

Ferry Service Lummi Island to Fairhaven: Some Observations

by Chuck Antholt

This scenario for ferry service from Lummi Island to Fairhaven was developed assuming use of the Whatcom Chief and no restrictions on docking at Fairhaven. On April 14, Roland Middleton of PWD reported to LIFAC that given the plans of Burlington Northern and Santa Fe (BNSF) the Port of Bellingham would limit Lummi Island ferry use of Fairhaven to once a day. The following scenario therefore is only illustrative. The proposal has serious problems in and of itself. Given the Port Authority's position, however, no further consideration should be given to ferry service from Lummi Island to Fairhaven as outlined below.

Background Information:

Distance: ~¹ 9.3 nautical miles (nm) Lummi Island to Fairhaven

Weather: Most of our relatively high winds come from the south, southeast. Going to Fairhaven would have the wind a beam crossing Bellingham Bay. Given relatively shallow draft and the relatively broad beam of the Chief, the Chief could expect considerable rolling.

Fetch: Across Bellingham bay is ~ 10 nm. Wave size is in part a function of "fetch."

Shallowness of Bellingham bay: This would result in shorter steeper waves in a blow.

Ferry crew reports that with the Chief more frequent "outages" could be expected because of wind.

Possible Scenario for Lummi Island/Fairhaven ferry service

1. Travel time – one way:

- a. @ 10 knots =>² .93 hr, i.e., 56 minutes at slack tide and no wind.

2. Ferry round trips:

- a. Assuming speed of Chief is 10 knots
- b. Assume slack tide and < 5 knot winds,
- c. Assume loading/unloading 10 min.
- d. Assume Murphy's law – 10 min.

1 ~ = about

2 => = implies

- e. Round trip time ~ 2.5 hours – optimistically.
- f. Include crew breaks, allowance for tidal and wind allow 30 min.
- g. Total round trip: **3 hours.**

3. **Possible schedule** assuming 3 hour round trips, could be:

- a. From Lummi Island, 05:00, 08:00, 11:00, 14:00, 17:00, 20:00. 23:00, (Seven sailings to Fairhaven from LI.
- b. From Fairhaven 06:30, 9:30, 12:30, 14:30, 17:30, 20:30, 23:00, (Seven sailings to LI from Fairhaven)
- c. Implied LOS with the following formulae: Assuming 20 cars each way total car traffic would be ~ 280 at the max, i.e., assuming no truck traffic.

$$\text{LOS} = \frac{((8 \times 20) + (107 \times 365)) \times 2}{991} = 40$$

4. **Fares:**

- a. TBD³. Dictated by vessel needs, operating costs, etc. Those costs are unknown at this time.
- b. Anacortes ferry terminal to Friday Harbor terminal is 16.3 nm. Car and driver for WASDOT is \$36.95, for a passenger is \$13.10.
 - b.i. Travel time over-water is 1 hr. and 33 minutes. =>s 10.5 knots.

³ TBD = To be determined

5. Landing charges Fairhaven

a. TBD.

b. Currently

b.i. Berth I $\pm < 400$ ft. \$242 per day.

b.ii. Berth II and “Touch and Go,” \$0.70 per ft, max 2 hrs.

b.iii. Stub Berth Dockage (Daily)

⇒ ≤ 100 ft

⇒ Stub Berth Dockage definition TBD.

⇒ \$0.50 per ft, \$30.00 minimum charge. =>s for Chief \$50.00 per docking, per day. No word on what multiple docking per day would be.

b.iv. <https://www.portofbellingham.com/DocumentCenter/View/3148>

b.v. Port person required to assist loading and unloading:

⇒ Longshoreman skill levels I – III (\$121 – 128 per hour.
=>s ~ \$2,000 per day.

iv. Fueling rate currently charged is @ \$0.05 per gallon into tanks.

Other Comments:

1. Emergency Services:

a. Response time slowed, e.g., medical a/o safety.

a.i. Gooseberry crossing ~ 7 minutes from departure.

a.ii. ~ 15 min. if ferry on island side and a full speed.

a.iii. Fairhaven to Lummi Island about 1 hr. min from departure.

a.iv. About two hours 20 min. (?) if ferry is on island side at flank speed.

2. Implications for service providers:

- a. Service providers, e.g., propane, garbage collection, furnace, roofing, plumbing, concrete, lumber, UPS, etc.
- b. Less sailing options, more queuing time.
- c. Longer net over water transit time which =>s:
 - c.i. Shorter work day, a/o
 - c.ii. Higher customer costs because of longer travel time (but no work) @
~ three hours.
- d. Higher ferry vehicle ferry fares.

3. Grade and High School students:

- a. Lummi Island is part of the Ferndale school district.
- b. Seventh to 12th graders go to Ferndale.
- c. Current school bus goes to Ferndale, ~ 15 minutes from Gooseberry.
- d. Via Fairhaven would take about one hour and 30 minutes net additional travel time for students one way.
- e. TBD if Lummi Island students could go to B'ham schools for 7th to 12th grades.

4. Connections for commuter passengers wishing to use bus transportation in Bellingham. (see attachments)

- a. Illustrative bus schedule from Fairhaven to i) St. Josephs and ii) Western Washington University in morning (08:00 hrs.) See Annex A.
 - a.i. To St. Joes (ETD 08:04 to ETA 08:33), \$2.00, bus time ~ 24 min.
 - a.ii. To WWU (ETD 08:04 to ETA 08:22), \$1.00, bus Time ~ 18 min.

- b. Illustrative bus schedule to Fairhaven from St. Josephs and Western Washington University afternoons (17:00 hrs.)
 - b.i. From St. Joes (ETD 17:10 to ETA 17:37), \$2.00, bus time ~ 27 min.
 - b.ii. From WWU (ETD 17:02 to ETA 17:22, \$1.00, bus time ~ 20 min.

- c. Lummi Island to WWU (currently).
 - c.i. Assume 5:40 ETD
 - c.ii. Assume travel to dock 5 min.
 - c.iii. Assume queuing time 10 min.
 - c.iv. Assume loading, crossing and unloading 12 min.
 - c.v. Assume drive time to WWU (Parks Hall) 19 miles via Marine drive 30 min.
 - c.vi. Max. net travel time: 57 min.

Compared with a, ii above.

- a.i. Assume 5:00 ETD
- a.ii. Assume travel to dock 5 min.
- a.iii. Assume queuing time 10 min.
- a.iv. Assume loading and unloading 20 min.
- a.v. Assume crossing and unloading 60 min.

- a.vi. Assume walking time to parking lot 5 min.
- a.vii. Assume drive time to WWU (Parks Hall) 9 min.
- a.viii. Assumed net travel time: 1 hr. 40 min.

5. Queuing time:

- a. Less sailing options implies higher premium on obtaining a placed on desired sailing.
 - a.i. Users would tend to que up longer to insure obtaining passage.
- b. Queuing time would increase from current minimum, with the exceptions of Friday afternoon's a/o special occasions in summer. How much more time TBD.

6. Parking charges at Fairhaven Cruise Terminal. See Annex B
 - a. Currently \$30.00 weekly, daily \$6.00, hourly \$1.00.
 - b. TBD would port be able to allocate sufficient parking space?

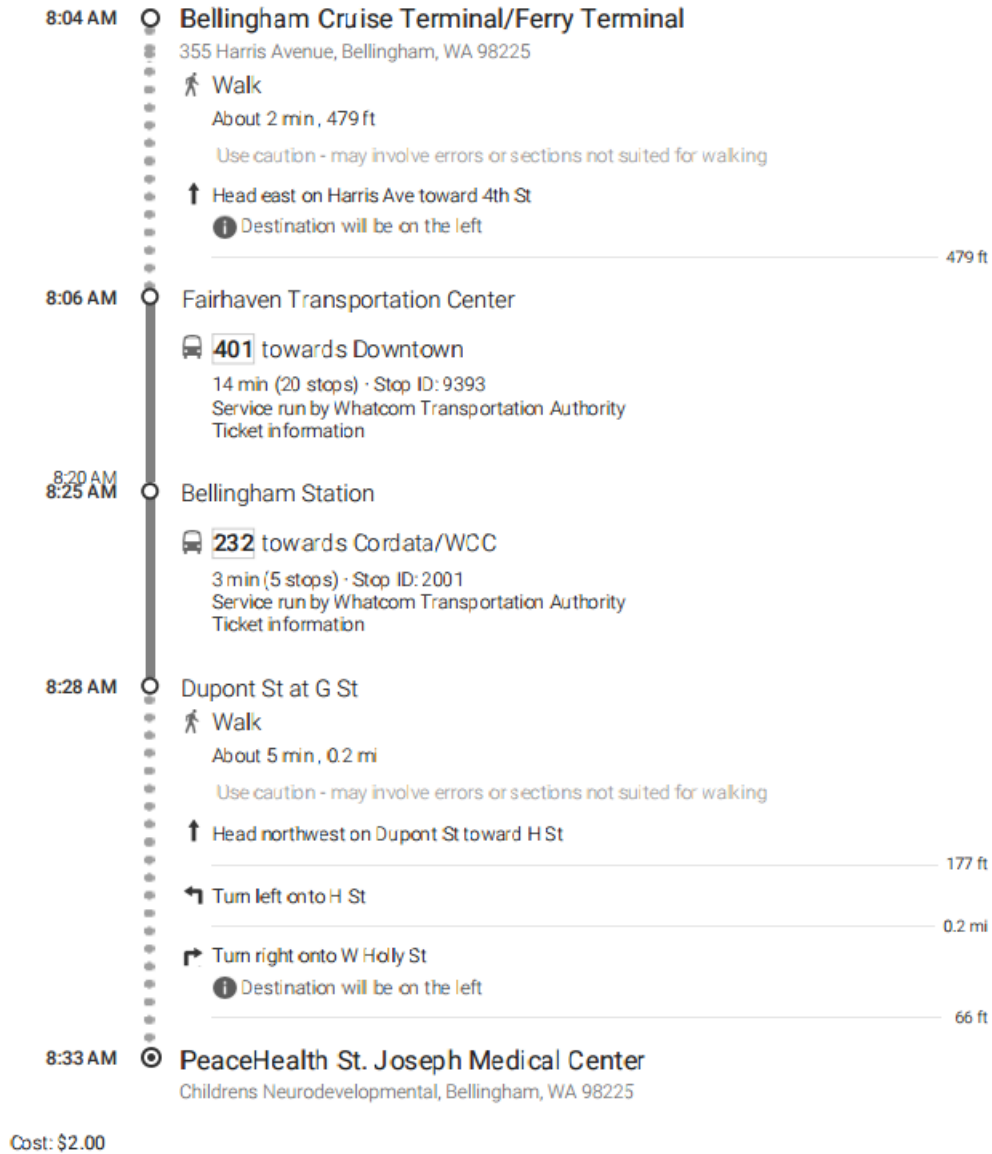
7. Landing space in Fairhaven.
 - a. Friday's a problem at Fairhaven with the Alaska Ferry. Unresolved.
 - b. Tues. in summers same problem with the Alaska Ferry

8. **Travel times and costs for vehicle commuters:**
9.
 - a. Net increase in over water travel times.
 - b. Limited to and from work options, i.e., less sailings
 - c. Higher ferry fares – amount TBD.

10. **Overall result:**
 - a. Reduction in service, travel flexibility, increased opportunity costs (travel time) and ferry operating costs per vehicle/passenger user.

Annex A. Illustrative Bus connections from Fairhaven Cruise Terminal to St. Joseph Medical Center, and to Western Washington University.

To St. Joes:



To Western Washington University:

Google Maps **Bellingham Cruise Terminal/Ferry Terminal to Western Washington University** 8:04 AM - 8:22 AM (18 min)

8:04 AM ○ **Bellingham Cruise Terminal/Ferry Terminal**
355 Harris Avenue, Bellingham, WA 98225

🚶 Walk
About 2 min, 479 ft
Use caution - may involve errors or sections not suited for walking

↑ Head east on Harris Ave toward 4th St
📍 Destination will be on the left
479 ft

8:06 AM ○ **Fairhaven Transportation Center**

🚌 **401** towards Downtown
8 min (14 stops) · Stop ID: 9393
Service run by Whatcom Transportation Authority
Ticket information

8:14 AM ○ **State St at Cedar St**

🚶 Walk
About 8 min, 0.3 mi
Use caution - may involve errors or sections not suited for walking

↑ Head southwest on N State St toward Cedar St
98 ft

↙ Turn left onto Cedar St
0.1 mi

↙ Turn left onto N Garden St
194 ft

➡ Turn right toward High St
📍 Take the stairs
0.1 mi

➡ Turn right onto High St
📍 Destination will be on the left
108 ft

8:22 AM ◎ **Western Washington University**
516 High Street, Bellingham, WA 98225

Cost: \$1.00

From St. Joes to Fairhaven Cruise Terminal:

Google Maps PeaceHealth St. Joseph Medical Center to Bellingham Cruise Terminal/Ferry Terminal 5:10 PM - 5:37 PM (27 min)

5:10 PM ○ **PeaceHealth St. Joseph Medical Center**
 Childrens Neurodevelopmental, Bellingham, WA 98225

🚶 **Walk**
 About 4 min , 0.2 mi
 Use caution - may involve errors or sections not suited for walking

↑ **Head southeast on W Holly St toward H St**
 66 ft

↶ **Turn left onto H St**
 0.2 mi

↷ **Turn right onto Dupont St**
 Destination will be on the right
 72 ft

5:14 PM ○ **Dupont St at H St**

🚌 **232** towards Downtown
 6 min (4 stops) · Stop ID: 3220
 Service run by Whatcom Transportation Authority
 Ticket information

5:20 PM ○ **Bellingham Station**
5:25 PM

🚌 **401** towards Fairhaven
 11 min (19 stops) · Stop ID: 2001
 Service run by Whatcom Transportation Authority
 Ticket information

5:36 PM ○ **Fairhaven Transportation Center**

🚶 **Walk**
 About 1 min , 479 ft
 Use caution - may involve errors or sections not suited for walking

















↑ **Head west on Harris Ave toward 4th St**
 Destination will be on the right
 479 ft

5:37 PM ○ **Bellingham Cruise Terminal/Ferry Terminal**
 355 Harris Avenue, Bellingham, WA 98225

Cost: \$2.00

From Western Washington University to Fairhaven Cruise Terminal:

Google Maps Western Washington University to Bellingham Cruise Terminal/Ferry Terminal 5:02 PM - 5:22 PM (20 min)

- 5:02 PM  **Western Washington University**
516 High Street, Bellingham, WA 98225
-  **Walk**
About 10 min, 0.4 mi
Use caution - may involve errors or sections not suited for walking
-  **Head northeast on High St**
482 ft
-  **Turn left toward E Pine St**
 Take the stairs
0.1 mi
-  **Continue onto E Pine St**
0.1 mi
-  **Turn left toward Boulevard**
30 ft
-  **Turn right onto Boulevard**
 Take the stairs
 Destination will be on the left
486 ft
- 5:12 PM  **Boulevard St at 500 Blcok**
 **401** towards Fairhaven
9 min (14 stops) · Stop ID: 2003
Service run by Whatcom Transportation Authority
Ticket information
- 5:21 PM  **Fairhaven Transportation Center**
About 1 min, 479 ft
Use caution - may involve errors or sections not suited for walking
-  **Head west on Harris Ave toward 4th St**
 Destination will be on the right
479 ft
- 5:22 PM  **Bellingham Cruise Terminal/Ferry Terminal**
355 Harris Avenue, Bellingham, WA 98225

Cost: \$1.00

Annex B

Parking costs at Fairhaven

Short-Term Parking

Short-term parking is for 2-6 hour stays. The lot is located just past the 2-hour parking lot next to the BCT. A self-pay station is located at the entrance; pay slots correspond to parking stall numbers. The lot is not locked in the evenings to allow for easy entry and exit for customers.

Long-Term Parking

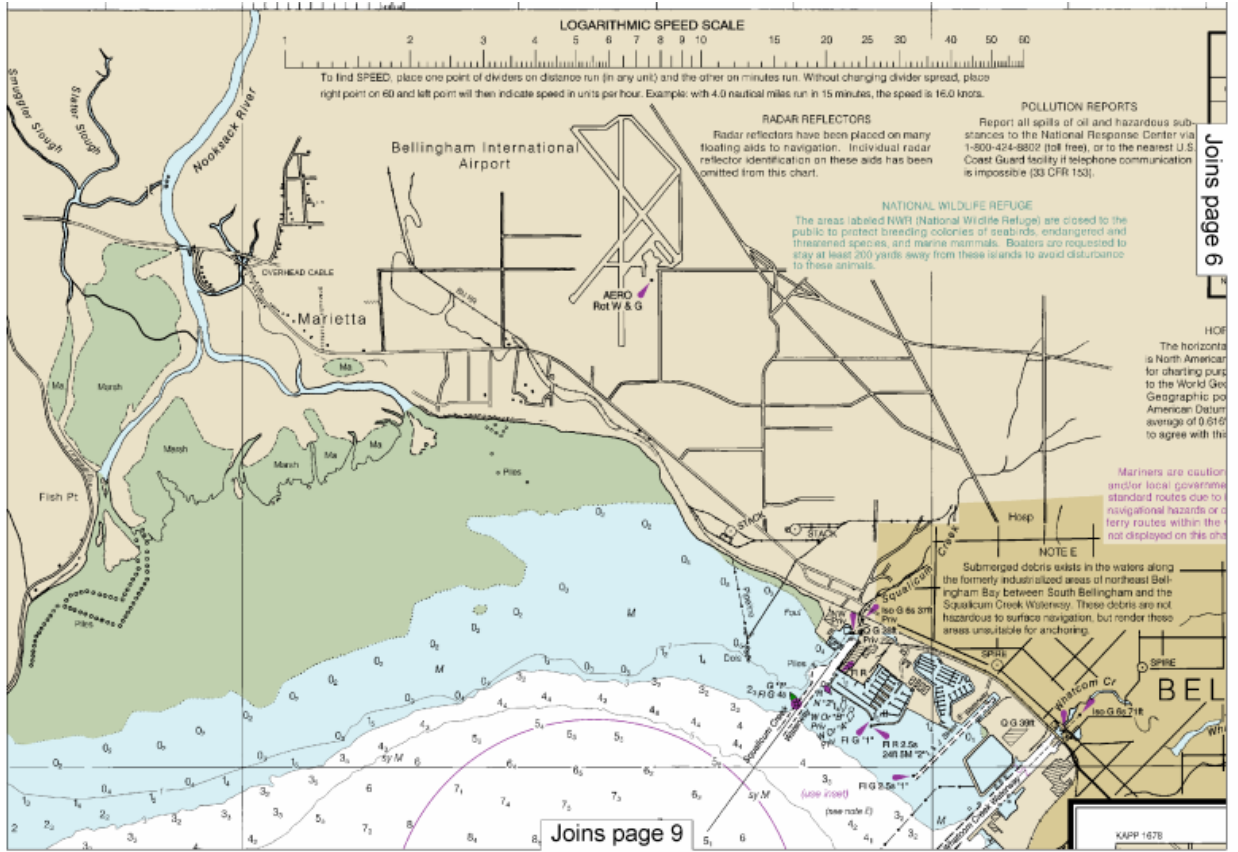
This lot is located across from the Fairhaven Station on Harris Avenue. The secured lot is available for long-term travelers departing on the ferry, Amtrak, or Greyhound as well as for day-use overflow parking. The parking lot gate is locked in the evenings between 10:45 and 11 p.m. and is reopened each morning between 6:30 and 7:30 a.m. The lot is capable of accepting larger vehicles such as RV's and vehicle trailer combinations. Payment rates apply to each parking space that your vehicle combination requires. A self-pay station is located at the entrance; payment slots correspond to parking stall numbers. Parking in the lot is first-come, first-served but has plenty of parking even during the peak season.

Rates

Short-term parking is free for the first 30 minutes and \$1 per hour after that (sales tax included).

Amount of Time	Rates (Sales Tax Included)
Hourly	\$1
Daily	\$6
Weekly	\$30

Annex C



This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:53333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

