

July 23, 2024

Lummi Ferry Replacement and System Modernization Project



Agenda

- Project overview
- Estimated costs overview
- Updated funding plan
 - *Alternate project scenarios*
 - *Funding gap by scenario*
 - *Potential funding plan*
- Discussion



Project History

2007 - New 35-Car Ferry project deferred

- Estimated project cost of \$16M (*roughly \$35M in 2024 level dollars*)
- CRAB award for \$8M declined (*roughly \$17.5M in 2024 level dollars*)
- Lummi Island terminal work deferred pending vessel replacement

2018 - County Council adopts LOS recommendation (Resolution 2018-026)

- Replace the Whatcom Chief with 34-car, hybrid diesel-electric vessel and make terminal modifications

2021 - Initial project financial plan adopted by Whatcom County Council March 23, 2021

2021 – Submitted successful application for County Road Administration Board – County Ferry Capital Improvement Program Grant - \$10M

2022 - Received a \$25M RAISE grant for an electric-battery hybrid 34-car vessel and terminal modifications and electrical charging infrastructure



Project Cost History

Estimated project costs have increased approximately 90% since the 2021 financial plan.

Major factors contributing to growth in the Lummi Ferry Replacement base cost estimate were:

- Cost escalation in the shipbuilding sector (contributed over \$7M in cost growth in 2022 alone)
- Updating replacement vessel from diesel to hybrid-electric propulsion (additional \$10M)
- Added passenger-only floats at both terminals (\$2M)
- Accounting for mitigation and Tribal Employment Rights Ordinance (TERO) (\$2M)
- Including the costs of project management and technical support over the term of the project (additional \$2M)
- Other project costs not previously considered, including one-time operating costs and revenue impact (added nearly \$7M)

Industry Cost Escalation Rates

Cost Escalation Rates	2018	2019	2020	2021	2022	2023	2024
Vessels (BLS PPI Shipbuilding)	2.37%	2.03%	0.90%	10.23%	21.19%	13.34%	4.76%
Terminals (Seattle Area CPI)	3.15%	2.50%	1.64%	5.00%	8.95%	5.68%	3.32%



Financial Plan Development

New project financial plan(s) were developed to ensure timely and sufficient funding for the RAISE submitted replacement project. Process included:

- Define project scenarios and schedule
- Estimate expenditures
- Identify known revenue sources
- Identify potential additional revenue sources
- Build cash flow statements for each scenario using debt financing to cover front end funding gaps



Two project scenarios and an in-kind option

Single Phase with Electrification

Complete full electrification project with a 34-car battery electric ferry in a single phase (as anticipated with the RAISE grant application).

Deferred Electrification

Replace the *Whatcom Chief* with a 34-car hybrid diesel propulsion system, make marine structure and uplands improvements in the first phase, deferring full electrification of the vessel and shoreside charging equipment to a later phase.

In-Kind Replacement plus Deferred Terminal Maintenance (*default RAISE grant, reject Level of Service resolution*)

The baseline work required: replace the *Whatcom Chief* with a diesel propulsion ferry with similar capacity (15 cars) that does not meet the Level of Service Study recommendation adopted by the Council and is not compliant with the RAISE grant. Performs deferred terminal maintenance.

Cash flow analysis and funding gaps by Scenario¹

	Single Phase with Electrification	Deferred Electrification	In-Kind Replacement <i>(default RAISE grant & reject LOS recommendations)</i>
Project Expenditures			
Total Capital Asset Investment	82,607,000	87,395,000	39,608,000
Operating Program Impacts	3,215,000	4,672,000	3,215,000
Total Expenditures	85,822,000	92,067,000	42,823,000
Current Funding			
RAISE Grant	25,000,000	25,000,000	Canceled
State CRAB Grant	10,000,000	10,000,000	10,000,000
Received State Appropriation	5,300,000	5,300,000	5,300,000
User Fees	3,651,000	3,651,000	3,651,000
Total Current Funding	43,951,000	43,951,000	18,951,000
Current Funding GAP¹	45,086,000	52,788,000	27,087,000

¹ Before financing costs



Financial Plans – Scenario Assumptions

Some key assumptions and caveats are:

- A bond rate of 4.5% is assumed for a single issuance with a 20-year term.
- A specific local tax revenue source is not identified but local tax funding is assumed to be capped at the equivalent of a \$.05 countywide real property tax levy.
- The plans are preliminary and have not been refined for
 - fund balance requirements
 - potential interfund loans
 - fund balance interest earnings
 - federal match requirement timing
- In all cases the financial plan maintains a positive fund balance and attempts to minimize the ending period fund balance

Financial Plans - Comparison Summary

	Single Phase with Electrification		Deferred Electrification		In-Kind Replacement (default RAISE grant & reject LOS recommendations)
	Higher Additional State Funding +\$18.7M	Lower Additional State Funding +\$8.7M	Higher Additional State Funding +\$18.7M	Lower Additional State Funding +\$8.7M	
Project Expenditures and Debt Servicing Costs					
Total Project Expenditures	85,822,000	85,822,000	92,067,000	92,067,000	42,823,000
Financing Costs	14,554,000	22,133,000	11,634,000	22,701,000	15,891,000
Total Project Expenditures and Debt Servicing Costs	100,376,000	107,955,000	103,701,000	114,768,000	58,714,000
Less Known Available Funding	43,951,000	43,951,000	43,951,000	43,951,000	18,951,000
Total Additional Local Funding Needed	56,425,000	64,004,000	59,750,000	70,817,000	39,763,000
Less Potential Additional State	18,700,000	8,700,000	18,700,000	8,700,000	
Local Funding Needed if Additional State Funds Rec'd	37,725,000	55,304,000	41,050,000	62,117,000	39,763,000



Revenue Options

Available options to meet revenue needs:

- Additional state appropriation (as modeled in scenarios)
- Countywide real property taxing district (ferry district)
- Supplemental federal or state grant funding (secondary funding source)
- Increase fare surcharge (low yield)

Key Project Decision Points

The RAISE Grant funding obligation deadline is September 2026. The project schedule to meet this deadline is outlined below.

Project team tasks to meet RAISE grant and project delivery requirements

Complete 60% terminal design to support permits

Begin Contract Design for terminals and vessel

Federal/State/Local Permits

NEPA Environmental Assessment

JULY 2024

JAN 2025

JUL 2025

JAN 2026

JUL 2026

SEP 2026

RAISE Grant deadline

Key decision points for Council

Confirmation of current project to meet adopted Level of Service goals

Finalize project schedule and funding approach

Adopt a final financial plan with local funding component

Council to approve grant agreement



Key Project Decision Points

What we need from the Council:

- Decision on whether to proceed with the current project that meets the adopted Level of Service goals
- Decision on how to fund the project:
 - Commitment to establishing ferry district
 - Approval to start bonding process

Next steps:

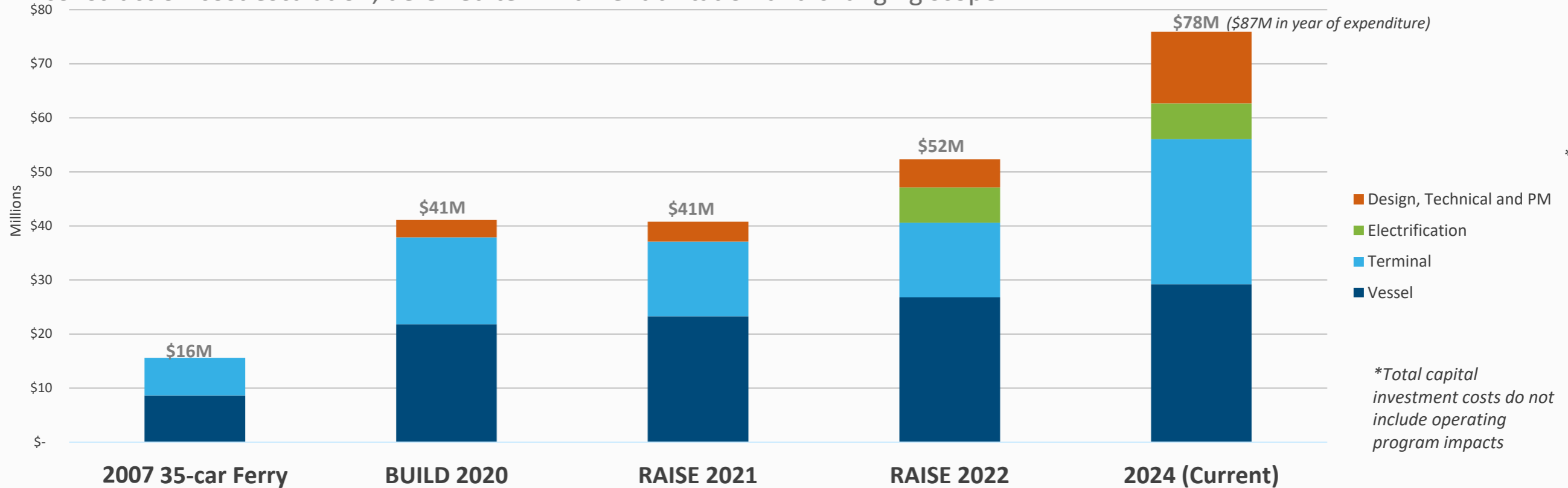
- Public Works provides a memo to the Council summarizing the presentation along with key deadlines.
- Work sessions with the Council on project scenarios to support timely decision-making



Backup slides for reference

Project Cost History – Lummi Island Ferry

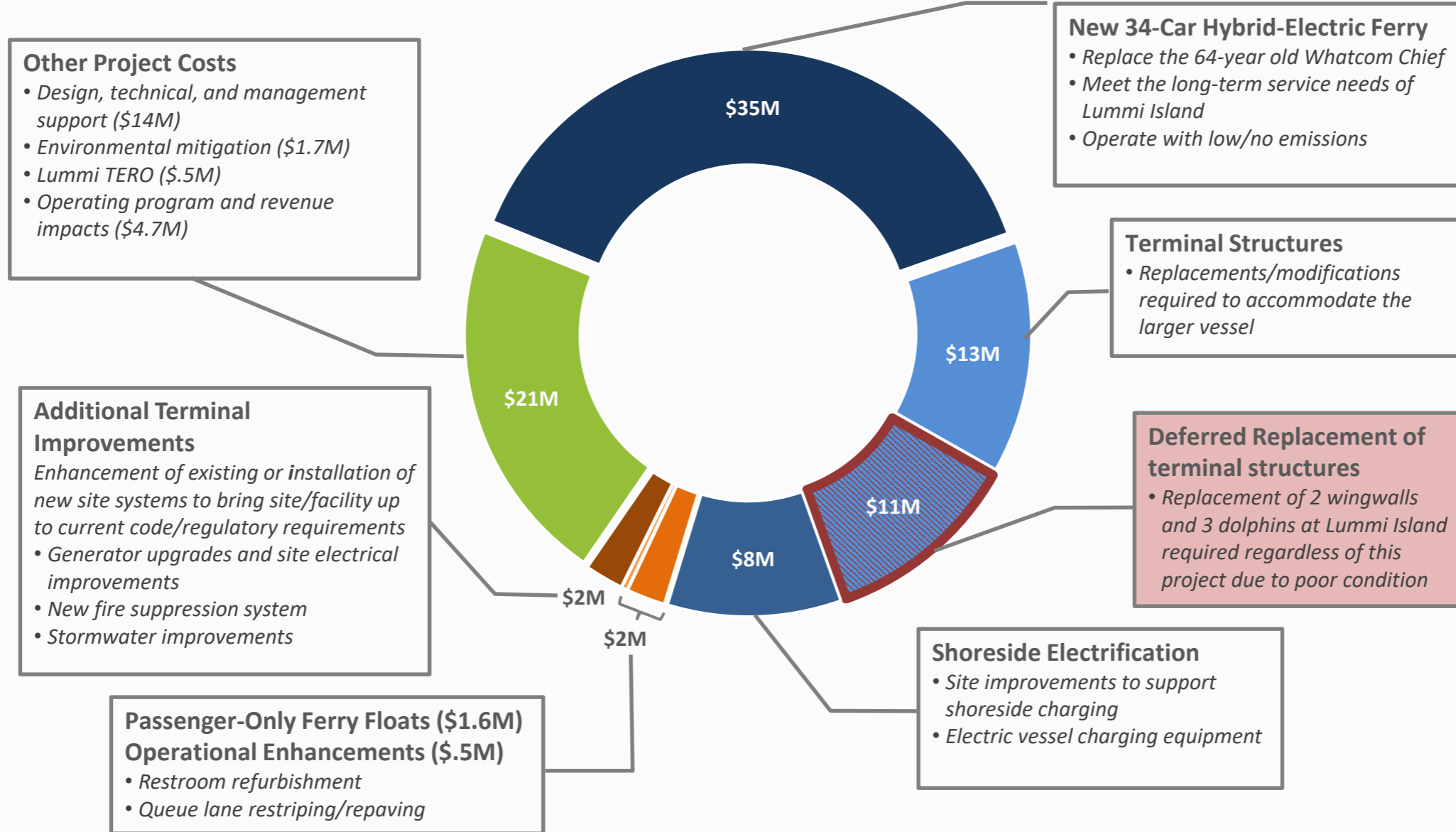
The Lummi Ferry Replacement project cost has grown **significantly** since first proposed in 2007 due to construction cost escalation, deferred terminal rehabilitation and changing scope.



*Total capital investment costs do not include operating program impacts

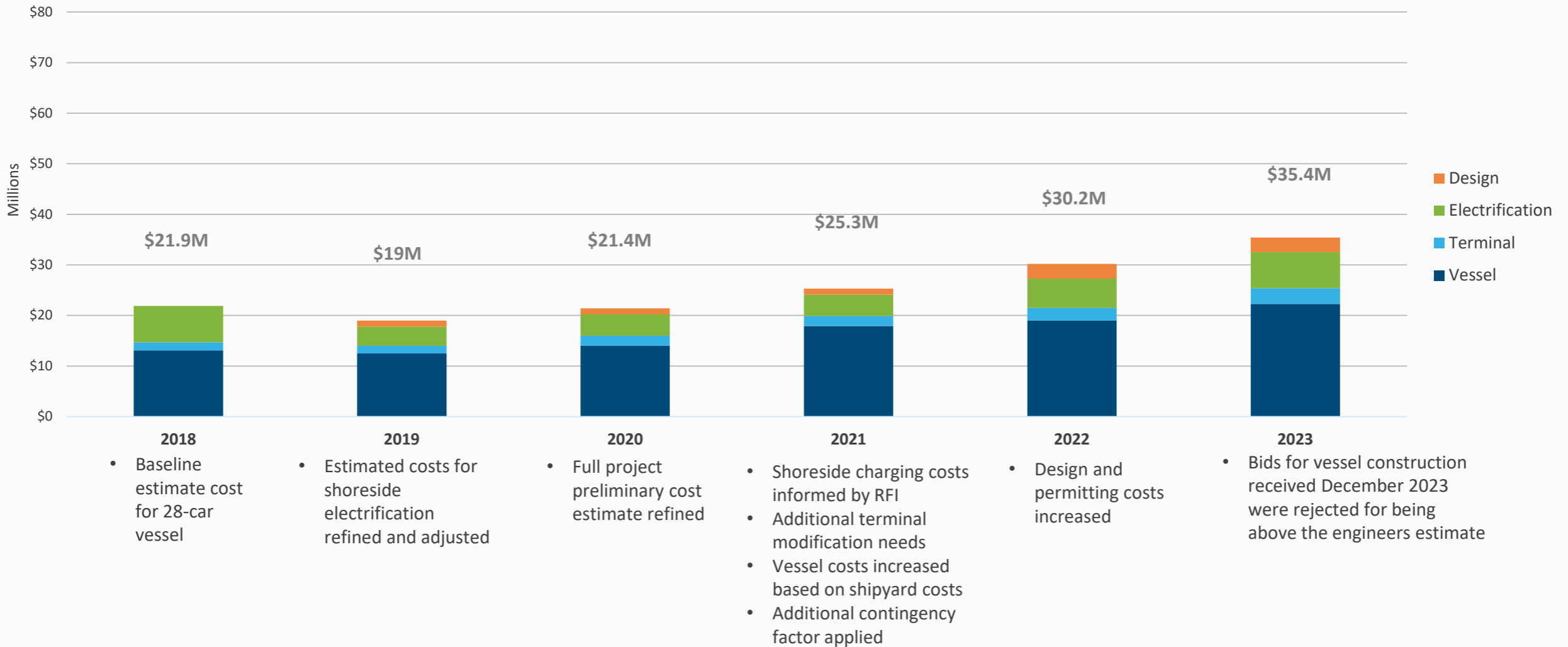
Current Project Costs - \$92M total (before debt financing)

Dollars in year of expenditure (before financing costs), assuming phased electrification



Project Cost History – Guemes Island Ferry

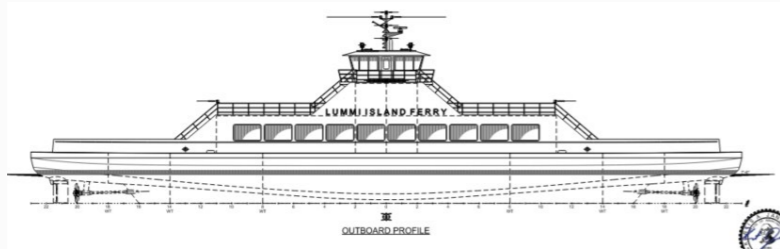
Without an expansion in project scope the cost of the Guemes Island Ferry Replacement Project grew 62%



Comparison to Guemes Ferry Project

Lummi Island Ferry

(34-car, hybrid-electric vessel)

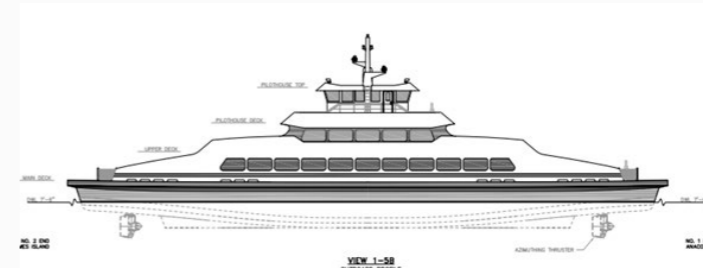


Estimated construction cost (2024 dollars): **\$28M**

\$/car: **\$.82M**

Guemes Island Ferry

(28-car, electric vessel)



Estimated construction cost (2024 dollars): **\$23.7M***

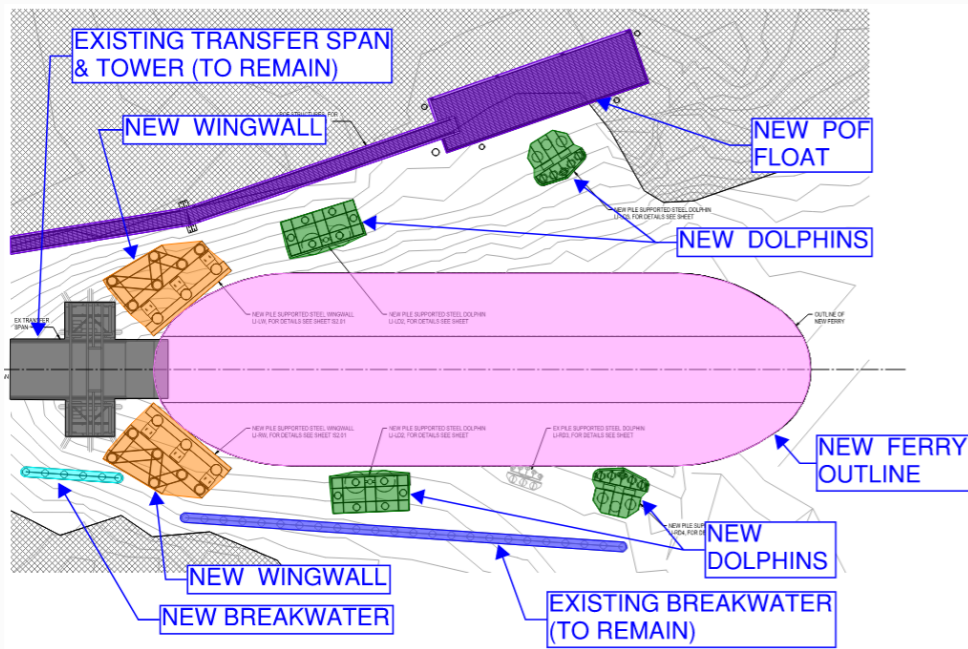
**Cost shown is average of 2 bids received Jan 2024*

\$/car: **\$.85M**

Comparison to Guemes Ferry Project

Lummi Island Ferry – Terminal Improvements

Major modifications to accommodate new larger vessel, including deferred replacement of old/damaged Lummi Island structures. Includes more extensive shoreside improvements.

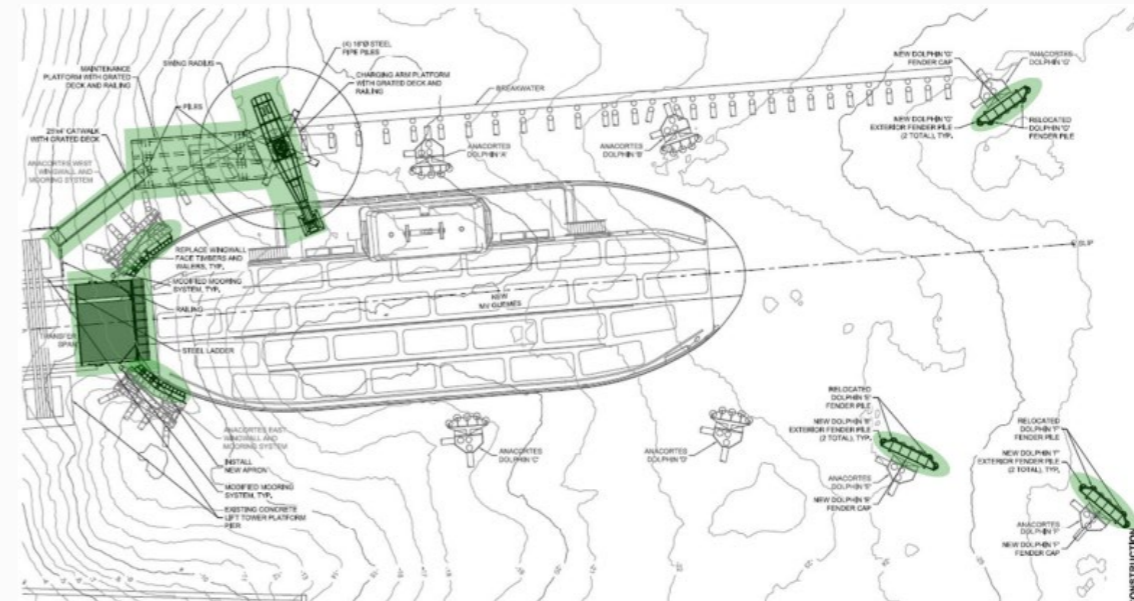


Improvements at both terminals: \$36M

Total project: \$78M

Guemes Island Ferry – Terminal Improvements

Minor modifications to accommodate new vessel—existing slip width is sufficient without major changes. Some shoreside modification and builds a 28-car vessel.



Improvements at both terminals: \$10.2M

Total project: \$35M

Lummi Ferry Replacement Project

One-time Operating & Regulatory Costs

In addition to capital investment cost there are operating program and other project costs that must be included in the project financial plan.

Operating Program Impacts ¹	
Break-in Training Labor	412,000
ER&R Vessel Interfund	1,423,000
Insurance	126,800
POF vessel charter	1,809,600
Contingency	294,300
Moorage	17,800
Revenue Loss	605,900
Total operating program	4,689,400
Potential Mitigation	1,657,269
Estimated TERO	560,753
Total Other Project Costs	6,907,422

Project Scenario Expenditure Comparison¹

	Single Phase with Electrification	Deferred Electrification	In-Kind Replacement
Project Expenditures			
Design, Technical and Management Support	11,989,000	13,827,000	8,649,000
Ferry Replacement/Upgrade	32,407,000	34,709,000	11,572,000
Terminal Modification and Restoration	24,015,000	24,015,000	17,390,000
POF Float Procurement	1,645,000	1,645,000	0
Terminal Electrification	7,093,000	7,736,000	0
Lummi Terminal Uplands Improvements	3,092,000	3,092,000	0
Lummi Building and Restroom Rehabilitation	148,000	153,000	0
Regulatory	2,218,022	1,657,000	1,657,000
Total Project Expenditures	82,607,000	87,395,000	39,608,000
Operating Program Impacts			
Training and Breakin Charges	1,275,000	2,256,000	1,275,000
Other Operating Costs (Charter)	1,352,000	1,810,000	1,352,000
Fare Revenue Loss	588,000	606,000	588,000
Total Operating Program Impact	3,215,000	4,672,000	3,215,000
Total Capital Project Expenditures	85,821,000	92,067,000	42,823,000

¹ Expenditures escalated to the year they are incurred

Currently Available Funding Sources

	With Electrification 34 Car Ferry	Diesel Propulsion 15 Car Ferry
RAISE Grant	25,000,000	0
State CRAB Grant	10,000,000	10,000,000
Received State Appropriation	5,300,000	5,300,000
User Fees	3,651,000	3,651,000
Total	43,951,000	18,951,000

Potential Additional Funding

Skagit County received two State Transportation Fund Appropriations:

- \$14M in 2023 from the Move Ahead Funding Package
- \$10M in 2024 from the State’s Climate Commitment Act(CCA) cap-and-trade program account contingent upon voter rejection of the Initiative I-2117 seeking to repeal the CCA.

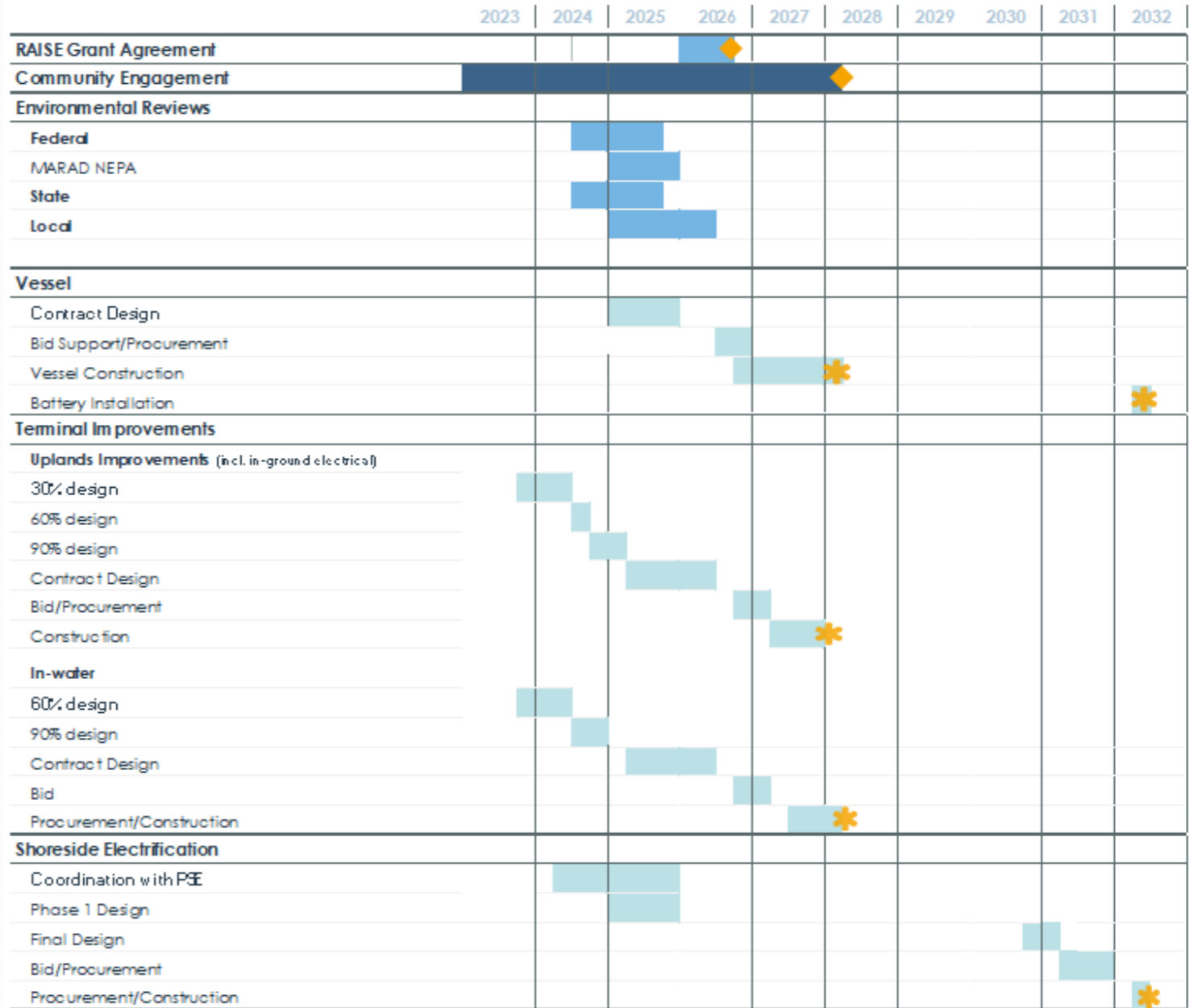
An additional State Transportation Fund appropriation is anticipated at a level similar to the appropriations made to Skagit County for the Guemes Ferry replacement project

- CCA cap-and-trade funding can only be spent on “green” projects.

	With Electrification 34 Car Ferry	Diesel Propulsion 15 Car Ferry
Low Range State Appropriation	\$8,700,000	
High Range State Appropriation	\$18,700,000	

Project Schedule

Lummi Ferry Replacement and Terminal Modifications Project - June 2024 Schedule Update DRAFT



* Indicates completion
 ◆ Identifies project milestone