



Guemes Island Ferry System 2023 Rate Study

May 11, 2023



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1. Comparison of Current Fares and Proposed Increase for Summer 2023 through 2024
2. Comparison to Peer Ferry Operators
3. Ancillary Revenue Evaluation

EXECUTIVE SUMMARY

The Guemes Island Ferry 2023 Rate Study was conducted to evaluate the current (2022) Guemes Island Ferry fare schedule and policies, and to provide recommendations for rate adjustments planned for 2023, as well as policies for setting future rate increases. This report documents the objectives of the study, the approach used to project fare increase requirements, and the assumptions that formed the basis for fare level evaluation and revenue projection.

The Rate Study provides the following recommendations for the Guemes Island Ferry fare schedule and fare policies.

Implement fare increases to reach fare box revenue targets phased over a five-year period

- Implement the first fare rate increase in summer 2023, to be effective through December 2024. The recommended fare schedule is provided in Figure 1.
- Adjust fares on an annual basis beginning in January 2025 to achieve 65% fare box recovery by 2028
 - Update the 2028 5-year average annual O&M cost with new expenditure data and updated cost escalation rates
 - Re-run the fare model to confirm the required fare increase to achieve the updated 2028 average annual O&M and establish new fare levels

Track and analyze ridership data to inform future fare increases

- Monitor monthly ferry sales reports for indications of fare elasticity by fare type. Areas for potential evaluation include:
 - Possible fare type increase adjustments
 - Possible model adjustments to reflect ridership response to fare increases such as changes to ridership numbers reflected in the fare sales report
 - Revenue impacts from extending free youth fares from passengers under 5 years to under 18 years

Conduct future analysis to evaluate the following revenue options

- Pricing strategy for Skagit County-owned parking lots at one or both terminals
- Appropriate rate for charter and after-hours trips, and HAZMAT runs
- Appropriate rate for school district vehicles and students
- Potential implementation of traffic impact fees

Figure 1 – Recommended Fare Schedule for Summer 2023 Implementation

FARES*	NON-PEAK	PEAK
PASSENGERS		
Adult	4.50	5.50
Senior (+65)/Disabled	2.25	3.00
Youth - 18 and under (includes youth with bicycles)	Free	Free
Rider & Bicycle	5.50	6.75
Riders & Bicycle senior/disabled	3.50	5.00
PASSENGER MULTI RIDE (Valid for 90 days from purchase date)		
25 trip adult passengers	84.50	84.50
25 trip senior/disabled	53.75	53.75
VEHICLE (22 FT OR LESS INCLUDING OVERHANG)		
Motorcycle & rider	7.75	11.25
Vehicle/driver 14 feet or under	11.25	14.50
Vehicle/driver 14 feet or under senior/disabled	8.75	11.25
Vehicle/driver under 22 feet	13.50	16.75
Vehicle/driver senior/disabled under 22 feet	11.25	13.50
VEHICLE & DRIVER MULTI-RIDE (Valid for 90 days from purchase date)		
20 trip under 14 feet	183.25	183.25
20 trip under 14 feet senior/disabled	134.75	134.75
20 trip under 22 feet	221.50	221.50
20 trip under 22 feet senior/disabled	177.25	177.25
20 trip Motorcycle	129.75	129.75
VEHICLE NEEDS BASED (No expiration)		
5 trip convenience needs based only	56.25	67.50
OVERSIZED VEHICLES		
Over 22 feet under 30 feet	21.50	27.25
Under 40 feet	42.25	52.00
Under 50 feet	63.00	80.25
Under 60 feet	93.25	109.25
Each 10 foot over 60	16.25	18.25
Over width charge (over 8 feet 6 inches)	Double Length Charge	
OVERSIZED VEHICLES 5 TRIP CONVENIENCE CARD (No expiration)		
Over 22 feet under 30 feet	107.50	136.25
Under 40 feet	211.25	260.00
Under 50 feet	315.00	401.25
Under 60 feet	466.25	546.25

*Posted fares include capital surcharge

INTRODUCTION

Skagit County Public Works conducted the Guemes Island Ferry 2023 Rate Study to evaluate the current (2022) rate structure for the Guemes Island Ferry system and to make recommendations for rate adjustments planned for summer 2023. Skagit County hired a consultant team, led by KPFF Consulting Engineers and including Progressions and Trans4Media, to develop a recommended rate structure and propose an alternative methodology for setting annual ferry fare revenue targets. As part of this effort, the consultant team developed a spreadsheet-based model to be used as a tool for estimating fare level adjustments and predicting fare revenue.

This report summarizes the following:

- Objectives and approach for developing a proposed fare structure
- Assumptions used to forecast operating and maintenance costs and fare revenue targets, and to estimate future fare level adjustments.
- Findings and recommendations, including:
 - The recommended fare schedule for implementation in summer 2023
 - The methodology for setting future fare increases
 - Additional long-term financial planning considerations

OBJECTIVES

The initial primary objectives for the 2023 Rate Study were outlined by Skagit County Public Works in the project Request for Qualifications (RFQ) and in initial project discussions, and included:

- Balance Road Fund and fare box contributions to Guemes Island Ferry operations
- Provide alternative methodology for setting future fare increases
- Recommend fare structure changes and fare policies focused on addressing the following goals for the proposed fare schedule:
 - Meets fare recovery goals
 - Simplified (fewer fare types, eliminate underutilized fare types and commercial accounts)
 - Equitable (user groups, fare payment methods)
 - Consider future ticketing system

Based on the initial primary objectives, the consulting team presented a preliminary proposed fare schedule that was modeled to increase fare revenue to a target level which would limit the annual Road Fund contribution up to \$750,000, requiring a 71% increase over the current fare revenue target. This fare schedule was presented to Skagit County Public Works, the Board of County Commissioners, and the public.

The Board of County Commissioners, with input from Skagit County Public Works and feedback from public comments, provided direction on the preliminary fare schedule in two public work sessions held March 14 and April 17, 2023. In response to this direction, the consulting team developed a revised fare schedule based on a 5-year phased implementation of the fare revenue increase, as well as a revised methodology for setting future fare increases.

This report documents the proposed fare adjustments, fare policies and fare structures as they were refined following the public hearing and two Board of County Commissioners work sessions.

APPROACH

Four basic steps were taken to project the fares required to fund operation and maintenance of the Guemes Island Ferry system.

1. Identify base year operations and maintenance (O&M) expenditures to establish funding requirements and fare box revenue requirements.
2. Estimate how much the current fares need to increase to achieve the established fare revenue target.
3. Evaluate potential adjustments to fare categories
4. Establish fare level increases and a phased implementation plan.

The sections below summarize the process and assumptions used in each step.

Step 1: Identify base year operations and maintenance expenditures to establish funding requirements and fare box revenue requirements

The Rate Study recommended an alternative methodology for setting fare increases, replacing the current methodology which calculates revenue target using an average of the past 5 years.

The recommended new methodology establishes an average annual O&M expenditure projection, which is calculated using the past two years actual expenditures, the current year's approved budget, and the next two years projected expenditures using published cost escalation factors. Using this methodology, the O&M expenditures for 2023 were calculated using the data and assumptions below:

1. Actual 2021 and preliminary 2022 expenditures are used to form the past two years portion of the average O&M expenditure calculation for 2023.
2. Adjustments were made to the 2023 adopted budget to annualize dry docking, include deferred maintenance costs and incorporate other planned expenditures for ticketing improvements, online fare sales and a reserve for unanticipated expenditures (such as the new collective bargaining agreement). Table 1 shows the adjustments made to the 2023 O&M budget.

Table 1: 2023 Budget Adjustments

2023 Budget Adjustments	
Annual fare collection costs	\$ 150,000
Ticketing Improvements	\$ 55,000
Reserve for unanticipated expenditures	\$ 151,000
Total Adjustments	\$356,000

Once adjustments are applied to the 2023 approved budget, the total revenue required in 2023 is estimated at \$3.4 million as shown in Table 2.

Table 2: 2023 O&M Expenditures

2023 Adopted Budget	
Salaries & Wages	\$ 926,708
Personnel Benefits	\$ 416,804
Supplies & Consumables	\$ 462,562
Services & Pass-throughs	\$ 1,407,117
Total Adopted Budget	\$3,213,191
Adjustments	
Eliminate 2023 Haul out & Maintenance	\$ - 915,000
Add annualized repair, maintenance & Haul out	\$ 758,000
Supplies & Consumables	\$ 356,000
Total Adopted Budget	\$199,000
Total Adjustments	\$ 3,412,191

Table 3 shows the 5-year average annual O&M expenditure calculation for each year from 2023 to 2028. These are pro forma annual expenditures calculated using historical data, the adjusted 2023 budget and currently projected cost escalation rates. Projected O&M expenditures do not account for expenditures changes that may occur when the new electric propulsion vessel is placed in service.

Table 3: 2023 – 2028 Average O&M Calculation ¹

	Actual		Adopted Budget	Projected						
	2021	2022 ²	2023	2024	2025	2026	2027	2028	2029	2030
Actual/Projected Annual Expenditure	3,144,332	2,900,908	3,412,205	3,504,334	3,746,065	3,843,462	3,924,175	4,006,583	4,110,754	4,217,634
Five Year Avg. 2023	3,341,569									
Five Year Avg. 2024			3,481,395							
Five Year Avg. 2025			3,686,048							
Five Year Avg. 2026						3,804,924				
Five Year Avg. 2027									3,926,208	
Five Year Avg. 2028									4,020,522	

¹Congressional Budget Office and Federal Reserve Board estimates of cost escalation were used to inflate the 2023 adjusted budget expenditures for future periods. Projected O&M expenditures do not account for expenditures changes that may occur when the new electric propulsion vessel is placed in service.

²Source: Skagit County report dated 3/3/2023.

Step 2: Estimate how much current fares need to increase to achieve the fare revenue target

While the Rate Study reviewed alternative fare box recovery targets and estimated the impact to required fare levels, the Board of County Commissioners decided to use a 65% fare box recovery target, calculated with the new methodology described in Step 1.

Table 4 displays funding needs by year (not tied to a proposed fare schedule). In 2023, to achieve the 65% fare revenue target, \$1,945,820 would need to be collected through fares matched by \$1,047,569 from the Road Fund. By 2028, fare revenue would contribute \$2,387,139 matched by \$1,285,383 from the Road Fund.

Additional assumptions related to revenue requirements include:

- Other tax revenue: contributions are assumed to remain the same as the average calculated for the 2022 fare revenue target report as a reliable projection is not available.
- Revenue overages/shortfalls: No allowance is made for a previous year's fare collections being over or under the fare revenue target.

Table 4: Pro Forma Six-Year Funding Sources for 65% Fare Box Recovery

O&M Expenditures	2023	2024	2025	2026	2027	2028
Five Year Average Pro Forma Expenditure	3,341,569	3,481,395	3,686,048	3,804,924	3,926,208	4,020,522
Other Tax Revenue	348,000	348,000	348,000	348,000	348,000	348,000
Adjusted Average O&M	2,993,569	3,133,395	3,338,048	3,456,924	3,578,208	3,672,522
Local Revenue Sources						
65% Fare Box Revenue	1,945,820	2,036,707	2,169,731	2,247,001	2,325,835	2,387,139
35% Road Fund Contribution	1,047,749	1,096,688	1,168,317	1,209,923	1,252,373	1,285,383
Total Annual Local Sources	2,993,569	3,133,395	3,338,048	3,456,924	3,578,208	3,672,522

The O&M portion of the posted fare has not changed since 2015. Revenue collected through the capital surcharge, imposed in 2018, has not contributed any revenue to cover operating expenditures. O&M expenditures have continued to grow faster than new revenue from ridership growth. To achieve the 65% fare box recovery target in the first period means that fare revenue must increase \$737K using 2023 five-year average O&M expenditures and 2022 ridership levels.

Step 3: Evaluate potential adjustments to fare categories

Fare structure changes were made to simplify fare sales or reduce administrative requirements, to bring the Guemes Island Ferry fare schedule more in line with those of peer ferry operators (as summarized in *Attachment 2 Comparison to Peer Ferry Operators*), or to standardize pricing across different fare types. Specific structural changes include:

- Vehicle fares:
 - Increased standard vehicle length from under 20 feet to 14 to 22 feet
 - Added new fare category: vehicles under 14 feet, which is priced at 80% of the under 22-foot fare
- Large vehicles:
 - Condensed oversize vehicle fares into 10-foot categories
- Multi-ride passes:
 - Standardized discount amount at 15% of the single ride nonpeak fare (excluding capital surcharge) for multi-ride passes
 - Added 5-trip convenience passes for large vehicles (to replace commercial accounts)
 - Added 5-trip convenience passes for needs-based vehicle drivers with the per trip fare set at senior/disabled single trip fare level

- Youth fares:
 - Extended free fares from under 5 years to 18 years and under
- New categories:
 - Bicycle & rider; bicycle & senior/disabled rider, setting the fare proportionate to the square footage occupied by a bicycle compared to a vehicle under 22 feet.
- Eliminated categories:
 - Motorcycle - senior/disabled rider
 - 10-trip convenience punch cards

Assumptions used for establishing fare levels and estimating revenue for each fare type are outlined in the *Rate Study Assumptions* section.

Step 4: Establish Fare Level Increases and a Phased Implementation Plan

Fare level increases were developed in two ways; one for oversized vehicles and one for passengers and vehicles under 22 feet.

1. Oversized Vehicle Fares

Oversized fares were established first because, unlike the passenger and under 22-foot vehicle fare types, oversized fare types were re-structured and entirely new fare levels established to bring fares in line with what other regional operators charge for oversized vehicles. The approach to restructuring fare types and setting these fare levels is discussed in the Rate Study Assumptions section. Once the proposed fare levels for oversized vehicles were known, revenue at these new rates was forecast.

2. Passenger and Under 22-Foot Vehicles

Once the projected revenue from oversized vehicles was known, incremental adjustments were made evenly across all passenger and under 22-foot vehicle categories until the overall fare box recovery target was achieved.

As an alternative to a single steep fare increase, a phased fare level implementation plan was developed achieving the 65% fare box recovery goal in 2028. The incremental approach allows ferry users time to adjust and allows the agency an opportunity to adjust the fare schedule or service levels as rider behavior and future operating costs are known.

Furthermore, potential ridership loss due to the increasing cost of ferry travel may be less with a gradual fare increase. A review of past Guemes Island Ferry fare increases did not provide any reliable measure of elasticity that could be used to predict the ridership demand change triggered by a fare increase. However, a larger fare price increase is likely to cause a greater reduction in demand. In other words, a single 65% fare increase may lead to a larger loss in ridership than a phased, smaller increase would. Without any data to predict the elasticity of Guemes Island Ferry prices, we cannot quantify the loss in ridership related to a 65% fare increase nor can we predict how much of the 65% price increase will actually be realized in fare revenue growth. Any increase in fare price will likely affect demand for ferry services in some way but a phased rate of increase may have a less severe negative impact on near- and long-term ridership and long-term fare revenue.

The phased fare increase is proposed to be implemented over 5.5 years with the first period being Summer 2023 through December 2024 and each subsequent period being 12 months beginning on January 1, 2025, 2026, 2027 and 2028 (Skagit County to determine planned date for increases). Attachment 1 provides a comparison of current fare levels to the proposed fare levels to be implemented in the first fare increase. Based on pro forma average O&M expenditures, the periodic fare increase for passengers and vehicles under 22 feet would be 14%. The periodic increase for oversized vehicles varies based on the length category as shown in Table 5.

Oversized vehicle fares are increased on a straight-line basis over 5 periods with the periodic rate of increase varying by length category from 15 - 23%.

Table 5: Oversized Vehicle Phased Fare Increase Rates

	Periodic Rate of Increase ¹	
	Non-Peak	Peak
Over 22 feet under 30 feet	19.0%	32.5%
Under 40 feet	22.9%	21.2%
Under 50 feet	21.5%	17.2%
Under 60 feet	15.2%	12.7%

¹ The increase is applied to the average realization of the new 10-foot length category created by merging two existing 5-foot length categories. For example, the current non- peak 30-35 foot rate is \$33 and the 35-40 foot rate is \$42. The current rate equivalent for the merged 30-40 foot category (Under 40 feet) would be \$36.75.

FARE POLICY RECOMMENDATIONS

Within the time available for this study, it was not possible to evaluate a complete overhaul and standardization of the fare structure. Like so many other ferry systems, the Guemes fare schedule has evolved over time and has been customized to meet emerging needs. The priority objective of the study was to balance road fund contribution and fare box revenue. A thorough evaluation and re-design should involve active engagement with elected leaders, riders and community members to build a fare schedule that reflects a fair balance of user fees and general taxpayer support.

The Rate Study provides the following recommendations for the Guemes Island Ferry fare schedule and fare policies.

Phased Fare Increase Implementation

The initial fare increase should occur during the 2023 peak season and will be effective through December 2024. The periodic increase rates were calculated using pro forma five-year average O&M expenditures forecasts through 2028. As noted above, for passengers and vehicles under 22 feet the rate is 14%. For oversized vehicles the rate varies by length and are shown on Table 5.

The 2025 and subsequent average annual O&M expenditure calculations should be updated during the budget development process with current year expenditures adjusted as necessary to reflect actual year to date expenditures and any anticipated future cost adjustments. Once 2025 through 2028 five-year average annual O&M expenditures are calculated, the fare model workbook can be used to determine the level of increase required and the proposed fares for the next fare increase. If the five-year average expenditure forecast changes materially from the pro forma forecast made for this study, the fare revenue target may change resulting in a different fare increase for the passengers and under 22-foot vehicle fare types. Fare increases and proposed fares for oversized vehicles are programmed based on target levels aligned to other regional ferry fares. The rate of increase will not change based on changes to projected O&M expenditures and the fare box recovery target.

Data Analysis to Inform Future Fare Increases

Monthly sales reports should be monitored by fare type for indications of fare elasticity. Responding to the changes in fare levels riders may alter their travel behavior. For example, travelers may choose to carpool resulting in an increase in passenger trips and a decrease in car and driver trips. Changing rider demand may suggest differing future changes to individual fare rate increases to avoid overall revenue loss. The fare model uses 2022 ridership(sales) to predict revenue. The model ridership inputs should be updated, ideally as soon as there is twelve months of sales data at the new fare levels.

It is recommended that ridership data following the first phased fare increase is tracked and analyzed to improve information regarding elasticity and revenue projections for future fare increases. Areas for potential evaluation include:

- Possible fare type increase adjustments
- Possible model adjustments to reflect ridership response to fare increases such as changes to ridership numbers reflected in the fare sales report
- Revenue impacts from extending free youth fares from passengers under 5 years to under 18 years
- Review of fare level and eligibility process for needs-based fares

Potential Revenue Options for Future Evaluation

The Rate Study process identified several potential revenue opportunities which, while outside the scope of the study, provide potential opportunities to increase revenue for the Guemes Island Ferry system. In addition to the ancillary revenue opportunities presented in Attachment 3, options recommended for future evaluation include:

- Pricing strategy for Skagit County-owned parking lots at one or both terminals
- Appropriate rate for charter and after-hours trips, and HAZMAT runs
- Appropriate rate for school district vehicles and students

RATE STUDY ASSUMPTIONS

Fare Elasticity

Demand is assumed to be inelastic for this analysis (the revenue model assumes that ridership will not be adversely affected by fare increases). However, fare level increases may suppress demand to some degree. As noted earlier, a review of past Guemes fare increases did not provide any reliable measure of elasticity that could be used to predict the ridership demand change triggered by a fare increase. At some point price increases will likely result in lower revenue, but without reliable data we have not applied an elasticity factor which means that projected revenue may be overstated.

Capital Surcharge

The current capital surcharge on fares was established in 2018. Because the revenue from the capital surcharge is dedicated to vessel replacement and not available to fund operating and maintenance costs, capital surcharge levels were not considered as part of the fare schedule study. Current surcharge rates remain constant for all passenger and regular sized vehicle fare types.

Fare Payment Methods

The following assumptions were used to inform development of the recommended fare schedule.

- Rounding: Fares are rounded to the nearest \$.25.
- Credit card fees: In 2022, ferry merchant services fees totaled \$49,671, which is included in the 2022 expenditures. Credit card fees are considered an O&M cost and are not included as a separate fee on the fare schedule.

Revenue by Fare Type

Reported 2022 sales are used to approximate ridership by fare type for revenue forecasting. No adjustment has been made for externally driven ridership growth or fare elasticity (as discussed above). The assumptions used to model revenue by fare type or set fare levels for new/modified fare types are listed below.

PASSENGER FARES

Adult: Calculations for this category used 2022 ticket sales data provided by Skagit County. The sales for both adult passengers and 10 trip punch cards were used to project passenger fare totals.

Senior/Disabled: This category includes passengers ages 65+ year and passengers with disability. Passengers between six and 18 years of age now travel for free.

Youth Under 18: Free fares for passengers were extended from 5 years and younger to 18 years and under. Ridership for passengers five through 18 years of age is currently counted with senior and disabled riders. The revenue loss of making fares free for this additional group of youth riders has not been estimated.

Bicycle Senior/Disabled/Youth: The Guemes Island Ferry previously discontinued bicycle fares in 2018. The proposed fare schedule reinstates two bicycle fares (Bicycle + Adult Rider, and Bicycle + Senior/Disabled) in order to increase system revenue and track ridership data for bicycle use. Ridership totals for this fare category used in the revenue model were based on the averaged totals of previously captured full year ticket sales from 2016 and 2017.

Fare levels for bicycles were established relative to the standard-size vehicle fare, based on the estimated footprint of a bicycle (including larger e-bikes and bicycles with trailers) compared to the footprint of a vehicle under 22 feet.

MULTI-RIDE PASSES

The “Passenger Punch Card” category will be renamed “Passenger Multi-Ride” as fare collection methods shift away from using punch cards. Multi-ride discounts are standardized at 15% on the O&M portion of the fare when calculated at the designated number of trips for the single trip O&M portion of the fare plus the existing multi-ride surcharge rate. Year-round pricing for multi-ride discounted products at non-peak price is maintained but the expiration period for both Vehicle & Driver passes and Passenger passes is shortened to 90 days in order to focus the discount on frequent users and bring the Guemes Island Ferry fare practices more in alignment with peer ferry services.

VEHICLE FARES

Vehicles Under 14-feet: A new discounted fare rate for small vehicles was added to reflect the smaller amount of vessel deck space used by the vehicle, and to incentivize the use of smaller vehicles to maximize vessel capacity. To be in line with other regional ferry systems (WSF), the fare type was proposed for vehicles under 14 feet in length.¹ Four fare types were added to the proposed fare schedule: Vehicle/Driver 14 Feet or Under (single trip and 20-trip multi-ride pass), and Vehicle/Driver Senior/Disabled 14 Feet or Under (single trip and 20-trip multi-ride pass)

The proposed fare levels for Vehicles under 14 feet were set at 80% of the fare for vehicles 14 to 22 feet. The revenue model assumed that 6.5% of vehicles under 22 feet fit into the under 14-foot category, based on 2021 vehicle ridership data from Washington State Ferries.

Vehicles Under 22 Feet: With the addition of the under 14-foot vehicle category, the length of standard-size vehicles was extended from 20 feet in length to 22 feet. This change modified four fare categories: Vehicle/Driver Under 22 feet (single trip and 20-trip multi-ride pass), and Vehicle/Driver Senior/Disabled Under 22 feet (single trip and 20-trip multi-ride

¹ Examples of vehicles that are 14 feet in length or less include Volkswagen Golf, Jeep Wrangler (2-door), and Honda Civic (hatchback).

pass). Single fares and multi ride products sold in 2022 are used to determine average realization by fare type for oversized vehicles.

Revenue forecasts used the 2022 ridership numbers for vehicles under 20 feet to estimate revenue for the vehicles under 22 feet categories. This may result in an understatement of under 22-foot vehicle length revenue and an overstatement of 22-foot to 30-foot vehicle length revenue. The magnitude cannot be quantified with existing data.

Vehicles Over 22 Feet: To simplify the fare schedule and ticket sales operations, the current 5-foot increments were combined into 10-foot increments, with an additional charge assumed for each 10-foot increment for vehicles over 60 feet.

The fare structure and fare levels for large over-size vehicles were reviewed for opportunities to simplify the fare structure and understand if fares for large vehicles are fair and equitable. Considerations for setting vehicle fares include the deck space used by each vehicle (length and width) as well as the vehicle weight which can contribute to wear and tear on the ferry and terminal infrastructure. Review included comparison to comparable ferry operator fare schedules to understand how fare levels for the Guemes Island Ferry compared.

ATTACHMENT 1

COMPARISON OF CURRENT FARES AND PROPOSED INCREASE
FOR SUMMER 2023 THROUGH 2024

Current and Proposed Fares
5 Period Implementation - Period One 2023-2024

	Current = Proposed		Current		Proposed		Current		Proposed	
	Surcharge		Posted		Posted		O&M		O&M	
	Non Peak	Peak	Non Peak	Peak	Non Peak	Peak	Non Peak	Peak	Non Peak	Peak
Passengers										
Adult	1.00	1.00	4.00	5.00	4.50	5.50	3.00	4.00	3.50	4.50
Senior/Disabled	0.00	0.50	2.00	3.00	2.25	3.00	2.00	2.50	2.25	2.75
Youth			Free	Free	Free	Free	Free	Free	Free	Free
Rider & Bicycle	1.00	1.00			5.50	6.75			4.50	5.75
Riders & Bicycle senior/disabled	0.00	1.00			3.50	5.00			3.50	4.00
Passenger Multi Ride Card										
25 trip adult passengers	10.00	10.00	77.00	77.00	84.50	84.50	67.00	67.00	74.50	74.50
25 trip senior/disabled	6.00	6.00	46.00	46.00	53.75	53.75	40.00	40.00	47.75	47.75
Vehicles										
Motorcycle & rider	1.00	2.00	7.00	10.00	7.75	11.25	6.00	8.00	6.75	9.25
Vehicle/driver 14 feet or under	2.00	3.00	10.00	13.00	11.25	14.50			9.25	11.50
Vehicle/driver 14 feet or under senior/disabled	2.00	2.00	8.00	10.00	8.75	11.25			6.75	9.25
Vehicle/driver under 22 feet	2.00	3.00	12.00	15.00	13.50	16.75	10.00	12.00	11.50	13.75
Vehicle/driver senior/disabled under 22 feet	2.00	2.00	10.00	12.00	11.25	13.50	8.00	10.00	9.25	11.50
Vehicles & driver multi-ride										
20 trip under 14 feet	26.00	26.00			183.25	183.25			157.25	157.25
20 trip under 14 feet senior/disabled	20.00	20.00			134.75	134.75			114.75	114.75
20 trip under 22 feet	26.00	26.00	196.00	196.00	221.50	221.50	170.00	170.00	195.50	195.50
20 trip under 22 feet senior/disabled	20.00	20.00	156.00	156.00	177.25	177.25	136.00	136.00	157.25	157.25
20 trip Motorcycle	15.00	15.00	117.00	117.00	129.75	129.75	102.00	102.00	114.75	114.75
Vehicle Needs Based										
5 trip convenience needs based only	10.00	10.00	50.00	60.00	56.25	67.50	40.00	50.00	46.25	57.50
Oversized Vehicles										
Over 22 feet under 30 feet	4.00	6.00	19.00	24.00	21.50	27.25	15.00	18.00	17.50	21.25
Under 40 feet	8.00	11.00	36.00	45.00	42.25	52.00	28.00	34.00	34.25	41.00
Under 50 feet	11.00	18.00	54.00	71.00	63.00	80.25	43.00	53.00	52.00	62.25
Under 60 feet	19.00	23.00	83.00	100.00	93.25	109.25	64.00	77.00	74.25	86.25
Each 10 foot over 60	4.00	4.00			16.25	18.25			12.25	14.25
Over width charge			Double Length Charge		Double Length Charge					
Oversized Vehicles 5 Trip Convenience Card										
Over 22 feet under 30 feet	20.00	30.00	95.00	120.00	107.50	136.25	75.00	90.00	87.50	106.25
Under 40 feet	40.00	55.00	180.00	225.00	211.25	260.00	140.00	170.00	171.25	205.00
Under 50 feet	55.00	90.00	270.00	355.00	315.00	401.25	215.00	265.00	260.00	311.25
Under 60 feet	95.00	115.00	415.00	500.00	466.25	546.25	320.00	385.00	371.25	431.25

ATTACHMENT 2

COMPARISON TO PEER FERRY OPERATORS

ATTACHMENT 2 – COMPARISON TO PEER FERRY OPERATORS

INTRODUCTION

To inform the Guemes Island Ferry 2023 Rate Study, the consulting team reviewed the fare schedules of similar ferry systems or routes to understand how the Guemes Island Ferry fare schedule compares, and identify areas where Guemes Island Ferry fares could be brought into alignment with those of regional operators. Similar ferry systems and routes were identified which serve small island communities and have similar route lengths; however, direct equivalency is challenging due to the differences in funding, ridership, and operating profiles.

Ferry services selected for review include two other county-run ferry services in Washington State, Pierce County and Whatcom County, which are both facing similar funding shortfalls and reviewing potential increases to fares in 2023. Additional local and national ferry services identified for review include Washington State Ferry’s (WSF’s) Point Defiance to Tahlequah route, and services in Michigan and Maine.

Table 1 below provides a summary of the routes and systems reviewed.

Table 1: Summary of Ferry Services by Route Distance and Annual Ridership

Owner / Agency	Service / Route Names	Route Distance (mi) [One-way]	Annual One-Way Trips (Approximate 2021)
Skagit County	Guemes Island	0.75	137,000 (passengers) 133,000 (vehicles+drivers)
Pierce County	Anderson Island	3.5	100,000 (passengers) 135,000 (vehicles+drivers)
Whatcom County	Lummi Island	0.8	66,000 (passengers) 113,000 (vehicles+drivers)
Washington State Department of Transportation, Ferries Division (WSF)	Pt. Defiance – Tahlequah route	1.7	328,000 (passengers) 483,000 (vehicles+drivers)
Eastern Upper Peninsula Transportation Authority (EUPTA), MI	Neebish Island	0.13	324,000 (2018 passengers) 497,000 (2018 vehicles+drivers)
	Sugar Island	0.22	
	Drummond Island	0.90	
Casco Bay Lines, ME	Peaks Island	2.45	940,000 (estimated passengers) 41,589 (2019 vehicles+drivers)
MaineDOT, Maine State Ferry Service (MSFS)	Islesboro route	3.0	190,000 (passengers) 91,000 (vehicles+drivers)

FINDINGS

To support development of recommendations for the Guemes Island Ferry fare schedule, evaluation of fare schedules focused on the following key fare structure options and fare level considerations:

- Passenger fare types
- Fare rounding
- Multi-ride passes
- Ratio of passenger fare to vehicle & driver fare
- Bicycle fares
- Oversize vehicles

Evaluation and findings in the following sections are based on 2022 fare schedules.

Fare Rounding

The type of rounding used in fare schedules impacts the ease of fare communication and the amount of change carried by staff and time involved in handling cash payments. Additionally, rounding fares using larger increments, such as to the nearest \$1.00, can result in significant variations in the percentage increase by fare type as rounding is applied. Of the ferry service fare schedules reviewed, three (including Skagit County) used \$1.00 rounding for their fares, two used \$0.05, one used \$0.25, and one used \$0.01.

Table 2: Comparison of Fare Rounding Levels

Owner / Agency	Rounding Type
Skagit County	\$1.00
Pierce County	\$0.01
Whatcom County	\$1.00
WSF (WSDOT)	\$0.05
EUPTA	\$1.00
Casco Bay Lines	\$0.05
MSFS (MaineDOT)	\$0.25

Multi-ride Passes

Review of similar fare schedules also compared the multi-ride passes (also known as commuter or “punch card” passes) offered by each ferry service. Most services offer this discount fare category as a discount to the under 20- or 22-foot “standard” size vehicle and driver fare as well as the walk-on passenger fare. Whatcom County’s Lummi Island Ferry system uses weight-based vehicle fare categories, and the comparable “standard size” vehicle category is the “under 11,000 lbs” fare type.

Review of multi-ride passes considered the following elements:

- **Number of trips:** The number of trips included per multi-ride pass range from 5 to 31 trips. The 2022 Guemes Island Ferry fare schedule offered multi-ride passes including 20 trips for vehicles and 25 trips for passengers, at the higher end of this range.
- **Expiration period:** The amount of time given for a multi-ride pass to be used by Skagit County is on the higher end of the ferry services reviewed. Whatcom County is the only system that does not have a specified expiration time, noting that “tickets are valid until next fare change.”
- **Average days per trip:** Calculated based on the number of trips per pass and the expiration period.
- **Amount of discount:** The amount of discount per each multi-ride pass trip from the cost of a single fare typically varies by fare type. The multi-ride discounts offered by the 2022 Guemes Island Ferry fare schedule were similar or lower than the level of discount offered by the ferry services reviewed. In the peak season when the cost of single fares increases, the per-trip discount level is increased.

Table 3: Comparison of Multi-ride Fare Discounts

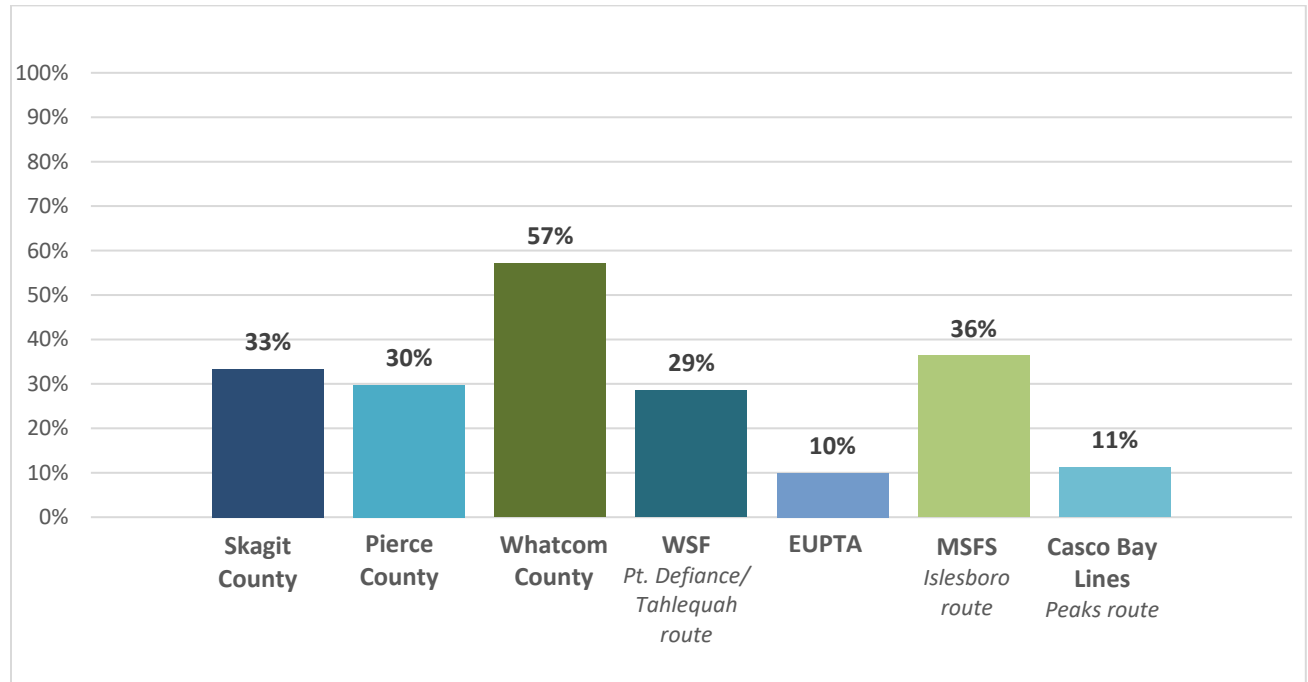
Owner / Agency	Fare Type*	Number of Trips per Pass	Multi-Ride Pass Expiration	Avg. days per trip	Per-Trip Discount from Single Fare (Off-peak)
Skagit County	Vehicle & driver	20	120 days	6	18%
	Vehicle & driver (reduced)	20	120 days	6	22%
	Passenger	25	365 days	14.6	23%
	Passenger (reduced)	25	365 days	14.6	8%
Pierce County	Vehicle & driver	5	40 days	8	20%
	Passenger	5	40 days	8	20%
Whatcom County	Vehicle & driver	10	N/A	N/A	20%
	Vehicle & driver	25	N/A	N/A	33%
	Passenger	25	N/A	N/A	44%
	Passenger (reduced)	10	N/A	N/A	65%
WSF (WSDOT)	Vehicle & driver	10	90 days	9	20%
	Passenger	10	90 days	9	19%
	Passenger	31	Monthly	1	58%
EUPTA	Vehicle & driver	20	180 days	9	75%
Casco Bay Lines	Passenger	5	15 days	6	22%
	Passenger	Unlimited	Monthly/Annual	N/A	Dependent on usage
MSFS (MaineDOT)	Passenger	5	7 days	1.4	20%

*Reduced fare types include senior, disability, and needs-based

Ratio of Passenger Fare to Vehicle & Driver Fare

Similar ferry service fare schedules were reviewed to understand how passenger fares relate to standard-size vehicle & driver fares. Of the systems reviewed, most set this ratio at around 30%, with Whatcom County charging the most for passenger fares compared to vehicle fares at 57% and EUPTA charging the lowest at 10%. Figure 1 shows the adult passenger fare as a percentage of the standard-size vehicle & driver fare of each ferry service (using 2022 off-peak fares).

Figure 1: Ratio of Adult Passenger Fare to Vehicle & Driver Fare



Bicycle Fares

Of the ferry services reviewed, three charge for bicycles on top of the passenger fare, as shown in Table 4.

Table 4: Comparison of Fare Rounding Levels

Owner / Agency	Bicycle Fare (adult)
Skagit County	\$0
Pierce County	\$0
Whatcom County	\$0
WSF (WSDOT)	\$1
EUPTA	\$0
Casco Bay Lines	\$6.50
MSFS (MaineDOT)	\$5

Oversize Vehicle Fares

To inform assessment of the Guemes Island Ferry fare schedule, peer ferry service fare schedules were reviewed to understand the fare types and fare levels applied to oversized vehicles.

Skagit County set fares for every 5 feet of vehicle length, whereas the other services that charge by length set fares for every 10 feet in vehicle length. Whatcom County and Casco Bay Lines set vehicle fares by weight rather than length and are not included in the fare level comparison below.

Figure 2 shows the fare price by vehicle length for each of the operators which charges by length. Skagit County’s oversize vehicle fare levels, both peak and off-peak, are well below those of similar ferry services. Figure 2 also shows that two of the services, MSFS and WSF, have a larger cost increase for vehicles up to 30 feet in length before applying a steady cost increase across longer vehicles.

Figure 2: Fare Levels by Vehicle Size

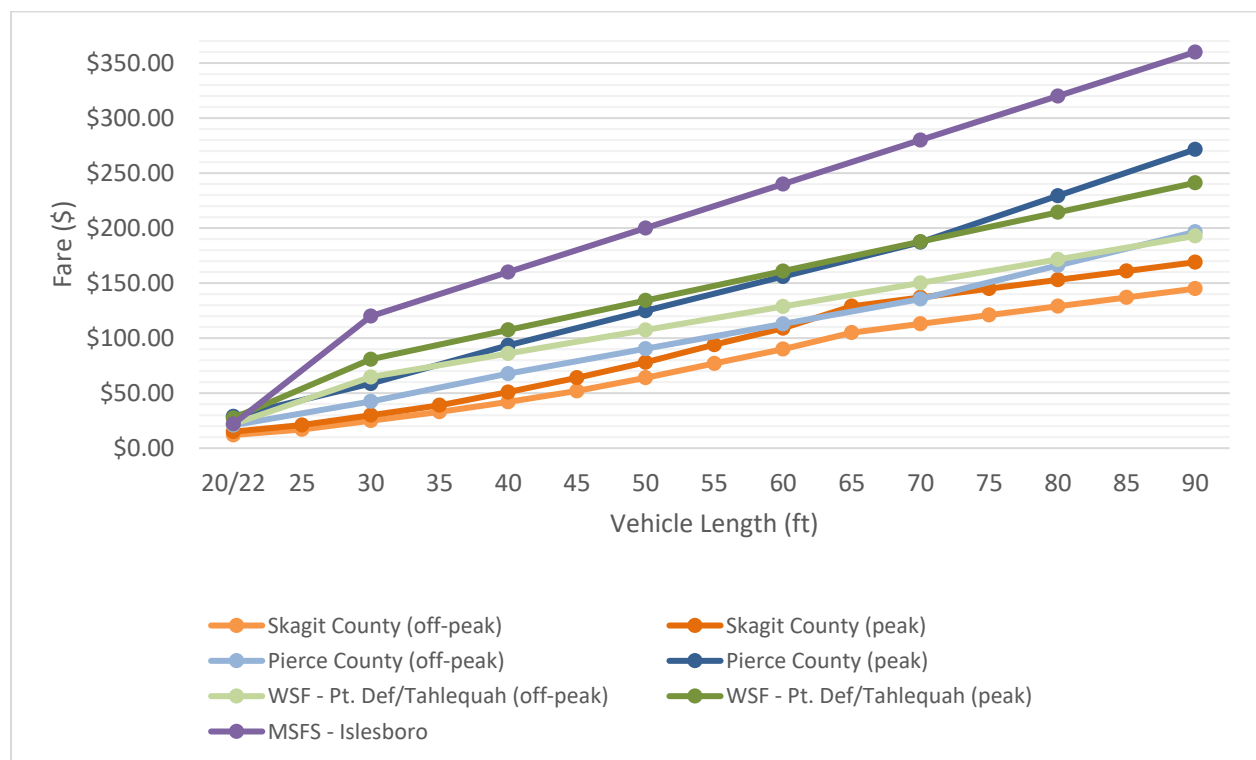
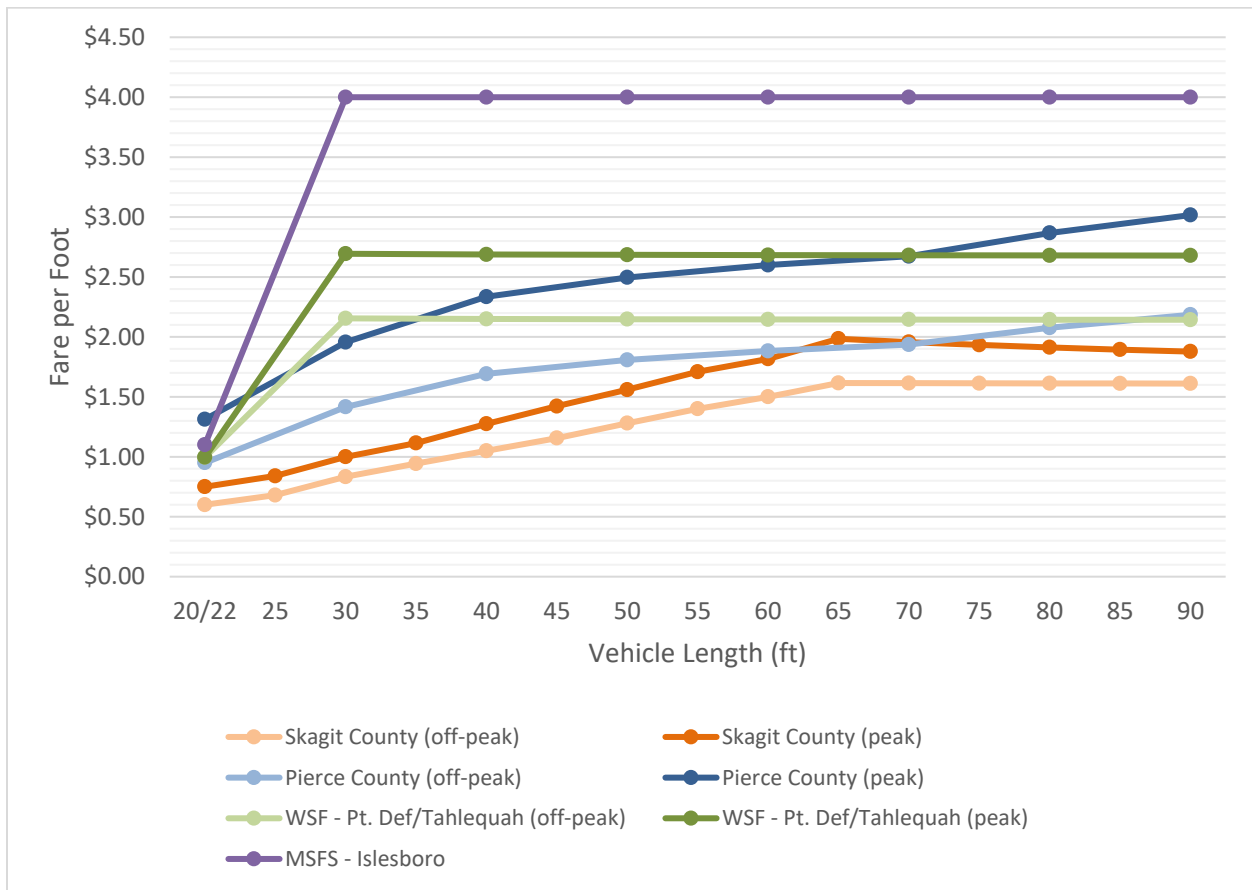


Figure 3 shows the fare price per foot by vehicle length based on each service’s fare schedule. As shown below, Skagit County’s oversized vehicle fares apply a lower cost per foot, and also increase more gradually based on vehicle length relative to similar ferry services. Compared to the other two services with seasonal fare schedules (Pierce County and WSF) Skagit County’s oversized vehicle fares apply a smaller price increase between off-peak and peak fare schedules.

Figure 3: Cost per Foot by Size Category



ATTACHMENT 3

ANCILLARY REVENUE EVALUATION

Ancillary Revenue Evaluation Guemes Island Ferry

Trans4media, Seattle



Prepared by Jayne Russell
President, Trans4media, Seattle



About Trans4media



Established in 2007, Trans4media (T4M) has become a leader in providing new revenue for marine transit entities. The company facilitates the advertising program for Washington State Ferries and has earned approximately 5 million dollars in ad and sponsorship revenue for the agency to date. T4M has also done advertising and marketing work for Golden Gate Ferries in San Francisco and the Fire Island Ferries in New York.

trans4MEDIA
t4media.net



Jayne Russell has been in the Marine Industry for over 25 years. She started her career working on passenger vessels in Alaska and then moved on to work in Marine Transit at Washington State Ferries where she had oversight of the system's concessions contracts. It was there that she developed a passion for public/private partnerships as a way to solve budget problems for transportation entities.

Guemes Island Ferry

Key Facts

The Guemes Island Ferry, operated by Skagit County Public Works, has provided vehicle and passenger ferry service between Anacortes and Guemes Island, WA since the early 1960s. The current vessel, the M/V GUEMES, is a 21-vehicle, 99-passenger, diesel-powered ferry that was built and put into service in 1979. Today, the ferry operates 365 days a year and transports roughly 200,000 vehicles and 400,000 passengers annually. There are no alternative roads or highways that provide access to Guemes Island; as such, the Skagit County ferry system serves as a vital transportation link for its ridership. In addition to transporting island residents and commuters, the ferry also carries tourist traffic, commercial, agricultural and logging trucks, essential services trucks and emergency vehicles and personnel to and from the Island.

Like most transportation entities, the ferry system is facing budget shortfalls and is looking into ways to earn revenue, outside of the farebox, also known as *ancillary revenue*.



Evaluation Approach



There are a number of ways a transit system can earn money outside the fare box. For the purpose of this report, we will explore four of the most common: Advertising Revenue, Parking Revenue, Sponsorships, and Food & Beverage Concession Revenue. We will assess the potential of each of these revenue opportunities for the Guemes Island Ferry within this report.



Advertising



Parking



Sponsorship



Concessions

Advertising

Transportation-based advertising is everywhere. Some physical locations have ample room for ad placement, such as airports and bus stations. Ads can also be posted directly on the modes of transportation themselves, including buses, taxis, trucks, trains, subways, ferries, and even blimps or inflatables. Many of these have the additional capacity for interior advertisements, such as overhead panels on a bus or in-flight entertainment on a plane.



The amount of money that can be garnered from any advertising platform is driven by the number of impressions it offers an advertiser. Impressions are measures that estimate the number of times people view an advertisement. Essentially, they indicate how often an individual consumer sees a message from an ad campaign. Another factor that drives the value of a platform is the size of the Demographic Market Area (DMA) where displays are located. For example, an advertisement that is posted on a bus in New York City, which is ranked as the #1 DMA in the country, will offer more value than an advertisement on a bus in Seattle, the 12th DMA, even if the buses hold the same amount of people.

Because the Guemes Island Ferry has little space in the terminal and on the vessel and because it serves a small segment in a small market, it would be difficult to generate a significant amount of advertising revenue. That said, a small, local, specialized program could garner some income.

One option would be to install a video screen in the Anacortes ferry terminal. This screen could replace the bulletin boards in the waiting area. The rate could be set at \$50 per ad per month to accommodate smaller ad budgets. There would likely be interest from the Real Estate, Banking, and Hospitality sectors. At 20 ads a month, the agency could earn \$1000 in monthly revenue or \$12,000 per year. The easiest way to sell the screens is to put a link to the opportunity on the ferry website and display messaging on the screens offering "Advertise Your Business Here". Working with the Anacortes Chamber of Commerce by offering the opportunity to their membership, at a discount, is another tactic.

A video screen in lieu of a bulletin board can tidy things up and earn a bit of ancillary revenue



Parking

Parking lot revenue is an essential aspect of modern society, as it provides a significant source of income for the property owner. The revenue generated from parking lots can be used to enhance existing ferry revenue sources

However, the management of parking lots is often a challenging task for an agency without existing parking management services or dedicated staff. Transit systems such as Guemes Island Ferry must implement efficient parking systems that ensure customer satisfaction while generating profits.



Entering into a concession agreement with a parking lot management company would enable the Guemes Ferry to access the expertise, technological innovation, and efficiency of the private sector. By engaging a private-sector company, some or all aspects of the parking lot operation including maintenance, fare collection, security, and payment enforcement can be handled by the partner, leaving the limited resources of the ferry focused on running the ferry. A revenue share arrangement would be negotiated in exchange for the rights to a portion of revenues generated by the facilities during that period. In addition, if new construction is needed, the private partner may be able to provide equity and secure debt financing for the project. Companies like Diamond Parking, Impark, and Upark offer such services.

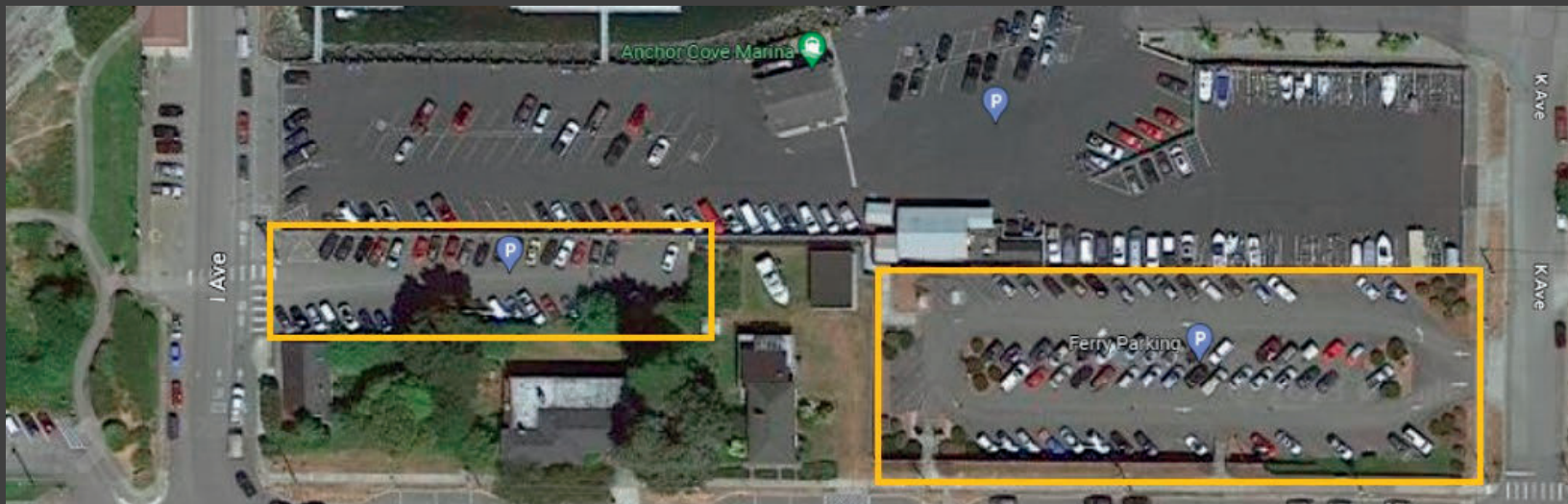
A Public Relations effort must accompany the shift to paid parking, particularly since the ridership has historically enjoyed free parking. Rates must be palatable and the general public must be made to understand that it is a necessary element in maintaining ferry service to and from the island.

Washington State Ferries has charged for parking at the Anacortes terminal for many years. The current daily rate to park at the terminal is \$8.00.

For purposes of this report, we are showing flat rates at \$3 and \$5 dollars per day to outline potential revenue. See the calculations on the following page.

Parking Continued

An aerial view of the Anacortes Terminal parking lots



Revenue Potential All Lots	Anacortes Side 74 spaces	Guemes Side 100 spaces	Total 174 spaces
Daily revenue with the rate at \$3	\$222	\$300	\$522
Daily revenue with the rate at \$5	\$370	\$500	\$870
Monthly revenue with the rate at \$3	\$6,660	\$9,000	\$15,660
Monthly revenue with the rate at \$5	\$11,100	\$15,000	\$26,100
Annual revenue with the rate at \$3	\$79,920	\$108,000	\$187,920
Annual revenue with the rate at \$5	\$133,200	\$180,000	\$313,200

The table above represents revenue potential if the parking lots are sold at capacity, and the table below represents lots sold at 60% capacity

Annual revenue with \$3 rate at 60% capacity	\$47,952	\$64,800	\$112,752
Annual revenue with \$5 rate at 60% capacity	\$79,920	\$108,000	\$187,920

The calculations above show the gross value of paid parking for the Guemes Island Ferry facilities. If the agency enters a concession agreement with a private sector partner, the totals would reflect a revenue share percentage. The average revenue share in the US is 50%, with the management company paying for all maintenance and operational costs.

Sponsorships



Potential for Sponsorship Funding as part of the Electric Ferry Effort

"Development of the all-electric ferry demonstrates that Skagit County and Washington State are technology leaders willing to invest in safe, environmentally conscious, clean energy projects that benefit both the local community and the global environment."

-Skagit County Web Site

The electric ferry project is an effort that will attract national attention. Being at the forefront of creating an environmentally conscious marine transit system could have financial benefits, as there are brands that may want to align themselves with the effort by offering sponsorship support.

Sponsorships for public transportation have become increasingly popular in recent years. With the rising costs of maintaining and improving public transit systems, many entities have turned to corporate partnerships to help fund their operations.

A sponsorship arrangement can provide much-needed funding for capital improvements but could also fund the gap between fare box revenue and operating costs. These types of agreements vary in duration and could be set up to renew annually, or over the course of 3 to 5 years, as is often the case for naming rights for stadiums and other venues.

Example: Powering the Daily Journey

As part of SEPTA's sustainability overhaul, PECO, a regional utility company, is sponsoring SEPTA's new electric bus fleet and free Wi-Fi service. Combined with 38 trackless trolleys in North and Northeast Philadelphia, SEPTA now has the largest zero-emission bus fleet on the U.S. East Coast. PECO's multi-year sponsorship is not only contributing to SEPTA's energy efficiency objectives but providing a daily service to riders and creating a positive brand image for itself in the local community.



Example is courtesy of Intersection.com

Concessions

Many transit systems enter into contracts with private companies that will offer food and beverage for purchase within their facilities. These arrangements either offer the space for rent or a share in the revenue. Like advertising, concession revenues are largely based on the number of people who pass through the facility. The Guemes Island Ferry ridership numbers likely do not support full-scale galley services, but there could be potential revenue with some well-placed vending machines.

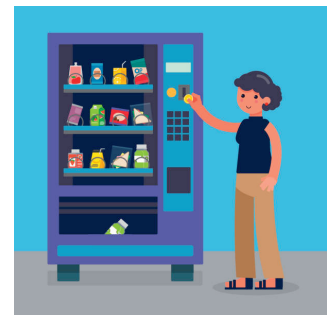


Vending machines have been a staple in the modern world for decades, providing quick and easy access to snacks and drinks. However, they are not just a convenience for consumers – they also generate revenue for businesses.

The revenue generated by vending machines can vary depending on several factors, such as location, product selection, and pricing. High-traffic areas such as airports or busy office buildings can yield more revenue than quieter locations. Offering popular products at competitive prices can also increase sales and revenue.

Americans spend about \$27 per person per year on items from vending machines and the average transaction is around \$1.75. The typical vending machine generates over \$75 of revenue each week and over \$300 per month. Some vending machines generate much less than this, while some vending machines generate much, much more. The more well-placed, well-stocked machines an owner operates, the greater their profits and revenue.

The recommendation of this report is that the Guemes Island Ferry explore implementing vending services through a third party. Because the ferry ride is so short, we recommend a vending machine or two at the Anacortes Terminal. The average revenue share range is 10 to 25% of the gross sales. While the revenue generated may not solve the system's budget problems, it would offer an amenity to customers and show the community that the ferry service is making every effort to bring in money from outside the fare box.



In Summary

Ancillary Revenue Potential Summary

Advertising-Potential Revenue: \$12,000 per year

- Guemes Island Ferry ridership is not large enough to support significant ad revenue, but a small, local program using a single video screen at the Anacortes Terminal could garner some revenue

Parking-Potential Revenue: \$100,000 to \$300,000 (gross) per year

- The lots at the Anacortes and Guemes Island terminals are definitely an area where significant revenue could be earned

Sponsorship-Potential Revenue: TBD

- This idea should be pursued in conjunction with the all-electric ferry project. There is likely a willing brand with deep pockets that could fund operations or capital improvements.

Concessions-Potential Revenue: Up to \$3600 per year

- As with advertising, the Guemes Island Ferry ridership numbers do not support robust food and beverage concessions. Vending would be easy to pursue through a third party and could offer some revenue. The typical vending machine generates over \$75 of revenue each week and over \$300 per month.

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