funding Source	\$'s
Ferry Boat Program	1,250,000
BUILD Grant	20,000,000
CRAB Grant	10,000,000
Road Fund - Unreimbursed	1,357,000
Road Fund - Reimbursed	5,950,000
Capital Surcharge	930,000
Property Tax	
Municipal Bonds	2,000,000
Total Project Funding	\$ 41,487,000
Less Project Cost (with debt repayment)	\$ 41,487,000
Ending Cash Balance	0
Debt Financing	\$2,000,000 Bonds repaid over 10 years

² Capital Surcharge revenue for 2022-2026

Appendix A – Proposed Financial Plan Cash Flow Pro Forma

Financial Plan Preparation General Assumptions

- The financial plan will address this capital project only and will not include operating costs or revenues.
- November 2020 Washington State Economic and Revenue Forecast Table 2.1- IPD was used to inflation adjust shoreside project costs.
- Twenty-year average cost escalation rate from the Bureau of Labor Statistics PPI for ship building and repair was used to inflations adjust vessel project cost estimates.
- The proposed financial plan will be complete but will be preliminary in that informed or researched assumptions will be made about things such as bond interest rates, bond issuance fees, tax levy yields. However, these may be refined at a later date.
- A ten-year repayment term with 3% interest is assumed for the proposed municipal bond issuance.
- The proposed bond issuance package has not been reviewed by bond counsel or a financial institution.

See Excel file *Lummi Financial Plan Appendix 022221*

Lummi Ferry Modernization and Improvement Project
Project Financial Plan

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	Project Total
Expenditures																							
Total Vessel Investments	-	-	396,000	7,312,000	9,909,000	965,000																	\$ 18,582,000
Total Terminal Improvements	102,000	650,000	702,000	2,243,000	4,648,000	5,995,000																	\$ 14,340,000
Municipal Debt Servicing and Repayment						302,000	257,000	257,000	257,000	257,000	257,000	257,000	257,000	257,000	257,000								\$ 2,615,000
Road Fund Reimbursement							250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	700,000	500,000	500,000	500,000	500,000	500,000	500,000	\$ 5,950,000
Total Project Expenditures	\$ 102,000	\$ 650,000	\$ 1,098,000	\$ 9,555,000	\$ 14,557,000	\$ 7,262,000	\$ 507,000	\$ 507,000	\$ 507,000	\$ 507,000	\$ 507,000	\$ 507,000	\$ 507,000	\$ 507,000	\$ 507,000	\$ 700,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 41,487,000
Funding Sources																							
Ferry Boat Program		250,000	250,000	250,000	250,000	250,000																	\$ 1,250,000
BUILD Grant			878,400	7,644,000	11,477,600																		\$ 20,000,000
CRAB Grant			500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	\$ 10,000,000
Road Fund																							
Unreimbursed	102,000	700,000	555,000																				\$ 1,357,000
Reimbursed			147,000	1,225,000	1,184,000	3,394,000																	\$ 5,950,000
Capital Surcharge on Fares		186,000	186,000	186,000	186,000	186,000																	\$ 930,000
Municipal Debt Financing						2,000,000																	\$ 2,000,000
Total Capital Funding Available	\$ 102,000	\$ 1,136,000	\$ 2,516,400	\$ 9,805,000	\$ 13,597,600	\$ 6,330,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 41,487,000
Project Fund Balance	0	\$ 486,000	\$ 1,904,400	\$ 2,154,400	\$ 1,195,000	\$ 263,000	\$ 256,000	\$ 249,000	\$ 242,000	\$ 235,000	\$ 228,000	\$ 221,000	\$ 214,000	\$ 207,000	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -