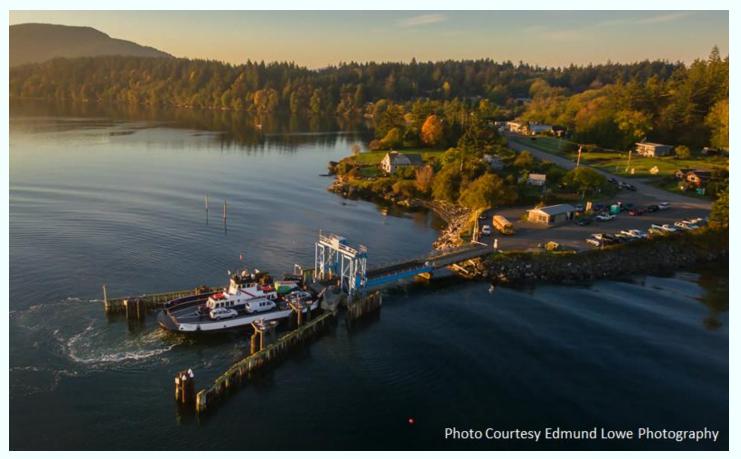
## The Ferry Today & Tomorrow



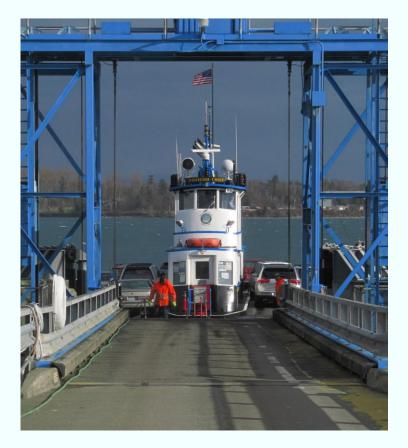
A Brief Overview of Topics the WCFAC Will Consider During 2024

December 4, 2023 WCFAC Inaugural Meeting

#### **A. Background on Ferry Governance**

Pam Gould, WCFAC member and long time island resident/ferry user

- 1) Why Is this ferry important?
- 2) Who owns and manages it?
- 3) Who pays for the ferry?
- 4) What does WCFAC do?



### Why a Ferry to Lummi Island? ....And Why Replace the Ferry Now?

--No Alternative Route to the Island. The ferry allows movement of people, goods and services to and from the Mainland to Island homes, small businesses, the general store, the school, churches, the library, post office, and hiking trails and beaches.

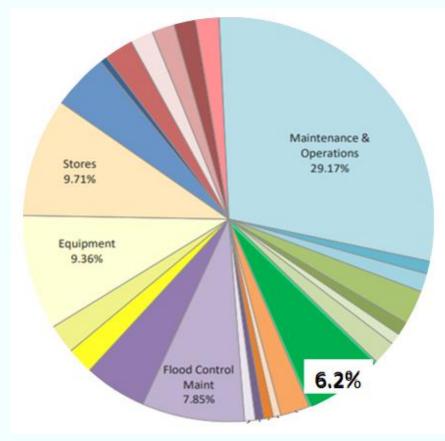
--**Critical Support for Emergency Services**. The ferry is the only way critical emergency services--EMS, fire fighting support, utility service workers, and law enforcement– can reach the Island rapidly and reliably. To ensure the ferry is available 24/7 for emergency services, it docks overnight at the Lummi Island terminal. Crew members must be on island overnight when on call.

--**Current Ferry at End of Its Service Life**. The current ferry is the *Whatcom Chief*. Ferries of the *Chief*'s type are built to last 40-60 years, depending on maintenance and wear-and-tear. The *Chief* is 60 years old and has exceeded its useful life.

--Major Cost if Not Replaced. If the *Chief* is not replaced before 2029 it will require a multi-million dollar overhaul of its diesel engines and exhaust system to be able to continue to comply with increasingly stringent EPA emissions requirements.

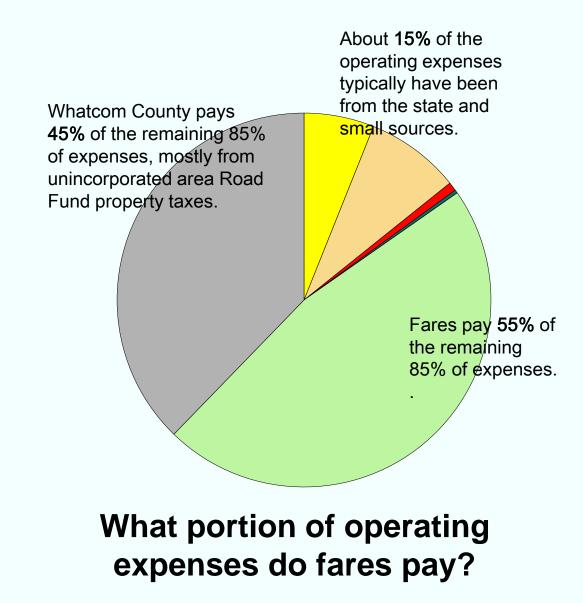
#### Who Owns and Manages the Ferry?

- The ferry is owned by the Whatcom County Equipment Rental and Revolving Fund (ER&R). The ferry, docks, and approaches are legally part of the county road and bridge network.
- For all 940 miles of roads and 162 bridges that the County owns, the Public Works Department (PWD) assesses needs and decides on repairs and improvements. It is also responsible for stormwater, natural resources, and flood mitigation. Daily ferry operations are a very small proportion of the PWD responsibilities, only about 6% of the total 2023 budget.
- But the ferry is a VERY complicated public road compared to most County roads: essential equipment is in operation every day, maritime employees, user fees, docks with movable ramps, relationship with the Lummi Nation, Coast Guard rules, and public involvement.

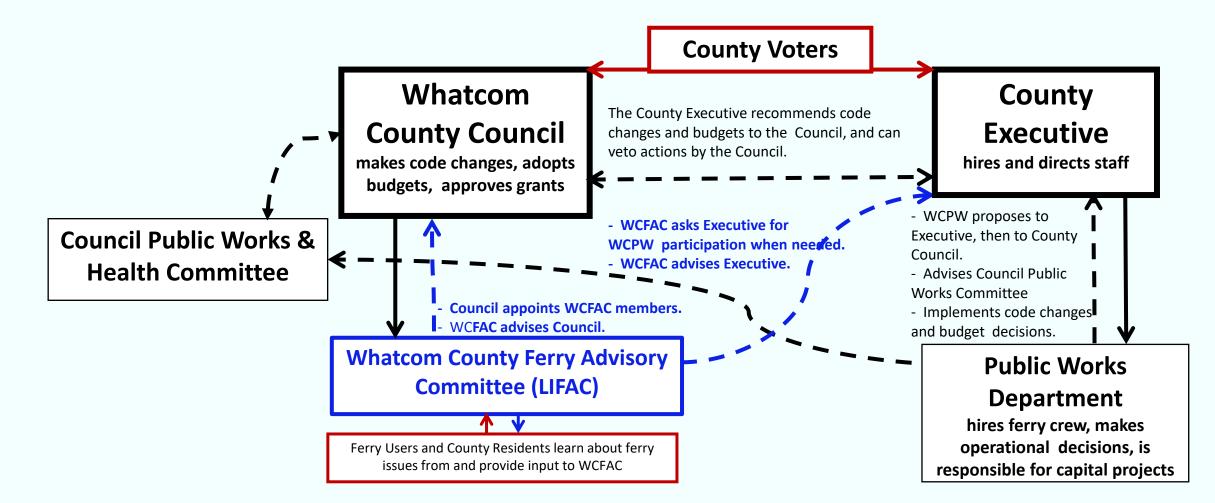


#### Who pays for the ferry?

- Whatcom County pays for ferry operations mostly through user fees (fares) and by unincorporated area property taxes; the state subsidizes ferry operation in the four counties with ferries. City property owners do not pay for the ferry.
- Capital projects that are larger than one year are in separate accounts, but managed by PWD. For instance, the finances for the planned Whatcom County Electric Ferry are not part of the operating budget. Grants or County funding mechanisms such as bond issues pay for most large road network capital projects. However, a \$1 surcharge per ferry passage goes toward future ferry capital expenses.



#### The WCFAC advises the County Council and County Executive on their decisions about the ferry



#### **B. Ferry Operating Expenses and Fares**

Diane Harper, WCFAC member, and member of the 2011 Citizen's Task Force on the Lummi Island Ferry

#### **Factors in Deciding What Fares to Charge**

- 1) What changes to make in the existing Whatcom County Code Chapter 10.34 that determines how to calculate ferry user fees?
- 2) What are recent costs and revenue? (what is included in Total Operating Expenses; will COVID revenue losses be reimbursed?)
- 3) Trends in costs and fare revenue.
- 4) Integrating fare increases with cumulative fare surpluses/deficits.

## What Determines the Cost of Fares?

Whatcom County Code Chapter 10.34

**B. "Operating cost"** means all actual daily running expenses and **all actual regular and routine maintenance** and administrative expenses associated with the use and operation of all physical elements of the ferry system.

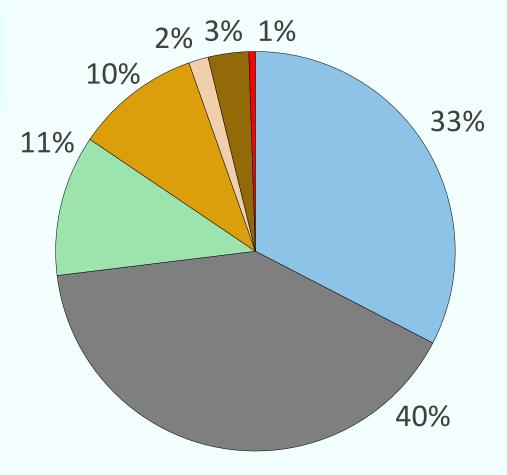
**D. "Fare Box Recovery rate"** means the calculated percentage of total revenue generated through ferry user fees in comparison to **total actual operating costs** for the same period of time minus any revenue from the motor vehicle fuel tax meant for ferry operations, or from interest."

#### What Are the Total Operational Expenses (TOE)?

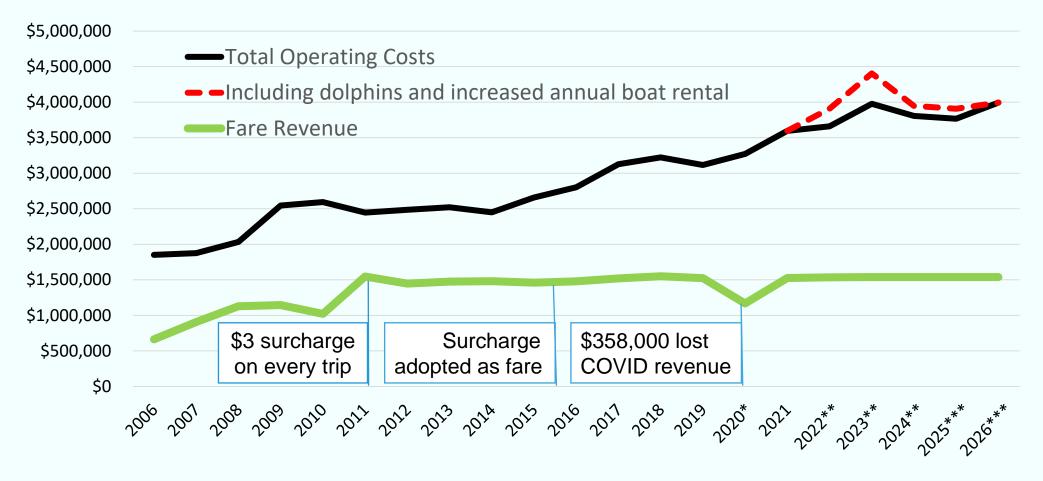
These percentages represent the total paid from 2006 through 2022; individual years vary.

Vessel Wages & Benefits

- Other Vessel: Drydock, Fuel, Repairs
- **Ferry Administration, includes County overhead**
- Gooseberry Dock and Lease
- Gooseberry Parking and Staging
- Lummi Island Dock (w/o dolphin repair)
- Island Parking and Staging



#### What are the Trends in Costs and Fare Revenue?



\* 2020 fare loss due to COVID restrictions ; \*\* 2022-2024 preliminary Public Works budget numbers; \*\*\* 14 Year Capital Ferry Plan sent to state in summer 2022

#### **Projecting Future Fares**

Three conclusions and one question:

1) The \$2 million cumulative fare surplus at the end of 2022 postponed dealing with the recent and projected average gap between expenses and revenue of about 25%.

2) Until the issues are resolved on what is included in operating expenses and whether the ferry will be awarded COVID refunds, the fare revenue needed cannot be determined. If neither of those happen, we will need a very large fare increase in 2025.

3) Using the fare surplus over multiple years would allow a fare increase to be in smaller steps.

An important question is how high can the fares be increased without decreasing ridership and therefore entering a cycle of repetitive fare increases? The answer is not simple to determine.

WARNING: The information in this part of the presentation is based upon end of year 2022 and May, 2023, financial reports. PWD staff will update us with 2023 information.

#### **C. The New Whatcom County Electric Ferry**

Charles Bailey, member of the Whatcom County Climate Advisory Committee and former LIFAC member

#### Four Steps to a New Ferry

- 1) Electrify the ferry
- 2) Bring power to the shore
- 3) Maintain vehicle access to the Island during construction
- 4) Complete the funding package



#### **Introducing the New Whatcom County Electric Ferry**

- Complies with the Americans with Disabilities Act (ADA).
- Meets or exceeds U.S. Coast Guard safety standards.
- Accommodates legal loads of vehicles per Washington State Commercial Vehicle Guidelines.

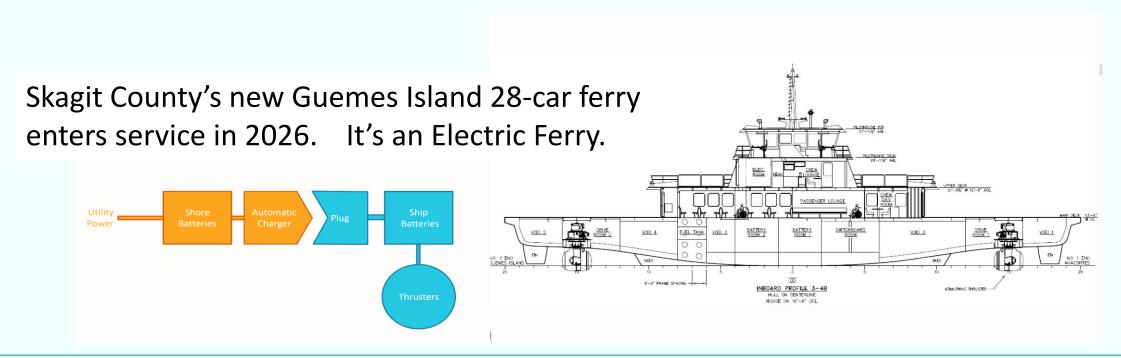
| Features                     | Whatcom Chief      | New Ferry                               |  |
|------------------------------|--------------------|-----------------------------------------|--|
| Length & Width               | 100' x 44'         | 180' x 49'                              |  |
| Displacement                 | 192 tons           | 548 tons                                |  |
| Deck Space                   | 16 cars            | 34 cars                                 |  |
| Walk-on Passenger Seating    | 35 passengers      | 65 passengers                           |  |
| Departure Frequency          | every 20 mins. max | every 30 mins. max                      |  |
| Propulsion System            | 2 diesel engines   | 2 diesel engines + 2<br>electric motors |  |
| Diesel fuel consumption/year | 65,700 gallons     | 70,445 gallons                          |  |
| Carbon Emissions/ Year       | 669 metric tonnes  | 717 metric tonnes                       |  |





#### **Electrify the Ferry**

Whatcom County government has committed to reducing its carbon emissions by 85% by 2030. --*Whatcom County Climate Action Plan* 



Whatcom County Public Works Dept. (PWD) Approved a New Kpff Consultancy Contract on 11/24/23. Contract Scope of Work: "We propose to review and update the previous propulsion study."

#### **Bring Power to the Shore**

**2021:** LIFAC formally recommends the County study how to bring enough electricity to both ferry docks to fully power the new EV ferry (Shore Power Study).

**2023:** Puget Sound Energy (PSE) completes the Shore Power Study.

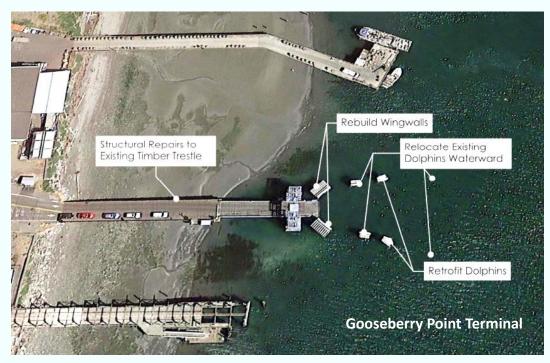


**2022:** The Whatcom County Climate Impact Advisory Committee (CIAC) recommended the County investigate how a solar array with battery storage could become the principal power supply for the new ferry and increase resiliency.



#### Maintain Vehicle Access to the Island During Construction





The new ferry is wider and longer than the Chief so the ferry slips on both sides will have to be widened and extended.

This construction will need to be done in a way that protects nearby eelgrass beds and minimizing disturbance to fisheries. These considerations could lead to significant periods of time with no vehicle ferry service to the Island.

More information is needed from the Public Works Department and consultants.

#### **Complete the Funding Package**

The new ferry project has received significant funding from federal and state sources. Cost estimates need to be updated and a municipal bond issue needs to be floated.

| Project Components                      | Costs<br>(in millions,<br>2021) | Sources of Funds              |                                 |                           |
|-----------------------------------------|---------------------------------|-------------------------------|---------------------------------|---------------------------|
|                                         |                                 | Federal Raise<br>Grant (2022) | State & CFCIP#<br>grants (2023) | Users* & Local<br>Taxes** |
| Diesel-Battery Hybrid 34-Vehicle Ferry  | 25.653                          | 25                            | 0.5                             | 0.153                     |
| Lummi Island Terminal Electrification   | 9.459                           |                               | 0.5                             | 8.959                     |
| Lummi Island Marine Structures Retrofit | 8.25                            |                               | 1.92                            | 6.33                      |
| Lummi Island Operational Improvements   | 1.799                           |                               | 0.5                             | 1.299                     |
| Gooseberry Trestle Replacement          | 5.13                            |                               | 5.13                            |                           |
| Total                                   | 50.291                          | 25                            | 8.55                            | 16.741                    |

# CFCIP: County Ferry Capital Improvement Program

\* Estimated \$600K from \$1/ferry passage surcharge

\*\* Municipal bond issue for approximately \$15.8 million in 2025

# The topics in this brief overview are suggested for detailed examination in future WCFAC meetings.

Use the Lummi Island Community Association website to follow ferry issues, background information, and important dates.

Also there is a fantastic history with photographs of past ferry service. Ferry Work Group: https://ourlummiisland.org/lica/c-r/liwg/ WCFAC/LIFAC: https://ourlummiisland.org/info/org/wcfac/

Use the Whatcom County website for information about ferry service, Public Works and Council documents, and WCFAC meetings and communications. Ferry: https://www.whatcomcounty.us/382/Lummi-Island-Ferry WCFAC: https://www.whatcomcounty.us/521/Whatcom-County-Ferry-Advisory-Committee

### **Questions?**

Thank you for sharing the beginning of the Whatcom County Ferry Advisory Committee.

