

SKAGIT COUNTY
PUBLIC WORKS DEPARTMENT
Ferry Operations Division

Fourteen-Year Ferry Capital Improvement Plan
2024-2037



OVERVIEW

The Fourteen-Year Ferry Capital Improvement Plan (the “Plan”) is a general guide for the effective, efficient, and continuing operation of the Skagit County ferry system. This program will assist the County Engineer and Ferry Division management in planning for capital projects that pertain to replacement and improvement for the Skagit County ferry system.

The Plan serves as a general guide for long-term planning, thus does not require strict adherence. As events unfold, future plans may change as the needs of the ferry system and the available financing become clearer. The Board of Skagit County Commissioners, with advice from the County Engineer, will ultimately decide capital improvements based on priority and available funds.

The capital projects listed in the Plan are the result of input from various County departments, governmental agencies, citizen groups, and over sixty years of experience operating and maintaining the ferry system, while complying with applicable state law. To be eligible for grant funding, capital improvement projects must be listed in the county’s Six-Year Transportation Improvement Plan and the Fourteen-Year Ferry Capital Facilities Plan.

GOVERNING WASHINGTON STATE LEGISLATURE

The Revised Code of Washington (“RCW”) and the Washington Administrative Code (“WAC”) contain laws as they pertain to the Fourteen-Year Ferry Capital Improvement Plan and the Six-Year Transportation Improvement Program (“TIP”), as follows:

RCW 36.54.015: “Ferries-Fourteen year long range improvement plan-Contents”, which 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.”

RCW 36.81.121: “Perpetual advanced six-year plans for coordinated transportation program, expenditures-Nonmotorized transportation-Railroad right-of-way”, which states,

“(1) At any time before adoption of the budget, 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. If the county has adopted a comprehensive plan pursuant to chapter [35.63](#) or [36.70](#) RCW, the inherent authority of a charter county derived from its charter, or chapter [36.70A](#) RCW, the program shall be consistent with this comprehensive plan.

The program shall include proposed road and bridge construction work and other transportation facilities and programs deemed appropriate, and for those counties operating ferries shall also include a separate section showing proposed capital expenditures for ferries, docks, and related facilities. The program shall include any new or enhanced bicycle or pedestrian facilities identified pursuant to RCW [36.70A.070](#)(6) or other applicable changes that promote nonmotorized transit. Copies of the program shall be filed with the county road administration board and with the state secretary of transportation not more than thirty days after its adoption by the legislative authority. The purpose of this section is to assure that each county shall perpetually have available advanced plans looking to the future for not less than six years as a guide in carrying out a coordinated transportation program. The program may at any time be revised by a majority of the legislative authority but only after a public hearing thereon.

(2) Each six-year transportation program forwarded to the secretary in compliance with subsection (1) of this section shall contain information as to how a county will expend its moneys, including funds made available pursuant to chapter [47.30](#) RCW, for nonmotorized transportation purposes.

(3) Each six-year transportation program forwarded to the secretary in compliance with subsection (1) of this section shall contain information as to how a county shall act to preserve railroad right-of-way in the event the railroad ceases to operate in the county's jurisdiction.

(4) The six-year plan for each county shall specifically set forth those projects and programs of regional significance for inclusion in the transportation improvement program within that region.”

RCW 47.56.725(4) provides that the county road administration board may evaluate requests for county ferry capital improvement funds by Pierce, Skagit, Wahkiakum, and Whatcom counties, and, if approved by the board, submit said requests to the legislature for funding. WAC 136-400 sets forth county and project eligibility, definitions of ferry capital improvement projects, and other requirements, including the requirement for the submittal of the six-year transportation program and ferry system fourteen-year plan submittal.

WAC 136-400-040: “Six-year transportation program and ferry system fourteen-year plan submittal”, which states,

“(1) Each county's six-year transportation program and ferry system fourteen-year long range capital improvement plan shall be prepared and adopted in accordance with RCW [36.81.121](#) and [36.54.015](#), respectively, and one copy shall be forwarded to the county road administration board no later than December 31 of each year.

(2) Any proposed county ferry capital improvement project must be included in both the county's six-year transportation program and ferry system fourteen-year capital improvement plan and must remain on both during all the phases of the project including:

- (a) At the time a county requests a call for projects;
- (b) At the time the county submits a project funding application; and
- (c) Until the project is completed or the project is otherwise terminated.

(3) The county ferry capital improvement project cost estimates that are included in the county's six-year transportation programs and ferry system fourteen-year plans shall be considered preliminary and are not binding on actual county ferry capital improvement project applications.”

HISTORICAL HIGHLIGHTS OF THE GUEMES ISLAND FERRY SYSTEM

- 1800's
 - A private ferry system was established.
- 1900's,
 - The first vehicle ferry carried 6 cars, was privately owned, and subsidized by the County.
- 1958
 - The privately-operated ferry expanded its service and purchased the M/V Almar with a capacity of 11 vehicles.

- 1962
 - Skagit County purchased the M/V Almar and all ferry facilities and began full management of the ferry system.
- 1978
 - Skagit County began planning for a larger ferry vessel and related dock improvements.
- 1979
 - Skagit County replaced the M/V Almar with the newly constructed M/V Guemes, which currently serves Guemes Island with a capacity of approximately 21 vehicles and 99 passengers. The County also replaced the ferry docks and associated infrastructure.
- 2005
 - The M/V Guemes was re-powered with new engines and transmissions.
- 2010
 - Skagit County replaced the creosote dolphins at the Guemes Island landing with steel pilings, and replaced the four wing walls at the Anacortes and Guemes landings.
 - Skagit County built a new terminal building at the Anacortes landing.
- 2011
 - Skagit County replaced the girders on both the Anacortes and Guemes Island docks and completed an asphalt overlay at the Anacortes terminal.
- 2013
 - Skagit County hired Elliott Bay Design Group to prepare a ferry replacement plan for future replacement of the 37-year-old M/V Guemes.
- 2014
 - Skagit County replaced the five remaining creosote dolphins at the Anacortes landing with steel pilings.
- 2016
 - Skagit County replaced the creosote timber breakwater with a new vertical plastic timber wave wall. As of the completion of this project, February 29, 2016, all creosote was eliminated from the Anacortes and Guemes Island ferry terminals.
 - Skagit County began researching all-electric propulsion technology as an option for a new vessel to replace the M/V Guemes. Art Anderson Associates, a naval architecture firm, completed a propulsion study which determined that all-electric technology would be feasible for the route.
- 2017
 - Skagit County hired Glosten, a naval architecture firm, for the design of a replacement vessel for the M/V Guemes. Concept design for the Ferry Replacement Project was complete December 31, 2017.
- 2018
 - The County Road Administration Board (CRAB) approved Skagit County for \$7.5 million through the County Ferry Capital Improvement Program for the Ferry Replacement Project.
 - The Board of Skagit County Commissioners approved a ferry replacement surcharge effective August 1, 2018.

- 2019
 - Skagit County began preliminary design of the new 28-vehicle electric ferry and shore-side facilities.
 - The WA State Legislature approved 1.5 million in the capital budget to fund construction of the shore-side facilities for the new electric ferry.
 - The design to remove and replace three deteriorating girders at the Anacortes ferry terminal was completed and is scheduled for construction in 2022.
- 2020
 - Preliminary design for the Ferry Replacement Project was completed.
 - Washington State Department of Commerce awarded \$989,521 for the shore side electrical systems and charging infrastructure for the Ferry Replacement Project.
- 2021
 - Washington State Legislature passed SHB 1502 authorizing counties pursuing electric ferries to use additional competitive bidding procedures for procurement and design resulting in RCW 36.32.234.
 - Skagit County Board of Commissioners approved Resolution R20210241 designating selection of the Electrical Systems Integrator for the Ferry Replacement Project.
 - The WA State Legislature approved \$474,000 in the capital budget to fund construction of the shore-side facilities for the new electric ferry.
- 2022
 - Washington State Legislature passed the Move Ahead WA Package (Substitute Senate Bill 5975) with the intent to award up to \$14 million for vessel construction.
 - Contract design for the Ferry Replacement Project was 90% completed.
 - The three northeastern-most girders on the Anacortes dock were replaced due to saltwater intrusion.
- 2023
 - The Move Ahead WA Package awarded \$14 million for vessel construction; funds were obligated in October.
 - Vessel bid package was released September 14; bids are due December 18.
 - The shoreside electrical and terminal modifications projects reached 100% design; bid release is planned for spring 2024.

ELEMENTS OF THE PLAN

The following tables are updated annually:

Table 1: Ferry System Current and Replacement Values

This table meets the requirements set forth in RCW 36.54.015 showing the current value, replacement cost, and amortization periods for the vessel and facilities. The current value of the vessel is the insured value, the closest approximation of true worth. The current value of the facilities is book value, original cost less depreciation.

Table 2: Projected Expenditures

The expenditure portion of RCW 36.81.121, subsection (1) is satisfied by Table 2, showing all expenditures for the ferry system that meet subsection (2) requirements. In Table 2, projected expenditures are categorized as vessel operations, non-vessel operations and capital.

Projected vessel costs include wages and benefits, fuel, general maintenance, supplies, insurance, and haul out expenditures. United States Coast Guard (USCG) regulations require that the M/V Guemes be hauled out every two years for inspection purposes and to maintain the vessel's Certificate of Inspection. This regular maintenance program improves reliability, lowers costs, and protects capital investment. The last haul out of the vessel and required USCG dry dock credit was completed in February/March 2023. Routine maintenance was completed.

Projected non-vessel costs include terminal maintenance and repair, administration, supplies, external taxes, and miscellaneous expenditures. Non-vessel costs also include the dock and bridge structures.

The dock and bridge structures are inspected regularly as required by the National Bridge Inspection Standards administered through the Washington State Department of Transportation. This inspection report assists with identifying and scheduling major maintenance and replacement of these facilities. The last routine/fracture critical bridge inspection was completed in October 2022; this inspection is scheduled on a 24-month frequency and the next one will occur in 2024. The last underwater inspection was performed in May 2022; this inspection is scheduled on a 60-month frequency and the next one will occur in 2027.

Table 3: Capital Improvement Projects

This table is meant to provide general guidance for specific capital facility improvement projects for the Skagit County ferry system from 2024-2036. For projects to be eligible for grant funding, they must be included in the Six-Year TIP and the Fourteen-Year Ferry Capital Improvement Program.

Estimated capital expenditures expected for 2024 are shown in Table 3 as follows:

- \$20,000 to complete contract design for the replacement vessel
- \$38,000 to complete contract design of the shore-side electrical facilities
- \$13,000 to complete the contract design of the terminal modifications
- \$10,251,000 for vessel construction
- \$4,148,000 for shoreside electrical construction
- \$2,150,000 for terminal modifications
- \$115,000 for design for the Anacortes Parking and Holding Lane Improvements
- \$78,000 for infrastructure for electronic ticketing/parking

Total capital expenditures for 2024 are estimated at \$16,813,000 for the Ferry Replacement Program. Skagit County has planned \$14,113,000 in state and federal grant funding and \$2,700,000 in local funding for the projects.

In addition to the capital projects listed in Table 3, Skagit County has included operating expenditures of \$359,000. Due to a recent change in the Bipartisan Infrastructure Law, operating expenditures are now eligible for reimbursement through the Federal Ferry Boat Program. The priority for the expenditure of federal grant funding through this formulary program will be capital projects. However, if funds remain that will be lost if not obligated (as was the case in 2023), the county will seek reimbursement for eligible operating expenses. Operating expenses are not programmed in to the Six-Year TIP as well.

Table 4: Projected Revenue

This table includes ferry fare receipts, motor vehicle fuel tax attributed to ferry operations, ferry deficit reimbursement, county road fund subsidy and any anticipated grant funds. On June 18, 2018, the Board of Skagit County Commissioners’ approved Resolution R20180123 establishing a vessel replacement surcharge effective August 1, 2018. Per RCW 36.54.200, a county operating a ferry may impose a vessel replacement surcharge on every fare sold to be used only for the construction or purchase of ferry vessels, and to pay the principal and interest on bonds authorized for the construction or purchase of ferry vessels. For the purposes of the planning period, anticipated annual revenue is approximately \$250,000.

TABLE 1: FERRY SYSTEM CURRENT AND REPLACEMENT VALUES**VESSEL**

<i>CURRENT STATISTICS</i>	<i>M/V GUEMES</i>
Length	124'
Beam	52'
Displacement	91 GT
Year Built	1979
Capacity - Passengers	99
Capacity - Cars	21
Current Book Value	\$2,200,000
Total Vessel Current Value	\$2,200,000

<i>CURRENT BOOK VALUE</i>	<i>REPLACEMENT VALUE-2024</i>
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\$2,200,000

<i>REPLACEMENT STATISTICS</i>	<i>M/V GUEMES</i>
Year	2026
Capacity - Passengers	150
Capacity - Cars	28
Total Vessel Replacement Value	\$22,200,000

\$22,200,000**FACILITIES**

<i>LOCATION</i>	<i>YEAR BUILT</i>	<i>REPLACEMENT YEAR</i>	<i>CURRENT BOOK VALUE</i>	<i>REPLACEMENT VALUE-2024</i>
Guemes Island Landing				
Dock	2011	2041	\$1,424,008	\$1,566,409
Transfer Span/Machinery	1979	2030	\$1,317,000	\$2,000,000
Dolphins/Wingwalls	2010	2040	\$954,736	\$1,069,304
Head Frame and Towers	1979	2030	\$100,000	\$550,000
Passenger Shelter	1979	2026	\$1,000	\$20,000
Parking Lot	1979	2026	\$150,100	\$280,000
Subtotal of Guemes Landing			\$3,946,844	\$5,485,713
Anacortes Landing				
Dock	2011	2041	\$1,368,182	\$1,505,000
Transfer Span/Machinery	1979	2030	\$1,317,000	\$2,000,000
Breakwater	2016	2056	\$200,000	\$462,000
Dolphins/Wingwalls	2014	2044	\$1,100,000	\$1,144,000
Head Frame and Towers	1979	2030	\$100,000	\$550,000
Terminal Building(s)	2010	2050	\$778,316	\$871,714
Parking Lots	2004	2024	\$1,067,948	\$1,196,102
Walkway	2010	2040	\$68,481	\$76,699
Subtotal of Anacortes Landing			\$5,999,927	\$7,805,515
Total Facilities Values			\$9,946,771	\$13,291,228
Total Vessel & Facilities Values			\$12,146,771	\$35,491,228

TABLE 2: PROJECTED EXPENDITURES

(in 1000's of dollars)

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Operations: Vessel														
Dry Docking-Shipyard ⁽¹⁾⁽²⁾	\$0	\$850	\$0	\$500	\$0	\$520	\$0	\$541	\$0	\$562	\$0	\$585	\$0	\$608
Wages & Benefits ⁽¹⁾	\$1,868	\$1,905	\$1,943	\$1,982	\$2,022	\$2,062	\$2,104	\$2,146	\$2,189	\$2,232	\$2,277	\$2,323	\$2,369	\$2,416
Fuel ⁽¹⁾	\$257	\$262	\$267	\$25	\$26	\$26	\$27	\$27	\$28	\$28	\$29	\$29	\$30	\$30
General Maintenance ⁽¹⁾	\$380	\$388	\$395	\$36	\$37	\$37	\$38	\$39	\$40	\$41	\$41	\$42	\$43	\$44
Supplies ⁽¹⁾	\$143	\$145	\$148	\$54	\$55	\$56	\$57	\$58	\$60	\$61	\$62	\$63	\$65	\$66
Insurance ⁽¹⁾	\$272	\$277	\$283	\$289	\$294	\$300	\$306	\$312	\$319	\$325	\$332	\$338	\$345	\$352
Misc. ⁽¹⁾⁽⁴⁾	\$202	\$206	\$210	\$214	\$219	\$223	\$227	\$232	\$237	\$241	\$246	\$251	\$256	\$261
Subtotal - Vessel	\$3,122	\$4,034	\$3,248	\$3,100	\$2,652	\$3,225	\$2,760	\$3,356	\$2,871	\$3,491	\$2,987	\$3,632	\$3,108	\$3,778
Operations: Non-Vessel														
Facility Maintenance / Repair ⁽¹⁾	\$20	\$50	\$51	\$52	\$53	\$54	\$55	\$56	\$57	\$59	\$60	\$61	\$62	\$63
Administration ⁽¹⁾	\$25	\$26	\$26	\$27	\$27	\$28	\$28	\$29	\$29	\$30	\$30	\$31	\$32	\$32
Supplies ⁽¹⁾	\$8	\$8	\$8	\$8	\$8	\$8	\$8	\$9	\$9	\$9	\$9	\$9	\$10	\$10
External Taxes ⁽¹⁾⁽³⁾	\$33	\$34	\$34	\$35	\$36	\$36	\$37	\$38	\$39	\$39	\$40	\$41	\$42	\$43
Misc. ⁽¹⁾⁽⁵⁾	\$129	\$132	\$134	\$137	\$140	\$142	\$145	\$148	\$151	\$154	\$157	\$160	\$164	\$167
Subtotal - Non-Vessel	\$215	\$248	\$253	\$258	\$264	\$269	\$274	\$280	\$285	\$291	\$297	\$303	\$309	\$315
Capital Expenditures (see Table 3)	\$17,172	\$17,331	\$1,007	\$694	\$0	\$0	\$11,000	\$0	\$0	\$0	\$0	\$0	\$1,180	\$0
TOTAL	\$20,508	\$21,613	\$4,508	\$4,053	\$2,916	\$3,494	\$14,034	\$3,635	\$3,156	\$3,782	\$3,284	\$3,934	\$4,596	\$4,093

⁽¹⁾ 2024 estimate based on preliminary budget for 2024, plus 0% growth, 2% inflation in years following

⁽²⁾ Haul-out expenditures based on next scheduled haul out occurring in 2025; beyond 2025, projections based on vessel replacement in Q1 2026

⁽³⁾ DNR lease, plus projected excise taxes

⁽⁴⁾ Misc. for vessel is rentals for passenger-only service, professional services, small tools & minor equipment, travel/training, contracted services and other haul-out associated costs

⁽⁵⁾ Misc. for non-vessel is for communications, advertising, utilities and interfund payments

TABLE 3: CAPITAL FACILITY IMPROVEMENT PROJECTS

(in 1000's of dollars)

Capital Projects

Capital Item	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2027
Electric Ferry Design/Bidding/Construction Support ⁽¹⁾⁽⁴⁾	\$20	\$100												
Shoreside Electrical Design/Bidding/Construction Support ⁽¹⁾⁽⁴⁾	\$38	\$100												
Ferry Terminal Modifications Design/Bidding/Construction Support ⁽¹⁾⁽⁴⁾	\$13	\$100												
Electric Ferry Construction ⁽¹⁾⁽²⁾	\$10,251	\$12,049												
Shoreside Electrical Construction ⁽¹⁾⁽²⁾	\$4,148	\$2,982												
Ferry Terminal Modifications Construction ⁽¹⁾⁽²⁾	\$2,150	\$900												
Battery Replacement (Vessel & Shore Side) ⁽¹⁾													\$1,180	
Ferry Terminals Cathodic Protection ⁽¹⁾⁽²⁾			\$231	\$694										
Guemes Island Parking Lot Improvements & Passenger Shelter ⁽¹⁾⁽²⁾			\$776											
Anacortes Ferry Parking & Holding Lane Improvements ⁽¹⁾⁽²⁾	\$115	\$1,000												
Transfer Span/Machinery - Anacortes ⁽¹⁾							\$5,500							
Transfer Span/Machinery - Guemes ⁽¹⁾							\$5,500							
Infrastructure for Electronic Ticketing System/Parking ⁽²⁾⁽³⁾	\$78	\$100												
Guemes Island Ferry Operating Cost ⁽²⁾	\$359													
Total Estimated Annual Costs	\$17,172	\$17,331	\$1,007	\$694	\$0	\$0	\$11,000	\$0	\$0	\$0	\$0	\$0	\$1,180	\$0

⁽¹⁾ Federal/state grants, low-interest loans, bonds and/or county road fund⁽²⁾ Included in Six-Year Transportation Improvement Program⁽³⁾ Capital infrastructure may or may not be required depending on the scope of the project⁽⁴⁾ 2025 figures are placeholders until we can negotiate with consultants for next phase of work

TABLE 4: PROJECTED REVENUE

(in 1000's of dollars)

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Ferry Fare Receipts ⁽¹⁾	\$1,482	\$1,512	\$1,542	\$1,573	\$1,604	\$1,636	\$1,669	\$1,702	\$1,736	\$1,771	\$1,807	\$1,843	\$1,880	\$1,917
Vessel Replacement Surcharge	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250
Motor Vehicle Fuel Tax (Ferry portion) ⁽⁴⁾	\$119	\$119	\$119	\$119	\$119	\$119	\$119	\$119	\$119	\$119	\$119	\$119	\$119	\$119
WSDOT Ferry Deficit Reimbursement ⁽⁴⁾	\$280	\$280	\$280	\$280	\$280	\$280	\$280	\$280	\$280	\$280	\$280	\$280	\$280	\$280
County Road Fund Subsidy ⁽⁵⁾	\$4,264	\$5,213	\$1,136	\$901	\$288	\$834	\$2,541	\$909	\$396	\$987	\$453	\$1,068	\$749	\$1,152
Grant Funding ⁽²⁾⁽³⁾	\$14,113	\$14,240	\$1,181	\$930	\$375	\$375	\$9,175	\$375	\$375	\$375	\$375	\$375	\$1,319	\$375
Total Revenue:	\$20,508	\$21,613	\$4,508	\$4,053	\$2,916	\$3,494	\$14,034	\$3,635	\$3,156	\$3,782	\$3,284	\$3,934	\$4,596	\$4,093

⁽¹⁾ Based on 2024 budgeted fare box revenue (assumes fare increase); projected 0% growth; 2% inflation in years following

⁽²⁾ Assumes grant funding at 80% for all projects identified in Table 3

⁽³⁾ County Ferry Capital Program reimbursement for the Ferry Replacement Program is \$375,000/year for the planning period

⁽⁴⁾ Source: 2023 Ferry Fare Revenue Target Report (5-year average of actuals 2018-2022)

⁽⁵⁾ Road Fund Subsidy is assumed to fund the gap between capital project/operating expenditures and revenue